

## 2012-2013 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 or veteran status. 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. Kim Davison, the ADA/Title IX/504 Coordinator, is located at CHEC Room 404; 972.985.3781. Upon request, the college catalog is available on computer disk for students with print-oriented disabilities. For more information, contact ACCESS (Accommodations at Collin County for Equal Support Services) at 972.881 .5898 (V/TTY). For persons with hearing or speech impairment, please use the Texas Relay Services when offices or departments on campus do not list a TTY number. The Texas Relay number is 800.735 .2989 (TTY).

## 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 on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-6794500 for questions about the accreditation of Collin County Community College District.

## 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.

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

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## COLLIN COLLEGE DIRECTORY

## Board of Trustees

http://www.collin.edu/administration/board of trustees.html

## Administrators

https://ssb.collin.edu/pls/PROD/bwpkedir.P DisplayDirectory

## Faculty

http://hb2504.collin.edu/ (course syllabi, professor curricula vitae)
https://ssb.collin.edu/pls/PROD/bwpkedir.P DisplayDirectory

## 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.htmı
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
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
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 2012-2013

 ACADEMIC CALENDAR*FALL 2012

Aug. 15
Aug. 17

Aug. 27
Sept. 3
Sept. 10
Sept. 21

Sept. 22-23
Oct. 19
Nov. 21-25
Dec. 10-16
Fall Final Exam Week
Dec. 22-Jan. 1 Winter Break (Campuses Closed)
SPRING 2013
Jan. 10

Jan. 11

Jan. $22 \quad$ Spring Classes Begin
Feb. 4 Spring Census Date
March 11-15 Spring Break (No Classes)
March 15
May 10

May 13-19
May 17

Jan. 21 MLK Holiday Campuses Closed (Except
for community activities at SCC)

March 15-17 Spring Break (Campuses Closed)
March 29-31 Spring Holiday (Campuses Closed)
All College Planning Work Session (All Campuses Close@12 p.m.)
Last day to receive the meningitis vaccine to register for Spring

Spring Last Day to Withdraw
Last day to receive the meningitis vaccine to register for Maymester
Spring Final Exam Week
Collin 2012-2013 Commencement @ 7 p.m.

## MAYMESTER 2013

| May 20 | Maymester Classes Begin |
| :--- | :--- |
| May 21 | Maymester Census Date |
| May 24 | Maymester Last Day to Withdraw <br> May 27 |
| Memorial Day Holiday (Campuses |  |
| Closed) |  |

Maymester Classes Begin
Maymester Census Date
Maymester Last Day to Withdraw Corial Day Holiday (Campuses ast day to receive the meningitis vaccine to register for Summer I/III
Maymester Final Exams

## SUMMER 2013

June 7-8 Summer I and II Weekend College Begins
June $10 \quad$ Summer I and III Classes Begin
June 13 Summer I Census Date
June 19 Summer III Census Date
June 25 Summer I Last Day to Withdraw
July 4 Independence Day Holiday (Campuses Closed)
July 5 Last day to receive the meningitis vaccine to register for Summer II
July 5
July 5-6
July 11
July 11
July 12-13
July 15
July 18
July 30
Aug. 9-10
Aug. 14-15
Aug. 15

July 4th Make Up Day for Summer I \& III Classes
Summer I Weekend College Finals
Summer III Last Day to Withdraw
Summer I Final Exams
Summer II Weekend College Begins
Summer II Classes Begin
Summer II Census Date
Summer II Last Day to Withdraw
Summer II and III Weekend College Finals
Summer III Final Exams
Summer II Final Exams

* All academic calendar dates are subject to change. Please
refer to www.collin.edu for the latest version.


## 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 G200 |
| Admissions and Records Office | 972.548.6710 D118 | $\begin{aligned} & 972.985 .3721 \\ & \text { CYC B101 } \end{aligned}$ | 972.377.1710 F109 | 972.881.5710 G103 |
| Bookstore | 972.548.6680 A104 | $\begin{aligned} & 972.985 .3710 \\ & \text { CYC B107 } \end{aligned}$ | 972.377.1680 F159 | 972.881.5680 F161 |
| Career Services \& Off-Campus Employment | 972.548.6747 D117 |  | 972.377.1781 F109 | 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 A221 |  | $\begin{aligned} & \text { 972.377.1785 F117 } \\ & \text { 972.377.1671 F119 } \end{aligned}$ | 972.881.5126 C225 |
| Dean of Student Development | 972-377-1595 B209 |  | 972-.881-5902 F136 | 972.881.5604 G227 |
| Financial Aid/Veterans Affairs | 972.548.6760 D118 |  | 972.377.1760 F109 | 972.881.5760 G103 |
| Fitness Center | 972.548.6891 E121 |  | $972.377 .1758$ <br> Alumni Hall | 972.881.5848 A103 |
| Food Service | First Floor | CYC A212 | Alumni Hall | 972.881.5949 F108 |
| Honors Institute |  |  |  | 972.516.5120 |
| Information Center | $972.548 .6790$ <br> First Floor Atrium | $\begin{aligned} & 972.985 .3790 \\ & \text { CYC B101 } \end{aligned}$ | $972.377 .1790$ <br> D-bldg Atrium | $972.881 .5790$ <br> First Floor Atrium |
| International Students Office |  |  |  | 972.516.5012 G150 |
| Library | 972.548.6860 B105 |  | 972.377.1560 L150 | 972.881.5860 D100 |
| Math Lab | 972.548.6896 C220 |  | 972.377.1639 D141 | 972.881.5921 J228 |
| Recruitment and Programs for New Students | 972-377-1627 D117J | $\begin{aligned} & \text { 972-377-1750 CHEC } \\ & 457 \end{aligned}$ |  | 972.516.-5047 G120 |
| Service Learning Office |  |  |  | 972.881.5900 F105 |
| Student Development Center | 972.548.6770 D117 |  | 972.377.1595 F109 | $\begin{aligned} & 972.881 .5627 \text { or } 5604 \\ & \text { G103 } \end{aligned}$ |
| Student Life | 972.548.6788 C119 |  | 972.377.1788 A185 | 972.881.5788 F129 |
| Student Lounge |  |  | 972.377.1788 <br> Alumni Hall |  |


| Student Service | CPC | CHEC/CYC | PRC | SCC |
| :---: | :---: | :---: | :---: | :---: |
| Tech Prep | 972.548.6723 A114 |  |  |  |
| Testing Center | 972.548.6849 A109 |  | 972.377.1523 F209 | 972.881.5922 J232 |
| Transfer Programs Office |  | 972-985-3734 <br> CHEC 120 |  |  |
| Tutoring (ACCESS Office) |  |  |  | 972.881.5128 G121 |
| Wellness Center |  |  |  | 972.881.5777 A217 |
| Writing Center | 972.548.6857 B108 |  | 972.377.1576 L214 | 972.881.5843 D224 |
| Administrative Department | CPC | CHEC/CYC | PRC | SCC |
| ADA/Title IX/504 Coordinator |  | $972.985 .3781$ <br> CHEC 404 |  |  |
| Associate Faculty Office | 972.548.6830 B305 |  | 972.377.1585, 1705, 1554, or 1506 F243, H119, L226, or U111 | $\begin{aligned} & 972.516 .5090 \text { or } \\ & 972.881 .5759 \text { B103 or } \\ & \text { K237 } \end{aligned}$ |
| Cashier's Office (Bursar) | 972.548.6616 A111E | $\begin{aligned} & 972.985 .3724 \\ & \text { CYC B101 } \end{aligned}$ | 972.377.1638 F140 | 972.881.5634 G143 |
| The Collin College Foundation (Scholarships) |  | $\begin{aligned} & \text { 972.599.3145 } \\ & \text { CHEC } 429 \end{aligned}$ |  |  |
| Continuing Education and Workforce Development |  | $\begin{aligned} & 972.985 .3750 \\ & \text { CYC A364 } \end{aligned}$ |  |  |
| Dean of Student Development Office | 972-377-1595 B209 |  | 972-.881-5902 F136 | 972.881.5604 G227 |
| Instruction Office | 972.548.6830 B305 |  |  |  |
| Plant Operations | 972.548.6690 E126 | 972.985.3777 <br> CYC Basement | 972.377.1690 Plant <br> Building | 972.881.5690 K006 B |
| President's Office |  | 972.758.3800 <br> CHEC 400 |  |  |
| Public Relations |  | 972.758.3895 <br> CHEC 411 |  |  |
| TSI Information | 972.548.6773 D118L |  | 972.881.5902 F136 |  |
| Vice President/Provost’s Office | 972.548.6800 A302 |  | 972.377.1550 J230 | 972.881.5802 G227 |
| Vice President of Administration |  | 972.758.3831 <br> CHEC 312 |  |  |
| Vice President of Student Development |  | $\begin{aligned} & 972.599 .3150 \\ & \text { CHEC } 457 \end{aligned}$ |  |  |

Weekend College
972.881.5801 G231

## OTHER COLLEGE LOCATIONS

| Allen Center | $972-377-1060$ |
| :--- | :--- |
| Collin Higher Education Center | $972-599-3100$ |
| Rockwall Center | $972-777-5737$ |


| Academic Associate Degree Areas of Emphasis | Associate of Arts (AA) | Associate of <br> Arts in Teaching * (AAT) | Associate of Science (AS) | Field of Study |
| :---: | :---: | :---: | :---: | :---: |
| Accounting - See Business |  |  |  |  |
| American Sign Language (Deaf Education) | $\bullet$ |  |  |  |
| Anthropology | $\bullet$ |  |  |  |
| Art | $\bullet$ |  |  |  |
| Biology |  |  | - |  |
| Business | - |  |  | - |
| Chemistry |  |  | - |  |
| Communication | - |  |  |  |
| Advertising / Public Relations |  |  |  | - |
| General Communication |  |  |  | - |
| Computer Science |  |  | - | $\bullet$ |
| Criminal Justice | - |  |  | - |
| Dance | $\bullet$ |  |  |  |
| Economics - See Business |  |  |  |  |
| Education * |  |  |  |  |
| Early Childhood (EC) - Grade 6 |  | $\bullet$ |  |  |
| Grades 4-8, EC - 12 Special Education |  | $\bullet$ |  |  |
| Grades 8-12, EC-12 Other than Special Education |  | - |  |  |
| Engineering |  |  | - | - |
| Engineering Technology |  |  | - | $\bullet$ |
| English | - |  |  |  |
| Environmental Science |  |  | - |  |
| French | - |  |  |  |
| Geology |  |  | - |  |
| German | $\bullet$ |  |  |  |
| Government | $\bullet$ |  |  |  |
| History | $\bullet$ |  |  |  |
| Industrial Engineering |  |  | - |  |
| Mathematics |  |  | $\bullet$ |  |
| Music | $\bullet$ |  |  | - |
| Nursing | - |  |  | $\bullet$ |
| Paralegal / Legal Assistant | $\bullet$ |  |  |  |
| Philosophy | $\bullet$ |  |  |  |
| Photography | $\bullet$ |  |  |  |
| Physical Education |  |  | - |  |
| General Physical Education |  |  |  |  |
| Sports Management |  |  |  |  |
| Physics |  |  | $\bullet$ |  |
| Psychology | - |  |  |  |
| Sociology | $\bullet$ |  |  |  |
| Spanish | $\bullet$ |  |  |  |
| Technical Communication and Knowledge Management |  |  | - |  |
| Theatre | $\bullet$ |  |  |  |

[^0]| Workforce and Technical Degree Programs | Associate of Applied Science (AAS) | Certificate | Enhanced Skills Certificate | Marketable Skills <br> Achievement Award |
| :---: | :---: | :---: | :---: | :---: |
| Animation and Game Art |  |  |  |  |
| Animation | - | - |  |  |
| (3-D Animation Track; Game Art Track) |  |  |  |  |
| 3-D Animation |  |  |  | - |
| Biotechnology | - | - |  |  |
| Business Management | - | - |  |  |
| Child Development | - | - |  |  |
| Child Development Administration of Programs for Children |  |  |  | $\bullet$ |
| Child Development Associate |  | - |  |  |
| Child Development Associate Training |  |  |  | - |
| Early Childhood Educator |  | - |  |  |
| Infant and Toddler Educator |  | - |  |  |
| Cisco Systems Computer Networking Technology | - |  |  |  |
| Advanced Cisco Systems Computer Networking Technology (CCNP) |  | $\bullet$ |  |  |
| Cisco Systems Computer Networking Technology (CCNA) |  |  |  | - |
| Computer-Aided Drafting and Design | - | - | - |  |
| AutoCAD |  |  |  | - |
| Mechanical Computer-Aided Drafting and Design |  | - |  |  |
| Computer Networking Technology | - |  |  |  |
| Computer Networking Technology Advanced Software (MCSE) |  | $\bullet$ |  |  |
| Computer Networking Technology Software (MCSA) |  | - |  |  |
| Computer Systems |  |  |  |  |
| (Computer Support Track; Database Development <br> Track; Information System Track) | $\bullet$ | - |  |  |
| (C++ Software Development Track; Java Software Development Track) | - |  |  |  |
| Computer Applications |  |  |  | - |
| Database Applications |  |  |  | - |
| Geographic Information Systems (GIS) Specialization | $\bullet$ | $\bullet$ |  | - |
| Software Design |  |  |  |  |
| (C++ Track; Java Track) |  | - |  |  |
| Convergence Technology | - | - |  |  |
| Home Technology Integration (HTI) Expert |  |  |  | - |
| IP Specialization |  | - |  |  |
| Culinary Arts | $\bullet$ | $\bullet$ |  |  |
| Dental Hygienist | - |  |  |  |
| Digital Video | $\bullet$ | - |  |  |


| Workforce and Technical Degree Programs | Associate of Applied Science (AAS) | Certificate | Enhanced Skills Certificate | Marketable Skills Achievement Award |
| :---: | :---: | :---: | :---: | :---: |
| E-Business Development |  |  |  |  |
| (Media Track; Android Mobile Development Track; iOS Mobile Development Track; J2ME Mobile Development Track; C\# .NET Development Track; Visual Basic .NET Development Track) | - | - |  |  |
| (Web Development Track) | - |  |  |  |
| (E-Commerce Track) |  | - |  |  |
| Interactive Web Programming |  |  |  | - |
| Studio |  |  |  | - |
| Web Commerce |  |  |  | - |
| Web Development |  | $\bullet$ |  |  |
| Electronic Engineering Technology | - | - |  |  |
| Emergency Medical Services Professions | - |  |  | - |
| EMS Paramedic |  | - |  |  |
| Fire Academy |  |  |  |  |
| Basic Firefighter |  | - |  |  |
| Basic Firefighter Certification | - |  |  |  |
| Fire Science |  |  |  |  |
| Fire Officer |  | - |  |  |
| Fire Officer Candidate |  |  |  | - |
| Fire Officer Certification | - |  |  |  |
| Graphic Design and Web |  |  |  |  |
| Graphic Design | - | - |  |  |
| (Print Track; Web Track) |  |  |  |  |
| Graphic Design |  |  |  | - |
| Web-Interactive Media |  |  |  | - |
| Green Interior and Architectural Design | - |  |  | - |
| Green Interior and Architectural Design Level I |  | - |  |  |
| Green Interior and Architectural Design Level II |  | $\bullet$ |  |  |
| Health Information Management | - |  |  |  |
| Medical Coding and Billing |  | - |  |  |
| Hospitality and Food Service Management | - |  |  |  |
| (Hotel / Restaurant Management Track; Meetings and Event Management Track) |  |  |  |  |
| Hotel / Restaurant Management |  | - |  |  |
| Meetings and Event Management |  | - |  |  |
| Information Systems Cybersecurity | $\bullet$ | $\bullet$ |  |  |
| CISSP Information Systems Cybersecurity Professional |  | $\bullet$ |  |  |


| Workforce and Technical Degree Programs | Associate of Applied Science (AAS) | Certificate |  | Marketable Skills <br> Achievement Award |
| :---: | :---: | :---: | :---: | :---: |
| Interpreter Preparation Program / Deaf | - |  |  |  |
| Interpreter Trainee |  | - |  |  |
| Marketing | - | - |  |  |
| Music, Commercial |  |  |  |  |
| Audio Engineering |  | - |  |  |
| Commercial Music | - |  |  |  |
| Music Business |  | - |  |  |
| Nursing | - |  |  |  |
| Certified Nurse Assistant |  |  |  | - |
| Healthcare Case Management |  |  | - |  |
| LVN / Paramedic Bridge to AAS - Nursing |  |  |  |  |
| Office Systems Technology | - | - |  | - |
| Accounting Support |  |  |  | - |
| Medical Office Support |  | - |  |  |
| Paralegal / Legal Assistant | - |  |  |  |
| Paralegal General |  | - |  |  |
| Pastry Arts | - | - |  |  |
| Photography, Commercial |  |  |  |  |
| Commercial Photography | - | - |  |  |
| Studio Management |  |  |  | - |
| Studio Production |  |  |  | - |
| Polysomnographic Technology | $\bullet$ | - |  |  |
| Real Estate | - |  |  |  |
| Real Estate Broker |  | $\bullet$ |  |  |
| Real Estate Salesperson |  | - |  |  |
| Respiratory Care | $\bullet$ |  |  |  |
| Semiconductor Manufacturing Technology | - |  |  |  |
| Semiconductor Manufacturing Operator |  | - |  |  |
| Surgical Technology | - |  |  |  |
| Central Sterile Processing (Beginning Spring 2013) |  | - |  |  |

## 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 programs for academic, professional, occupational and cultural enhancement.
- Developmental education and literacy programs designed to improve the basic skills of students.
- A program of student support services, including counseling and learning resources designed to assist individuals in achieving their educational and career goals.
- Workforce, economic, and community development 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 special admissions requirements. Collin College offers the COMPASS Subtest and the COMPASS ESL as
Department of Education approved tests. Minimum scores are required. Check with the Financial Aid office for more details. 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 being blocked and ineligibility to receive Collin 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 programs in this catalog, and/or contact the academic department office for information on program requirements.

## CAMPUS WIDE IDENTIFICATION (CWID)

 AND E-MAILStudents 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.

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 .

## 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 program 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. 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.
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 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 by contacting local high schools. In addition, 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 Associate Dean of Academic Partnerships, Dean of Enrollment and Academic Success Momentum, or the Registrar 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.) Take required Collin College institutional assessments.
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 Associate Dean of Academic Partnerships, Dean of Enrollment and Academic Success Momentum, or the Registrar for college admission. High school students interested in concurrent admission to Collin College must:

- Complete an Application for Admission (online).
- Provide Official High School Transcript.
- Complete Testing/TSI or Proof of Exemption. Take required Collin College institutional assessments (if necessary, based on TSI status and scores and course selection).
- Provide proof of meningitis vaccination, if needed
- Submit signed Concurrent Permission Form with appropriate signatures.
- 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 program of study.
5. Fall 1985 through Summer 2008 transfer work was included in students' overall GPA. Beginning Fall 2008 transfer work is not included in GPA.
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 certificate programs
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 programs. 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.

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
- the computerized TOEFL score higher than 196 or
- the Internet-Based (IB) test score higher than 70 or
- The IELTS (International English Language

Testing System) with a score higher than 6.4.
(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 .

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

## 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 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. 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 . 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 and assessment requirements and who have met with an academic advisor. Online Registration enables students to have earlier course selection, more comprehensive academic advisement, and more. See the current Collin College Registration Guide for a listing of dates, times and complete instructions.

## Add/Drop

Students registering during Add/Drop must meet all TSI requirements. 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 a percentage credit 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 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 Schedule of Classes.
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 Schedule of Classes.
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 Schedule of Classes for registration deadlines.
5. Fax-in registration: (credit card only) Check the current Continuing Education Schedule of Classes for fax availability. Fax your registration to 972.985.3723 or 972.548.1702.

## 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 SAT (Scholastic

Aptitude Test), 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 that is required of all students taking collegelevel 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 developmental education 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 Wwriting 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 TSI Office at 972.881.5902. For Collin College's testing, 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 972.881.5902.

## Passing scores for the THEA:

Mathematics 230
Reading 230
Writing 220

## Passing scores for COMPASS:

Mathematics 39
Reading 81
Writing 59/5

## Mathematics Assessment Policy

Students with a THEA score of 230-249 may enroll in MATH 0310 or MATH 1332. Students with a Math 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.

Otherwise, 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.

Students deciding not to enroll in a mathematics course during the semester of assessment may retain this assessment for one year, or may reassess at the beginning of the semester when enrollment is planned.

## 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 without assessment. 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.

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
- SAT - Scholastic Aptitude Test
- Credit by exam subject tests designed by college faculty
- Correspondence testing

Collin College codes for these tests are:

- CLEP (Spring Creek Campus) 1951
- ACT (Central Park Campus) 40460
- ACT (Spring Creek Campus) 42090
- SAT (Central Park Campus) 44-646
- SAT (Spring Creek Campus) 44-702
- THEA (Central Park Campus) 137
- THEA (Spring Creek Campus) 138

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 Vice President/Provost, no more than 18 hours of non-traditional credit may be counted toward a degree. Non-traditional credit will be added to the transcript only after six hours of traditional, non-transfer credit is achieved at Collin College.

For additional information regarding College-Level Examination Program (CLEP) examinations, departmental examinations, advanced placement tests, Tech Prep and 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 college Tech Prep pathway 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* nondevelopmental 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 972.548.6723 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 2302
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 1951.
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.

## 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

## TUITION AND FEE SCHEDULE*

Credit

Hours $\quad$\begin{tabular}{c}
In-County

$\quad$ Out of County $\quad$

Out of <br>
State/Country
\end{tabular}

\$2 Student Record fee included in above fees

* Subject to change by the Collin College 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 $\dagger$ \$0-24 per lab
Late Registration fee*** $\$ 10$
Returned Check fee*** $\$ 25$
*** Non-refundable
$\dagger$ 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.

COST PER CREDIT HOUR EXAMPLE

| Per Hour | In-County | Out-of- <br> County | Out-of- <br> State |
| :--- | :---: | :---: | :---: |
| Tuition | $\$ 27$ | $\$ 61$ | $\$ 116$ |
| Bldg Use Fee | $\$ 6$ | $\$ 6$ | $\$ 6$ |
| Student Act Fee | $\$ 1$ | $\$ 1$ | $\$ 1$ |
|  | $\$ 34$ | $\$ 68$ | $\$ 123$ |

## 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 semester's first class day. Each semester's first class day is always the first official day of the semester, not the first day of an individual's class. Refunds are processed approximately three 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.

## FINANCIAL RESOURCES

## FINANCIAL AID

As a service to Collin College students, the Financial Aid Office administers a financial aid program that includes grants, loans and part-time employment. Financial aid officers are trained to assist students in realizing their educational goals. Aid is offered to eligible students who are registered by the college's official census date.

A primary purpose of the college's 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. Students should not withdraw from college for financial reasons without first consulting with the Financial Aid Office. All financial aid students must become familiar with the standards of academic progress.

For more information, look on the college website (www.collin.edu/gettingstarted/financialaid). Federal law requires a financial aid student to complete at least 60 percent of each semester. If the 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.
Contact the Financial Aid Office for
complete information.
A financial aid student who earns all F's for the semester must have one instructor provide proof to the Financial Aid Office that the student was in an academically-related activity for at least 60 percent
of the semester. Otherwise, that student will owe money back to a financial aid program.

## FEDERAL ASSISTANCE PROGRAMS

## Federal Pell Grant

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

## Federal Supplemental Educational Opportunity Grant (FSEOG)

The FSEOG provides assistance for eligible students who show financial need and are making satisfactory progress toward their educational goal. Priority is given to students demonstrating the greatest of financial need.

## Federal Work-Study (FWS)

Students demonstrating financial need may be considered for the work-study program. Students are employed to work at various jobs on campus or at other district sites. They are allowed to earn the amount designated in their award package.

## Federal Stafford Loan Program

This program permits a student to borrow money from the U.S. Department of Education without the need for collateral and at a very low interest rate. The federal government guarantees repayment of the loan and pays interest on the subsidized amount borrowed until six months after the student graduates or ceases to be enrolled at least halftime.

Dependent students may borrow $\$ 3,500$ for the first year (0-30 hours) of completion in their program of study. During the second year (31 or more hours), the maximum is $\$ 4,500$. The maximum amount a student may borrow depends upon eligibility, dependency status, year in school, previous student loans borrowed and enrollment status for the year.

## Federal PLUS Loans

Federal PLUS Loans are for parents who want to borrow money to help defray the cost of their children's education. Like Federal Stafford Loans, Federal PLUS Loans are made from the U.S. Department of Education. Credit rates will vary. Parents may borrow up to the cost of the education, minus resources and aid.

## STATE ASSISTANCE PROGRAMS

Texas Public Education Grant (TPEG)
The TPEG program is a state financial aid program designed to assist students attending state-supported colleges. Students must demonstrate
financial need and be making satisfactory progress toward their educational goals. The actual amount of the grant varies depending upon the availability of funds to the
college, the student's financial condition and other aid the student is receiving.

## TEXAS Grant

Students may be eligible for this grant if the following conditions are met:

- Texas resident
- Never convicted of a felony
- Graduated from Texas high school in the recommended or distinguished programs
- Have need as determined by the federal form (FAFSA)
- Be enrolled at least half-time
- Enrolled in first 30 hours of classes/not eligible for initial award if over 30 hours
- Must meet institutional SAP first year as renewal; the 2.5/75\% complete 24 hours. Second renewal year-can only be used up to 75 hours
- EFC must be $\$ 4,000$ or less
- Must be enrolled in at least 9 hours
- Must sign a Statement of Eligibility before grant can be disbursed.

This grant covers the cost of tuition and fees and is renewable during the undergraduate career as long as the student maintains a cumulative 2.5 grade point average and completes at least 75 percent of the coursework. Additionally, the student must maintain academic progress. Please refer to the Institutional Policy of Satisfactory Progress in this section.

## TEXAS Equal Opportunity Grant (TEOG)

Community college students working on an associate degree may be eligible for this grant if they:

- Are a Texas resident,
- Must be enrolled in first 30 hours of classes (not eligible if over 30 hours).
- Must sign a Statement of Eligibility before grant can be disbursed.
- Enroll at least half-time, and
- Have an estimated contribution as determined by FAFSA of $\$ 2,000$ or less.

Additionally, students on this grant become eligible for the TEXAS Grant once they transfer to a university. To remain eligible, the student must maintain a 2.5 cumulative grade point average and complete at least 75 percent of the coursework.

## ADDITIONAL FINANCIAL AID INFORMATION

Many of the financial aid programs listed are under constant federal and state review and are subject to change. For additional information on any of the above loans and grants, please contact the Financial Aid Office.

Students may apply for financial aid by completing the Free Application for Federal Student Aid (FAFSA). The FAFSA is available online at www.fafsa.ed.gov .

The college’s Title IV number is 016792.
Priority deadlines are:
Fall Semester - May 1
Spring Semester - October 1
Summer Terms - February 1

## INSTITUTIONAL POLICY OF SATISFACTORY ACADEMIC PROGRESS FOR FINANCIAL AID

This is an official statement of Collin County Community College District policy related to the financial aid operational definition of Satisfactory Academic Progress of students for Collin County Community College District (CCCCD) effective for 2011-2012 and subsequent academic years.

## I. Incremental Measurement of Progress

The Financial Aid Office evaluates the satisfactory academic progress of Collin students who receive financial aid including grade point average and the number of hours completed at least once each academic year.

## 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 it 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\% of attempted hours per academic year.
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 it 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 $150 \%$ 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.*

## 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/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 wishes to appeal shall do so by submitting the college's approved Satisfactory Academic Progress Appeal form to the Financial Aid Office within 21 calendar days of notice of the adverse finding. Supporting documentation must accompany the completed appeal.
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 wishing to change the terms of their academic plan must submit an appeal explaining the reasons they wish to change the plan.
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 within 14 calendar days of the notice of the denial.
5. Subsequent to the denial by the Financial Aid Task Force, a student may seek an administrative appeal from the Vice President of Student Development.

## 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 $60 \%$ point in the term. After the $60 \%$ 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: Direct, unsubsidized Loan, Direct subsidized 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.

[^1]
## VETERANS EDUCATIONAL BENEFITS

Students requesting Educational Benefits at Collin College should submit all documentation to the Financial Aid/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 transcripts from prior institutions are submitted to the degree plan coordinator 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.

If there has been a break of more than two regular 16week semesters, additional VA documents will be required as well as transcripts from any schools attended during the break.

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.

It is assumed that continuing students wish to be certified for any subsequent enrollment unless they notify the Financial Aid/Veterans Affairs Office in writing. Though every effort is made to identify continuing students, it is still the responsibility of the student to notify the Veteran Certifying Official in writing at the time of enrollment. 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.

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

## Veterans Certification

Veterans wishing to enroll and receive benefits should contact the Financial Aid/Veterans Affairs Office. In order to receive benefits, veterans must maintain satisfactory progress as stipulated by college policy. All prior education and training earned through civilian or military education must be submitted to the degree plan coordinator for transfer evaluation.

## SCHOLARSHIP PROGRAMS

Collin College Foundation Scholarships
Through generous contributions from individuals, corporations and private foundations, Collin College Foundation annually awards scholarships to students. 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. 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 for fall and spring semesters. Scholarship applications are accepted online only. Additional scholarship information is available in the Foundation Office at the new Collin Higher Education Center campus Suite 429; the Financial Aid Office at Central Park Campus, Room A111; Preston Ridge Campus, Room F141; Spring Creek Campus, Room G119 and on the scholarship bulletin boards at each campus.

## Collin College Athletic Scholarships

Scholarships are also available for men's and women's basketball and tennis. Contact the Director of Athletics for these scholarships.

## 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.

## OTHER FINANCIAL AID PROGRAMS

## Exemptions/Waivers

State tuition waivers provide qualifying students with exemptions from certain tuition and fee charges in public colleges. Contact either the Financial Aid Office or the

Admissions and Records Office for additional information or for a specific waiver. A few of the state waivers are:

## Financial Aid

- Aid for Dependent Children
- Blind/Deaf Students
- Children of Disabled Firemen and Peace Officers
- Children of Prisoners of War or Persons Missing in Action
- Firemen Enrolled in Fire Science Courses
- Hazlewood Act
- Orphans of National Guard Members


## Admission Waivers (Admissions and Records Office)

- Ad Valorem Tax
- Contract Training for Out-of-District
- Senior Citizen
- Economic Development


## 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.

## Students Success Program (SSP)

SSP refers to the policies and procedures that govern Collin College students on any academic action status as outlined below. The policies 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 do 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 Student Success Program (SSP) 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 SSP registration deadline for each term. Please allow up to a week 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.

## 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

Students who have less than a cumulative 2.0 GPA and have 0-8 hours will be placed on academic warning. A registration hold will be placed on the student's records. Students must meet with an academic advisor to discuss available support services and to have the academic hold removed.

## Academic Probation

Students who have less than a 2.0 cumulative GPA and 9 or more earned hours in previous semesters will be placed on academic probation. Students on academic probation will be required to meet with an academic advisor in order to register for classes. Probation students are limited to 13 semester hours during each regular (i.e 16 -week) semester. Students on academic probation must meet the following requirements:

- Limited enrollment of no more than 13 credit hours per semester.
- Enroll in a mandatory college success class (included within the 13 semester hour limitation). A student who fails or withdraws from college success class will have course enrollment limited to six credit hours the next semester including a college success class.
- Submit a progress report at mid-semester.
- Earn a 2.0 GPA for the current term.


## Continued Enrollment on Probation

Students whose status is academic probation who wish to continue their enrollment and have earned a 2.0 GPA for the term, but who still have a cumulative GPA of less than 2.0 , may continue their studies at the college. The student must maintain a current 2.0 GPA for each subsequent term. Students on continued enrollment on probation will have a hold placed on their record and will be required to meet with an academic advisor. Enrollment stipulations are the same as those outlined under Academic Probation.

## Academic Suspension

Academic suspension occurs when a student whose previous status was continued enrollment on probation fails to earn a 2.0 GPA for the current semester and has a cumulative GPA below 2.0. Students on this status will be suspended from the college for one regular (i.e.16-week) semester.

## Readmission after a Period of Academic Suspension

After a period of academic suspension (i.e. one regular 16- week semester), a student may be readmitted on academic probation status. Before readmission, the student must meet with an academic advisor. This meeting is designed to assist the student in formulating an individualized plan for success. Enrollment stipulations are the same as those outlined under Academic Probation.

## Academic Dismissal

Students who were previously on academic suspension, have been readmitted on probationary status and did not earn a 2.0 GPA for the current semester will automatically be dismissed from the college for a period of one academic year [i.e. two regular (16-week) semesters].

## Readmission after a Period of Academic Dismissal

To be considered for readmission to the college, students must meet with an academic advisor and meet other reenrollment requirements based on the student's individual situation, as determined in consultation with an academic advisor. If readmitted, students must earn a 2.0 GPA for the current semester (credit hours approved may be below 13). If a 2.0 GPA is not earned, the student will automatically be placed on permanent academic dismissal and cannot return to Collin College.

## 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.
To be considered for admission, the student must have an official transcript; advising may use an unofficial transcript, or grade report from colleges attended to meet with students. Once this requirement is met, the following must be completed:

- Application for Admission.
- Meet with an academic advisor or designated advisor.
- Enroll in a college success class, with a total enrollment not to exceed 13 credit hours.

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.

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 a percentage credit 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 special 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. Additionally, 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. Login to CougarWeb. Go to 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.

## PASSIFAIL 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.

## GRADING SYSTEM

| A Excellent | 4 grade points per semester hr. |
| :--- | :--- |
| B Above Average | 3 grade points per semester hr. |
| C Average | 2 grade points per semester hr. |
| D Below Average | 1 grade point per semester hr. |
| F Failure | 0 grade points per semester hr. |
| W Withdrawn | 0 grade points per semester hr. <br> Not included in GPA or Earned Hrs |
| WS | 0 grade points per semester. <br> Withdrawal Affected Not included <br> in GPA or Cumulative Hrs. <br> Counts in State 6 W/D limit. |
| WZ Withdrawn | 0 grade points per semester hr. <br> Not included in GPA or Earned Hrs |
| by department. | 0 grade points per semester hr. |
| AD Incomplete | A Developmental Course 0 grade <br> points per semester hr. |


| BD | B - Developmental Course 0 grade points per semester hr. |
| :---: | :---: |
| CD | C - Developmental Course 0 grade points per semester hr. |
| DD | D - Developmental Course 0 grade points per semester hr. |
| FD | F - Developmental Course 0 grade points per semester hr. |
| AT Excellent | Transfer Course 0 grade points per semester hr. |
| BT Above Average | Transfer Course 0 grade points per semester hr. |
| CT Average | Transfer Course 0 grade points per semester hr. |
| DT Below Average | Transfer Course 0 grade points per semester hr. |
| AU Audit | 0 grade points per semester hr. Not included in GPA or Earned Hrs. |
| CR Credit | 0 grade points per semester hour. Included in Earned Hours but not GPA Hours. Used for Advanced Placement, College Level Exam Program, Credit by Exam, Articulated Credit, and Tech Prep. |
| P Pass | 0 grade points per semester hour Not included in GPA or Earned Hours. |
| T | Non Course Base TASP remediation. 0 grade points per semester hour. |
| XF | Administrative Assignment of Failure. 0 grade points per semester hour. Not included in GPA or Earned Hours. |
| XW | Administrative Withdrawal. 0 grade points per semester hour. Not included in GPA or Earned Hours. |
| Z | No grade reported. Instructor did not assign a grade. |
| ZW | Administrative withdraw due to a fraudulent act of scholastic dishonesty. 0 grade points per semester hour. 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.

## REPEATING COURSES

Grades of 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. 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. 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.

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 of the college's catalogs from the preceding five years as long as they were enrolled under that catalog; however, students may benefit from graduating under the requirements of the most recent catalog. 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.

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 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 collegelevel coursework. (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. Nontraditional 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/

## 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 allow courses to transfer from one institution to another without misrepresentation or loss of
credit - they 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 tuitionfree alternate courses at Collin College that are deemed acceptable by the college or university to which he/she wishes to transfer. Special conditions that apply to the guarantee program are available on request.

## Resolution of Transfer Disputes

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

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

## Procedures for Resolution of Transfer Disputes

The following procedures shall be followed by public institutions of higher education in the resolution of credit transfer disputes involving lower-division courses. If an institution of higher education does not accept course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and to the sending institution that transfer of the course is denied. The receiving institution will also give the reasons for denying credit for a particular course or set of courses at the request of the sending institution. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with board rule and/or guidelines.

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

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

## TRANSCRIPTS

Requests for official transcripts must be made by the student to the Admissions and Records Office. A student's written permission is required before transcripts will be released to other parties. To request a transcript, students may complete a Transcript Request form available from the Admissions and Records Office, mail or fax a signed request to the Admissions and Records Office or access the college website at www.collin.edu .

## WITHDRAWAL FROM THE COLLEGE

## Withdrawal Policy

Texas Education Code 51.907 Course Drop Limit Provisions
Students who enroll as an entering freshman or a firsttime 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 Student Success Program (SSP)


## 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. 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.

The ACCESS Office is located at Spring Creek Campus, Room G200, Central Park Campus, Room D-118J and Preston Ridge Campus, Room F118.

ACCESS staff is available to meet students on any campus. Please contact the office at 972.881 .5898 for services on all campuses.

## AIR FORCE ROTC

Business and Computer administers the offering of Air Force ROTC courses in Aerospace Studies and University 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. Activeduty 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 sophomores through graduate 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 engineering/nursing 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 http://www.collin.edu, click on "Student Resources," and Personalized Support." 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 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
- 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)

Collin College's Strategies of Behavior Intervention (SOBI) Committee provides a process to refer, assess, respond and assist students who may display various levels of distressed, disturbed, and/or unregulated behavior. SOBI responds to distressed and threatening behavior in order to provide assistance and to redirect behavior that may negatively impact student learning. SOBI brings to light distressed behaviors that may allow early intervention before a crisis would require a more intense response.

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

## 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 101226) and Texas House Resolution 2253 and Senate Resolution 645 (passed in 1987), the college forbids the unlawful delivery, manufacture, possession, sale, purchase, use or distribution of illegal controlled substances (as defined in the Texas Controlled Substance Act) such as alcoholic beverages, steroids, inhalants, herbal/ "natural" euphoriants, look-alike products, substances referred to as "designer drugs" and the inappropriate or illegal use of over-the-counter or prescription medication at the college, on college property, at Century Court Apartments or while attending college-sponsored activities on or off campus.

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

## EMERGENCY CLOSING OF THE COLLEGE

If classes have been cancelled, an announcement will be posted on the college's website (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 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 Nisseria meningitidis will die. About 20 percent of people who survive meningococcal disease will have permanent effects such as hearing loss, brain damage or the loss of a limb (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 or 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 may be at the request of a student by contacting the Dean of Student Development Office at their respective campus. For detailed information, see FDAC (LOCAL) at http://pol.tasb.org/Home/Index/304 .

## 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 or visit our website at 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/) 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 shrinkwrap 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 $50 \%$ 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, massmarket 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, and Developmental Writing courses. The instructional formats of DE courses vary and include computer-based, lecture, online, express, weekend, and self-paced 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 NonNative 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 nonnative English speaking students. For more information, see the course description section starting on page 152.

## English as a Second Language

The college has a program designed for students whose first language is not English. Courses offered include ESL Listening/Conversation, ESL Grammar, ESL Reading, and ESL Writing.

## 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/inde x.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 new 50,000 square foot library in the summer of 2009. A library of comparable size was opened at the Preston Ridge Campus in 2005, and a new Spring Creek library is under construction and scheduled to open in 2012. The Collin College libraries were visited over one million times last year. New high speed, networked computers are provided for students in the libraries. Laptops may be checked out for in library use, wireless networks are in place, while scanners and color printers are common. Many quiet individual and group study rooms are available, as are rooms for individual and group 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, 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, offcampus 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 810,000 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. Training on the use of the equipment is by appointment 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 study and test-taking 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 SAT (Scholastic Aptitude Test), 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 G200, Central Park Campus, Room D-118J and Preston Ridge Campus, Room F118.

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

## ACADEMIC AND WORKFORCE PROGRAMS

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.

## ACADEMIC AND WORKFORCE 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.

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.

## Developmental Education

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.

## 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.

## ACADEMIC ASSOCIATE DEGREES AND CERTIFICATES

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 to Collin Academic Awards for a complete description of all available awards and their requirements.

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 electives from emphasis areas.

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. The curriculum suggested in this document will satisfy the requirements of most colleges and universities. 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.

## 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. However, if the entire core curriculum is not completed at Collin, the transfer college may decide on a course-by-course basis whether credit will be transferred and applied to the core curriculum.

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. Your course options are displayed by area and discipline in the following table. 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.

Unless otherwise stated, all core course options shown in the Texas Core table can be used to satisfy both core and degree requirements for an Associate of Arts (AA), Associate of Science (AS), and Associate of Arts in Teaching (AAT).

| 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 | $\begin{aligned} & \text { ENGL 2322, 2323, 2327, 2328, 2332, } \\ & \text { 2333, 2342, 2343, } 2351 \end{aligned}$ | Satisfy the AA sophomore literature requirement |
| French | FREN 2303, 2304 |  |
| History | HIST 2311, 2312, 2321, 2322 |  |
| Humanities | HUMA 1301, 1305, 2319, 2323* | *May not take both ANTH |
| Spanish | SPAN 2321, 2322 | HUMA 2323. |
| Philosophy | $\begin{aligned} & \text { PHIL 1301, 1304, 2303, 2306, 2307, } \\ & 2321 \end{aligned}$ |  |
| 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 | $\begin{aligned} & \text { BIOL 1406, 1407, 1411, 1414, 1415, } \\ & 2401,2402,2406,2416,2421 \end{aligned}$ | 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 2301 and 2302 |  |
| 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 | $\begin{aligned} & \text { PHED 1100, 1102, 1104, 1106, } \\ & \text { 1111, 1112, 1113, 1114, 1115, } \\ & \text { 1116, 1117, 1118, 1120, 1121, } \\ & \text { 1123, 1124, 1125, 1126, 1127, } \\ & 1129,1130,1131,1133,1136, \\ & 1137,1140,1147,1148,1253, \\ & 1338 \end{aligned}$ |  |
| Dance | $\begin{aligned} & \text { DANC 1101, 1110, 1111, 1141, } \\ & \text { 1142, 1145, 1146, 1147, 1148, } \\ & \text { 1151, 1152, 1222, 1223, 2141, } \\ & 2142,2145,2146,2147,2148, \\ & 2151,2152,2301,2325 \end{aligned}$ |  |

## ASSOCIATE OF ARTS DEGREE REQUIREMENTS

The following requirements must be met for an AA degree:

1. Earn a minimum of 60 college-level credit hours.
2. Complete the general education core curriculum of 42 credit hours.
3. Complete a minimum of 18 additional credit hours of degree requirements and recommended electives from emphasis areas.
4. Complete at least one sophomore-level literature course ( 3 credit hours). This requirement may simultaneously meet the Humanities core requirement.
5. Earn a minimum cumulative grade point average (GPA) of 2.0
6. Earn a minimum of 18 credit hours in residency at Collin.

## 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. Complete a minimum of 60 credit hours, including all the courses listed for one of three AAT diplomas:

- AAT-Early childhood-Grade 6
- AAT-Grades 4-8 or Early Childhood-Grades 12 Special Education
- AAT-Grades 8-12 or Early Childhood-Grades 12 other than Special Education

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 program.
4. Earn a minimum of 18 credit hours in residency at Collin.

## ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS

The following requirements must be met for an AS degree:

1. Earn a minimum of 60 college-level credit hours.
2. Complete the general education core curriculum of 42 credit hours.
3. Complete a minimum of 18 additional credit hours of degree requirements and recommended electives from emphasis areas.
4. Complete at least two mathematics courses (six credit hours) from the following list: MATH 1314, 316, $1342,1414,2305,2312,2318,2320,2413,2414$, 2415,2417 , or 2419 . Three credit hours of this requirement will simultaneously meet the Mathematics core requirement.
5. Complete at least two Natural Science courses (eight credit hours) from the following list:
BIOL1406, 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. This requirement will simultaneously meet the Natural Science core requirement.
6. Earn a minimum cumulative grade point average (GPA) of 2.0.
7. Earn a minimum of 18 credit hours in residency at Collin.

## AA AND AS FIELDS OF STUDY

AA and AS degrees may have state-recognized Fields of Study (FOS) Transfer Curricula, which are available in nine (9) 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 major areas:

- Business
- Communication Studies
- Computer Science
- Criminal Justice
- Engineering
- Engineering Technology
- Music
- Nursing


## CHOOSING A PROGRAM 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.

## EMPHASIS AREAS

Emphasis Areas are topically related general education courses in academic areas that are usually referred to as a major or minor in a four-year baccalaureate program. To ensure that emphasis area (major) credits will apply to a chosen bachelor's degree program, check an academic advisor or the program advisor at the transfer university.

NOTE: See Academic Associate Degree Areas of Emphasis listing on page 6 in the Quick Reference section.

## PRE-PROFESSIONAL PROGRAMS

In addition to the general coursework and emphasis area electives that support transfer to bachelor degree programs, Collin offers freshman- and sophomore-level coursework required for professional
programs in Pre-Architecture, Pre-Law, and Pre-Health fields (Chiropractic Medicine; Dental; Medicine; Pharmacy; and Veterinary Medicine). Check with an academic advisor to learn about the requirements for admission to professional programs.

## ADVANCED STUDY OPPORTUNITIES

## CENTER FOR ADVANCED STUDY IN MATHEMATICS AND NATURAL SCIENCES (CASMNS)

The center includes advanced 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. Research opportunities are available for some students in the program. Applicants are assessed on the following enrollment requirements and should:

- Be highly motivated majors in mathematics or natural science
- Maintain an overall grade point average of 3.0
- Have their transcripts evaluated to ensure that prerequisites have been met
- Be interviewed by a CASMNS instructor
- Be recommended by discipline faculty or be approved to participate by the Dean of Mathematics and Natural Sciences Qualified students enrolled in selected sections of these courses may be eligible for CASMNS credit activities:

BIOL-1406, BIOL-1407, and BIOL-1411
CHEM-1411, CHEM-1412, CHEM-2423, and CHEM-2425
GEOL-1403 and GEOL-1405
MATH-2413, MATH-2414, MATH-2415, MATH-2417, and MATH-2419
PHYS-1401, PHYS-1402, PHYS-2425, and PHYS-2426

Note: See the course descriptions for complete information on these courses.

## HONORS INSTITUTE

The Honors Institute at Collin College can provide you 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 your transcript and you may qualify for honors scholarships. You must have a 3.5 cumulative grade point average (GPA) to be eligible for enrollment in honors courses.

## EMPHASIS AREAS 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

| 60 credit hours |  |  |
| :---: | :---: | :---: |
| Department Chair: |  |  |
| Christine DeLaTorre, Ph.D. |  |  |
|  | PRC-J214 | 972.548 .6637 |
| Faculty Contact: |  |  |
| Paula Miller | SCC-K229 | 972.881 .5179 |
| Academic Advisor: |  |  |
| Lisa Gibbs | PRC-F131 | 972.377 .1771 |
| Debra Lamb | SCC-G141 | 972.881 .5854 |
| 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)

60 credit hours

## Department Chair:

Ana Giron SCC-G215 972.881.5152
Academic Advisor:
Caryn Hawkins PRC-F133 972.377.1655

The Associate of Arts degree with an emphasis 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.

The American Sign Language emphasis 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 the AA degree, complete the 42 credit hour core curriculum, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

| RECOMENDED ELECTIVES |  |  |
| :--- | :--- | :--- |
| SGNL | 1401 | American Sign Language (ASL): <br> Beginning I <br> American Sign Language (ASL): <br> SGNL 1402 |

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


## Anthropology

| 60 credit hours |  |  |
| :--- | :--- | :--- |
| Department Chair: <br> Keith Volanto | SCC-BB216 | 972.578 .5531 |
| Faculty Contact: <br> Gerald Sullivan <br> Academic Advisor: | SCC-B230 | 972.881 .5800 |
| 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 the AA degree, complete the 42 credit hour core curriculum, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

| 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

60 credit hours

Also see Associate of Arts - Photography

## Department Chair:

Carter Scaggs SCC-A249 972.881.5867
Academic Advisors:
John Ciccia SCC-G148 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 the AA degree, complete the 42 credit hour core curriculum, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

## 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

60 credit hours

## Department Chair:

| Marsha Griggs | PRC-L232 | 972.881 .5185 |
| :--- | :--- | :--- |
| Academic Advisor: |  |  |
| Lisa Gibbs | PRC-F131 | 972.377 .1771 |
| Debra Lamb | SCC-G141 | 972.881 .5854 |

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.

## Business Field of Study

21 credit hours


OTHER REQUIRED COURSES 12 credit hours<br>ACCT 2301 Financial Accounting<br>ACCT 2302 Managerial Accounting<br>BCIS 1305 Business Computer Applications<br>ECON 2302 Principles of Microeconomics

> To complete the AA degree, you must complete the Texas Core.
> The Required Core courses listed above satisfy the Communication-Speech component; the
> Social/Behavioral Sciences component; and the
> Mathematics component.

## ADDITIONAL CORE <br> REQUIREMENTS <br> Communication <br> 33 credit hours <br> 6 credit hours <br> 3 credit hours

Select one sophomore level literature course:
ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343, or 2351
Natural Sciences 8 credit hours
(Select two Natural Science courses. A course sequence is recommended.)

| Social Sciences | $\mathbf{1 2}$ credit hours |
| :--- | ---: |
| Visual/Performing Arts | $\mathbf{3}$ credit hours |
| Institutional Option | $\mathbf{1}$ credit hour |

Any Physical Education or Dance Activity course may be taken.

## RECOMMENDED

ELECTIVES to complete AA - $\mathbf{6}$ credit hours
BUSI 1301 Introduction to Business ${ }^{2}$
BUSI 2301 Business Law ${ }^{2}$
MATH 1342 Elementary Statistical Methods ${ }^{2}$

1 Collin Prerequisite: MATH 1314, 1414, or 1324. Please check with the receiving college or university for prerequisite requirements.
2 Please check with the receiving college or university for transfer requirements.

## Communication

60 credit hours

## Department Chairs:

| Carl Hasler | SCC-B131 | 972.881 .5753 |
| :--- | :--- | :--- |
| Martha Tolleson | CPC-B252B | 972.548 .6843 |
| Diana Sage | PRC-F237 | 972.377 .1748 |
| 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:

## Communication Field of Study General Communication (Sub-Area)

12 credit hours

## REQUIRED COURSES



## 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

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

## REQUIRED COURSES

Competency Area 1
6-9 credit hours
COMM 1307 Introduction to Mass Communication
COMM 2300 Media Literacy
COMM 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 earn the AA degree, in addition to the Field of Study Certificate, complete the core requirements and two of these recommended electives, if not completed in Competency Area 1 or Area 2, to total 60 credit hours.
COMM 2330 Introduction to Public Relations
COMM 2332 Radio / Television News
SPCH 1318 Interpersonal Communication

## 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 $1302 \quad 6$ credit hours
Select one of the following Speech courses ${ }^{1}$ :
SPCH 1311, 1315, or 13213 credit hours


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, 1113, $1114,1115,1116,1117,1118,1120,1121,1123$, $1124,1125,1126,1127,1129,1130,1131,1133$, 1136, 1137, 1140, 1147, 1148, 1253, 1338

1 If you are working toward the General Communication SubArea of the Communication Field of Study, you have met this requirement. All other component areas of the Core must be completed.
2 Before taking MATH-1332, check with an academic adviser regarding the transferability. Some majors or institutions may require a higher-level mathematics course.

* You may take either ANTH-2346 as a core option under Social / Behavioral Sciences or HUMA-2323 as a core option under Humanities. HUMA-2323 is not listed above because it will not meet the AA degree requirement. Students may take either ANTH-2346 or HUMA-2323, but not both.


## Criminal Justice

## 60 credit hours

## Department Chair:

David Marble $\quad$ SCC-BB211 972.516 .5051
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 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.

## 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 the core requirements and recommended elective credit hours:

## RECOMMENDED

| ELECTIVES | to complete AA - $\mathbf{3}$ credit hours |  |
| :--- | ---: | :--- |
| CRIJ | 1307 | Crime in America |
| CRIJ | 1313 | Juvenile Justice System |
| CRIJ | 2314 | Criminal Investigation |
| CRIJ | 2323 | Legal Aspects of Law Enforcement |

Dance

60 credit hours

## Department Chair:

Tiffanee Arnold
SCC-AA145 972.881.5830
Academic Advisors:
John Ciccia SCC-G148 972.578.5563

Collin's Dance Program 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.

The Dance Program provides a solid foundation of classes that 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 the AA degree, complete the 42 credit hour core curriculum, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

## 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 <br>  |
| 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

## 60 credit hours

## Department Chair:

Russ Neal
PRC-J243 972.377.1652
Academic Advisor:

| Lisa Gibbs | PRC-F131 | 972.377 .1771 |
| :--- | :--- | :--- |
| Debra Lamb | SCC-G141 | 972.881 .5854 |

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 the Child Development Program.

## English

60 credit hours

## Department Chairs:

Natasha Robinson $\quad$ 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 |

An emphasis in English promotes 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 the AA degree, complete the 42 credit hour core curriculum, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

## 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

Academic Advisor:
Caryn Hawkins
PRC-F133
972.377.1655

## 60 credit hours

## 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:   <br> Caryn Hawkins PRC-F133 972.377 .1655 |  |  |

An emphasis in French provides the essential language background for the advanced study of French; for competency in understanding, speaking, and writing the language and for a more rapid acquisition of other foreign languages (particularly romance languages 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 the AA degree, complete the 42 credit hour core curriculum, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

## RECOMMENDED ELECTIVES

| FREN | 1100 | French Conversation I ${ }^{1}$ |
| :--- | :--- | :--- |
| FREN | 1110 | French Conversation II ${ }^{2}$ |
| 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 $F R E N-2311$ must be taken simultaneously |  |  |
| 2 Corequisite of FREN-2312 must be taken simultaneously |  |  |

## German

60 credit hours

## Department Chairs:

| Ana Giron | SCC-G215 | 972.881 .5724 |
| :--- | :--- | :--- |
| Martha Tolleson | CPC-B252B | 972.548 .6843 |
| Cheryl Wiltse | PRC-U114 | 972.377 .1546 |

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

To earn the AA degree, complete the 42 credit hour core curriculum, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

## RECOMMENDED ELECTIVES

GERM 1100 Conversational German I ${ }^{1}$
GERM 1110 Conversational German II ${ }^{2}$
GERM 1411 Beginning German I
GERM 1412 Beginning German II
GERM 2311 Intermediate German I ${ }^{1}$
GERM 2312 Intermediate German II ${ }^{2}$

1 Corequisites: must be taken simultaneously
2 Corequisites: must be taken simultaneously

## Government

60 credit hours

## Department Chairs:

David Marble
Meredith Martin
Tyler Young

| SCC-BB211 | 972.516 .5051 |
| :--- | :--- |
| PRC-F167 | 972.377 .1025 |
| CPC-E213 | 214.491 .6208 |

Academic Advisor:
Keyona McClellan SCC-G146 972.516.5069

An Associate of Arts degree with an emphasis 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 Emphasis Area 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 the AA degree, complete the 42 credit hour core curriculum, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

| 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 Logic |
| PHIL | 2306 | Introduction to Ethics |
| PSYC | 2301 | General Psychology |
|  | X4XX | Foreign Language Sequence I |
|  | X4XX | Foreign Language Sequence II |

## History

| 60 credit hours |  |  |
| :---: | :---: | :---: |
| 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: <br> Keyona McClellan <br> Department Website: <br> http://www.collin.edu/h | SCC-G146 <br> istory | 972.516.5069 |
| The History Emphasis interested in completing students pursuing a bac History survey courses six hours of American courses, the program al Civilizations, Texas Hi World History and Mex | Area is designe an associate helor's degree. meet the state' istory. In addi so includes cla tory, African-ican-American | for students gree as well as The American requirement for on to the survey es in Western merican History, History. |

To earn the AA degree, complete the 42 credit hour core curriculum, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

| 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 Logic |
| PSYC | 2301 | General Psychology |
| SOCI | 1301 | Introduction to Sociology |
|  | X4XX | Foreign Language Sequence I |
|  | X4XX | Foreign Language Sequence II |
|  |  |  |

## Music

66 credit hours
Music also has a workforce program.

## Department Chair:

Christopher Morgan, Ph.D.

$$
\text { SCC-B183 } 972.516 .5010
$$

## Academic Advisors:

John Ciccia SCC-G148 972.578.5563

The Associate of Arts - Music Field of Study provides the approved music major courses 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.

## Music Field of Study

35 credit hours

## Ensemble:

4 credit hours
MUEN X1XX Ensemble (4 semesters) ${ }^{1}$

| Applied Study: |  |  |
| :--- | :--- | :--- |
| MUAP | X2XX | Applied Music (4 |
| Theory / Aural Skills: | $\mathbf{1 6}$ |  |
| MUSI | 1116 | Aural Skills I |
| MUSI | 1117 | Aural Skills II |
| MUSI | 1311 | Music Theory I |
| MUSI | 1312 | Music Theory II |
| MUSI | 2116 | Aural Skills III |
| MUSI | 2117 | Aural Skills IV |
| MUSI | 2311 | Music Theory III |
| MUSI | 2312 | Music Theory IV |

Music Literature: 3 credit hours
MUSI 1307 Introduction to Music Literature ${ }^{3}$

Keyboard (Piano) Competency: 4 credit hours
MUSI 1114 Piano Class for Music Majors I ${ }^{4}$
MUSI 1115 Piano Class for Music Majors II ${ }^{4}$
MUSI 2114 Piano Class for Music Majors III ${ }^{4}$
MUSI 2115 Piano Class for Music Majors IV ${ }^{4}$

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 | Fundamentals of Speech <br>  |
|  | Communication ${ }^{5}$ |  |

## Social Sciences <br> 12 credit hours

The following courses are required by the Texas legislature:

| GOVT 2301 | American Government I (Federal and <br> Texas Constitutions) |
| :--- | :--- | :--- |
| GOVT 2302 | American Government II (Federal and <br> Texas Topics) |
| HIST 1301 | United States History I |
| HIST $\quad 1302$ | United States History II |
| Mathematics | 3 credit hours |
| MATH 1314 | College Algebra ${ }^{6}$ |

Natural Sciences: $\quad 4$ credit hours
PHYS $1410 \quad$ Physics of Music and Sound ${ }^{7}$
Social / Behavioral Sciences: 3 credit hours
PSYC $2301 \quad$ General Psychology ${ }^{8}$

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-X1XX
3. Required - Core component under Visual / Performing Arts
4. All music majors 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

66 credit hours
Nursing also has a workforce program

## Program Director:

Nell Ard, Ph.D., RN, CNE, ANEF
CPC-B336 972.548.6772

## Academic Advisor:

Erin Darity CPC-D117F 972.548.6778

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.

## 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 2421 Microbiology
CHEM 1405 Introduction to Chemistry I ${ }^{1}$
PSYC 2314 Life Span Psychology
RNSG 1523 Introduction to Professional Nursing for Integrated Programs ${ }^{2}$
RNSG 2504 Integrated Care of the Patient with Common Health Care Needs ${ }^{3}$

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 Nursing Field of Study Certificate, complete the following core requirements
(Note: Please be sure to complete one of the courses listed bellow to meet the Humanities component area and fultill the AA degree requirement.)

| ADDITIONAL CORE |  |  |
| :---: | :---: | :---: |
| REQUIREMENTS | TS 28 credit hours |  |
| Communication | 9 credit hours |  |
| Complete both of the following English courses: |  |  |
| SPCH 1311, 1315, or 1321 |  |  |
| Humanities | 3 credit hours |  |
| $\begin{aligned} & \text { ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, } \\ & 2343 \text { or } 2351 \end{aligned}$ |  |  |
| Social Sciences | 12 credit hours |  |
| Complete both of the following Government courses: GOVT 2301 and 2302 |  |  |
| Select two of the following History courses: HIST 1301, 1302 or 2301 |  |  |
| Visual/Performing A | ng Arts 3 credit hours |  |
| Select one of the following Fine Arts courses: |  |  |
| Dance DA | DANC-2303 |  |
| Music MU | MUSI 1306, 1307 |  |
| Theatre DR | DRAM 1310, 2361, 2362 |  |
| Visual Arts AR | ARTS 1301, 1303, 1304, 1313 |  |
| Institutional Option | tion 1 credit hour |  |
| Select one Dance or Physical Education activity core courses |  |  |
| Paralegal / Legal Assistant |  |  |
| 60 credit hours |  |  |
| Paralegal/Legal Assistant also has a workforce progra |  |  |
| Department Chair: |  |  |
| Marsha Griggs | PRC-L232 | 972.881.5185 |
| Academic Advisors: | ors: |  |
| Lisa Gibbs | PRC-F131 | 972.377 .1771 |
| Deidra Thompson | - SCC-G140 | 972.578.5564 |

The Texas Woman's University (TWU) and Collin Paralegal programs entered 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 UniversityCommerce, effective Fall 2004, for the Bachelor of Arts/Science in Political Science with Emphasis in Paralegal Studies degree.

To earn the AA degree, complete the 42 credit hour core curriculum ${ }^{1}$, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

| RECOMMENDED ELECTIVES ${ }^{2}$ |  |  |
| :--- | :--- | :--- |
| LGLA | 1303 | Legal Research |
| LGLA | 1307 | Introduction to Law and the Legal <br> Professions |
| LGLA | 1342 | Federal Civil Litigation <br> LGLA 1353 |
| Wills, Trusts, and Public |  |  |
| LGLA | 1355 | Administration <br> Family Law |
| LGLA | 2307 | Law Office Management |

1. Before taking MATH-1332, check with an academic adviser regarding the transferability. Some 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. LGLA1303, 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.

## Philosophy

60 credit hours

## Academic Contacts:

| Carl Hasler | SCC-B131 | 972.881 .5753 |
| :--- | :--- | :--- |
| Martha Tolleson | CPC-B252B | 972.548 .6843 |
| Diana Sage | PRC-F237 | 972.377 .1748 |
| Academic Advisor:   <br> Caryn Hawkins PRC-F133 972.377 .1655 lan |  |  |

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

To earn the AA degree, complete the 42 credit hour core curriculum, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

| RECOMMENDED ELECTIVE |  |  |
| :--- | :--- | :--- |
| PHIL | 1301 | Introduction to Philosophy |
| PHIL | 1304 | Comparative Religion |
| PHIL | 1316 | History of World Religions I - Eastern <br>  <br>  <br> Religions |
| PHIL | 1317 | History of World Religions II - |
|  |  | Western Religions |
| PHIL | 2303 | Introduction to Logic |
| PHIL | 2306 | Introduction to Ethics |
| PHIL | 2307 | Introduction to Social and Political |
|  |  | Philosophy |
| PHIL | 2321 | Philosophy of Religion |
| ANTH | 2351 | Cultural Anthropology |
| ENGL | 2322 | British Literature I |
| ENGL | 2323 | British Literature II |
| ENGL | 2332 | World Literature I |
| ENGL | 2333 | World Literature II |
| GOVT | 2304 | Introduction to Political Science |
| HIST | 2311 | Western Civilization I |
| HIST | 2312 | Western Civilization II |
|  | X4XX | Foreign Language Sequence I |
|  | X4XX | Foreign Language Sequence II |

## Photography

60 credit hours

Photography also has a workforce program

## Department Chair:

Laura Flores SCC-K241 972.578.5527
Academic Advisors:
John Ciccia SCC-G148 972.578.5563

The photography world is now the imaging universe. Contemporary industry paradigm change dictates a new breed of visual athlete. An emphasis in Photography 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 emphasis area includes intensive artistic investigations into traditional film-based photography techniques and approaches; including advanced darkroom and alternative processes; studio lighting for portrait, fashion and product; comprehensive creative solutions; installation and image / text issues; graphic design specifics and contemporary digital workflow.

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

To earn the AA degree, complete the 42 credit hour core curriculum, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

## RECOMMENDED ELECTIVES

| ARTS | 1313 | Historical Foundation of Photography / <br> Imaging Technology |
| :--- | :--- | :--- |
| 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 |

## Psychology

60 credit hours

## Department Chairs:

| Larry Stern | SCC-J246 | 972.881 .5608 |
| :--- | :--- | :--- |
| Meredith Martin | PRC-F167 | 972.377 .1025 |
| Tyler Young | CPC-E213 | 214.491 .6208 |
| Academic Advisor:   <br> Keyona McClellan SCC-G146 972.516 .5069 <br> COLLUN  $\quad$COLEGE |  |  |

COLLEGE

The Sociology emphasis area 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 the emphasis area. Students pursuing an Associate of Arts degree with an emphasis 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 the AA degree, complete the 42 credit hour core curriculum, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

## 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 Psychology |
| PSYC | 2316 | Psychology of Personality |
| PSYC | 2319 | Social Psychology |

## Spanish

60 credit hours

## 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: |  |  |

The Associate of Arts degree with an emphasis in Spanish provides the essential language background for the advanced study of Spanish; for the mastery of the competencies in listening, speaking and writing the language; and for a more rapid acquisition of other foreign languages (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 the AA degree, complete the 42 credit hour core curriculum, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

## RECOMMENDED ELECTIVES

| SPAN | 1300 | Conversational Spanish I |
| :--- | :--- | :--- |
| SPAN | 1310 | Conversational Spanish II |
| 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 Speakers I |
| SPAN | 2315 | Spanish for Native Speakers II |
| SPAN | 2321 | Spanish Literature I |
| SPAN | 2322 | Spanish Literature II |

## Theatre

60 credit hours

## Department Chair:

Shannon Kearns-Simmons
SCC-BB115
972.881.5621

## Academic Advisors:

John Ciccia SCC-G148 972.578.5563

An emphasis in Theatre 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.

The Theatre emphasis area has been nationally ranked among the top 50 collegiate drama programs and was previously awarded the national champion of collegiate drama. Additionally, numerous previous Collin College Theatre students worked on Broadway, during Spring 2012. 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 the AA degree, complete the 42 credit hour core curriculum, a 3 credit hour sophomore literature course (may be satisfied with a core literature course) and electives, totaling 60 credit hours.

## 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

DRAM 2361
DRAM 2362
DRAM 2363
DRAM 2366
DRAM 2367
DRAM 2372
DRAM 2373
DRAM 2375
DRAM 2376
DRAM 2377

Acting IV: Acting for Film and Television
History of the Theatre I
History of the Theatre II
History of Musical Theatre
History of Film Making I
History of Film Making II
Script Analysis
Practical Costuming
Fundamentals of Stage Lighting
Stage Combat and Circus Skills
Acting Shakespeare

## EMPHASIS AREAS FOR THE ASSOCIATE OF ARTS IN TEACHING

## Associate of Arts in Teaching Degree Requirements

61-63 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 will meet the lower division requirements for baccalaureate programs that lead to initial Texas teacher certification. Each of the three AAT specializations is designed to prepare teachers for the various certifications offered in Texas. The degree plan best suited to the desired certification should be followed and transferred to a university to complete Texas teacher certification requirements.

> Students must contact the teacher education program at the specific college or university to which they plan to transfer for detailed information. 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 area of emphasis 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

1. Complete the Texas Core curriculum of 42 credit hours.
2. Complete 18 credit hours in required education courses and content area teaching fields / academic disciplines. (See below)
3. Earn a minimum of 60 credit hours (excluding developmental credit).
4. Earn a minimum of 18 credit hours in residency at Collin.
5. Earn a minimum cumulative GPA of 2.0.
6. Complete TSI requirements.

## AAT in EC - 6

The AAT Early Childhood-Grade 6 Generalists satisfies the lower-division requirements for bachelor's degrees leading to initial Texas teacher certification. 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 <br> 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 ${ }^{1}$ |

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

## RECOMMENDED ELECTIVE

| To complete an AAT: | $\mathbf{3}$ credit hour |  |
| :--- | :--- | :--- |
| CDEC | 2371 | Teaching Technology in the |
|  |  | Classroom |
| PSYC | 1300 | Learning Framework |

## AAT in 4-8, EC-12 Special Education

The Grade 4-8 and Early Childhood-Grade 12 Special Education AAT satisfies the lower-division requirements for bachelor's degrees leading to initial Texas teacher certification in all Grades 4-8 certification areas and EC12 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 ECGrade 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 ${ }^{1}$

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

## RECOMMENDED ELECTIVE

To complete an AAT: 3 credit hour

| CDEC | 2371 | Teaching Technology in the <br> Classroom |
| :--- | :--- | :--- |
| PSYC | 1300 | Learning Framework |

## AAT in Grades 8-12, EC-12 other than Special Education

The AAT for Grades 8-12 and other Early ChildhoodGrade 12 licensure satisfies 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

## Education Courses

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 ${ }^{1}$

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

## EMPHASIS AREAS 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

60 credit hours
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 972.881.5562

The Associate of Science degree with an emphasis in Biology 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 biology students at Collin a personalized, high quality educational experience.

To earn the AS degree, complete the 42 credit hour core curriculum, an additional AS-approved mathematics course and electives, totaling 60 credit hours.

| 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 |
| 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 | General Physics I |


| PHYS | 1402 | General Physics II |
| :--- | :--- | :--- |
| PHYS | 2425 | University Physics I |
| PHYS | 2426 | University Physics II |

## Chemistry

60 credit hours

## 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 Adviso |  |  |
| Alaina Names | SCC-G147 | 972.881 .5562 |
| Department Website: http://www.collin.edu/ | mistry |  |

The Associate of Science degree with an emphasis in Chemistry 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 chemistry students at Collin a personalized, high quality educational experience.

To earn the AS degree, complete the 42 credit hour core curriculum, an additional AS-approved mathematics course and electives, totaling 60 credit hours.

## 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

60 credit hours

## Department Chair:

Glen Grimes
Academic Advisor:
Lisa Gibbs
SCC-J127
972.578.5520
972.377 .1771

The Associate of Science degree with an emphasis in Computer Science 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.

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 general academic teaching institution. If a student successfully completes the field of study curriculum, that block of courses may be transferred to a general academic teaching 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 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 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.

## Computer Science Field of Study

30 credit hours

REQUIRED CORE COURSES
12 credit hours

| MATH | 2413 | Calculus I $^{1}$ |
| :--- | :--- | :--- |
| PHYS | 2425 | University Physics I $^{1}$ |
| PHYS | 2426 | University Physics II |

OTHER REQUIRED COURSES 18 credit hours
COSC 1436 Programming Fundamentals I - C++ ${ }^{2}$
COSC 2325 Computer Organization and Machine Language ${ }^{3}$
MATH 2414 Calculus II ${ }^{1}$
(Select from one of the following tracks.)
C++ Track Content Courses

| COSC | 1437 | Programming Fundamentals II $-\mathrm{C}++^{2}$ <br> COSC |
| :--- | :--- | :--- |
| 2336 | Programming Fundamentals III - <br> C $++^{2}$ |  |

Java Track Content Courses
COSC 1337 Programming Fundamentals II - Java ${ }^{2}$
COSC 2436 Programming Fundamentals III Java ${ }^{2}$

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 $\mathbf{3}$ 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, 1305, 2319, or 2323*
Philosophy PHIL 1301, 1304, 2303, 2306, 2307, or 2321
Spanish SPAN 2321 or 2322
Social/Behavioral Sciences $\mathbf{3}$ 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 2301 and 2302
Select two of the following History courses:
HIST 1301, 1302 or 2301
Visual / Performing Arts $\mathbf{3}$ 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.
2. 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 either ANTH-2346 as a core option under Social / Behavioral Sciences or HUMA-2323 as a core option under Humanities, but not both.


## Engineering

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 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 CollinUTD 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 CollegeUniversity of Texas at Dallas Engineering Articulation Agreement located at www.collin.edu under the University Pre-Admission Partners tab.)

## Engineering Field Of Study

36 credit hours

## REQUIRED CORE COURSES <br> 11 credit hours

CHEM 1412 General Chemistry II ${ }^{1}$
MATH 2320 Differential Equations ${ }^{1}$
PHYS 2425 University Physics I ${ }^{1}$

## OTHER REQUIRED COURSES 25 credit hours

ENGR 2301 Engineering Mechanics I ${ }^{1}$
ENGR 2302 Engineering Mechanics II ${ }^{1}$
ENGR 2305 Electrical Circuits I ${ }^{1}$

MATH 2413 Calculus I ${ }^{1}$
MATH 2414 Calculus II ${ }^{1}$
MATH 2415 Calculus III ${ }^{1}$
PHYS 2426 University Physics II ${ }^{1}$

To earn the AS degree, in addition to the Field of Study Certificate, complete the following additional 31 credit hours:

## ADDITIONAL CORE

## REQUIREMENTS

Communication
31 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, 1305, 2319, or 2323*
Philosophy PHIL 1301, 1304, 2303, 2306, 2307, or 2321

Spanish SPAN 2321 or 2322
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 2301 and 2302
Select two of the following History courses: HIST 1301, 1302 or 2301
Visual / Performing Arts $\mathbf{3}$ 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 ${ }^{2}$
ENGR 2110 Introduction to Digital Systems Laboratory ${ }^{2}$
ENGR 2300 Applied Linear Algebra ${ }^{2}$
ENGR 2310 Introduction to Digital Systems ${ }^{2}$

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 either ANTH 2346 as a core option under Social / Behavioral Sciences or HUMA 2323 as a core option under Humanities, but not both.


## Engineering Technology

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.

## Engineering Technology Field Of Study

35 credit hours

## REQUIRED CORE COURSES 12 credit hours

CHEM 1411 General Chemistry I ${ }^{1}$
MATH 2413 Calculus I ${ }^{1}$
PHYS 2425 University Physics I ${ }^{1}$

| OTHE | REQ | ED COURSES | 23 credit hours |
| :---: | :---: | :---: | :---: |
| ENGL | 2311 | Technical and Business Writing |  |
| ENGT | 1401 | Circuits I ${ }^{1}$ |  |
| ENGT | 1407 | Digital Fundamen |  |
| MATH | 2414 | Calculus II ${ }^{1}$ |  |
| PHYS | 2426 | University Physics |  |
| To earn the AS degree, in addition to the Field of Study |  |  |  |
| Certifica | te, com | lete the following cor | re requirements: |

## ADDITIONAL CORE

REQUIREMENTS

## 31 credit hours

Communication
9 credit hours
Both of the following English courses are required: ENGL 1301 and 1302
Select on 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, 1305, 2319, or 2323*
Philosophy PHIL 1301, 1304, 2303, 2306, 2307, or 2321
Spanish SPAN 2321 or 2322
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 2301 and 2302
Select two of the following History courses: HIST 1301, 1302 or 2301
Visual/Performing Arts $\mathbf{3}$ 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 either ANTH-2346 as a core option under Social / Behavioral Sciences or HUMA-2323 as a core option under Humanities, but not both.


## Environmental Science

| 60 credit hours |  |  |
| :---: | :---: | :---: |
| 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 | 972.881.5562 |
| Department Website: |  |  |
| http://www.collin.edu/g | eology |  |

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 emphasis 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 the AS degree, complete the 42 credit hour core curriculum, an additional AS-approved mathematics course and electives, totaling 60 credit hours.

## RECOMMENDED ELECTIVES

| BIOL | 1407 | General Biology II |
| :--- | :--- | :--- |
| ENVR | 1401 | Environmental Science I |
| ENVR | 1402 | Environmental Science II |


| BIOL | 1406 | General Biology I |
| :--- | :--- | :--- |
| 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 | General Physics I |

## Geology

60 credit hours

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 972.881.5562
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 emphasis in geology prepares the student to pursue university studies leading to a Bachelor of Science Degree.

To earn the AS degree, complete the 42 credit hour core curriculum, an additional AS-approved mathematics course and electives, totaling 60 credit hours.

| 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

## 60 credit hours

## 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 an emphasis 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 the AS degree, complete the 42 credit hour core curriculum, an additional AS-approved mathematics course and electives, totaling 60 credit hours.

## RECOMMENDED ELECTIVSE

| CHEM | 1411 | General Chemistry I ${ }^{1}$ |
| :--- | :--- | :--- |
| COSC | 1436 | Programming Fundamentals I - C++ ${ }^{1}$ |
| DFTG | 1309 | Basic Computer-Aided Drafting ${ }^{2}$ |
| DFTG | 2319 | Intermediate Computer-Aided <br> Drafting ${ }^{2}$ |
| ENGR | 1201 | Introduction to Engineering $^{2}$ |

ENGR 2301 Engineering Mechanics I ${ }^{1}$
ENGR 2302 Engineering Mechanics II ${ }^{1}$
ENGR 2305 Electrical Circuits I ${ }^{1}$
MATH 2414 Calculus II ${ }^{1}$

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

## Mathematics

60 credit hours

## Department Chair:

| Raja Khoury | SCC-J217 | 972.881 .5909 |
| :--- | :--- | :--- |
| Cathy Donald-Whitney | CPC-C200B | 972.548 .6717 |
| Dawn Richardson PRC-D215 972.377 .1633 <br> Academic Advisor:   <br> Alaina Names <br> Department Website: <br> http://www.collin.edu/math SCC-G147 972.881 .5562 <br>   $\quad$. |  |  |

The Mathematics emphasis area 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 the AS degree, complete the 42 credit hour core curriculum, an additional AS-approved mathematics course and electives, totaling 60 credit hours.

## RECOMMENDED ELECTIVES

MATH $1314{ }^{1}$ College Algebra
MATH 1316 Plane Trigonometry
MATH 1342 Elementary Statistical Methods
MATH $1414{ }^{1}$ 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 Logic

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

## Physical Education

60 credit hours

## Department Chair:

Craig Leverette PRC-A107 972.377.1756
Academic Advisor:

| Torrey West | PRC-F132 | 972.377 .1513 |
| :--- | :--- | :--- |
| Caryn Hawkins | PRC-F133 | 972.377 .1655 |

Students may earn an Associate of Science degree with an emphasis in Physical Education. The emphasis area focuses on the inter-relatedness of several fields of study. Physical skills and knowledge are acquired through the physical education activity and theory classes.

Offerings in the humanities, social sciences, and biological sciences also prepare the student for a career in physical education.

## General Physical Education

To earn the AS degree, complete the 42 credit hour core curriculum, an additional AS-approved mathematics course and electives, totaling 60 credit hours.

## RECCOMENDED ELECTIVES

| PHED | 1301 | Foundations of Sport and Physical <br> Activity |
| :--- | :---: | :--- |
| PHED | 1304 | Personal Health |
| PHED | 1306 | Safety and First Aid |
| PHED | 1336 | Introduction to Sports Management |
| PHED | 1337 | Leadership and Communication in |

## 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 the AS degree, complete the 42 credit hour core curriculum, an additional AS-approved mathematics course and electives, totaling 60 credit hours.

## RECOMMENDED ELECTIVES

| PHED | 1301 | Foundations of Sport and Physical <br> Activity |
| :--- | :---: | :--- |
| PHED | 1336 | Introduction to Sports Management |
| PHED | 1337 | Leadership and Communication in <br>  <br> Sport |
| ACCT | 2301 | Financial Accounting |
| ECON | 2301 | Principles of Macroeconomics |
| ECON | 2302 | Principles of Microeconomics |

## Physics

60 credit hours

## 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 972.881.5562
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 an emphasis in Physics prepares the student to pursue university studies leading to a bachelor's degree. The basic AS program, at the general physics level, 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 the AS degree, complete the 42 credit hour core curriculum, an additional AS-approved mathematics course and electives, totaling 60 credit hours.

## 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 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

## Technical Communication and Knowledge Management

60 credit hours

## Faculty Contact:

Jennifer Warren
SCC-B109
Academic Advisor:
Caryn Hawkins
PRC-F133
972.881.5968
972.377.1655

Students may earn an Associate of Science degree with an emphasis in Technical Communication and Knowledge Management. The emphasis area is a twoyear (four-semester) course of study that will prepare those completing it to transfer into baccalaureate level programs in Technical Communication or related fields at universities throughout Texas and around the country, or to enter the field of Knowledge Management after completing a liberal arts degree and possible graduate training.

The course of study includes a strong liberal arts core curriculum ( 42 hours) as well as an additional course in mathematics required for the Associate of Science degree, and four courses in the concentration.

According to the Bureau of Labor Statistics' Occupational Outlook Handbook: "Technical writers put technical information into easily understandable language. They prepare operating and maintenance manuals, catalogs, parts lists, assembly instructions, sales promotion materials, and project proposals. Many technical writers work with engineers on technical subject matters to prepare written interpretations of engineering and design specifications and other information for a general readership. Technical writers also may serve as part of a team conducting usability studies to help improve the design of a product that still is in the prototype stage. They plan and edit technical materials and oversee the preparation of illustrations, photographs, diagrams, and charts."

Most Technical Writers work for private corporations, especially in the fields of computer systems design, software publishing, engineering services, and scientific, technical, and management consulting.

Positions generally require at least a Bachelor's degree, though there are a small number of openings for candidates with Associate's degrees.

Knowledge Management is an emerging field which offers excellent opportunities for students with a broad liberal arts background and strong communications and leadership skills to enter the business world in a way that offers opportunities for advancement into management.

Students interested in this emphasis area should see an academic advisor for consultation and consult the college web site for more specific information.

To earn the AS degree, complete the 42 credit hour core curriculum, an additional AS-approved mathematics course and electives, totaling 60 credit hours.

## CORE CURRICULUM

Some specific Core course selections are recommended but any Core Curriculum options listed in the Texas Core table that satisfy an AS requirement may be taken.

## Core recommendations include:

SPCH 1321 Business and Professional Speaking Any Philosophy course
Two of these Math courses: (One satisfies the Mathematics Component Core requirement and one satisfies the AS degree requirement for an additional Math course.) MATH 1342, 2312, 2413, 2414, 2415, 2417, 2419 Select two of the following Natural Science courses: PHYS 1401, 1402, 2425 or 2426

## RECOMMENDED ELECTIVES

| BUSI 2304 | Business Writing and Technical <br> Communications Seminar |  |
| :--- | :--- | :--- |
| COMM 2301 | Intro to Technology and Human <br> Communication |  |
| ENGL 2311 | Technical and Business Writing |  |
| ENGL | 2389 | Academic Co-op English |
| SPCH | 1318 | Interpersonal Communication |

## 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

| ARTS | 1311 | 2-D Design |
| :--- | :--- | :--- |
| ENGL | 1301 | Composition I |
| ENGL | 1302 | Composition II |
| MATH | 2413 | Calculus I |
| MATH | 2414 | Calculus II |
| PHYS | 1401 | General Physics I |
| PHYS | 1402 | General Physics II |
| GOVT | 2301 | American Government I (Federal and |
|  |  | Texas Constitutions) |
| GOVT | 2302 | American Government II (Federal and |
|  |  | Texas Topics) |
| HIST | 1301 | United States History I |
| HIST | 1302 | United States History II |
| PSYC | 2301 | General Psychology |
| Social/Behavioral Sciences: Any five (5) |  |  |
| Anthropology, Economics, Psychology, and/or |  |  |
| Sociology courses |  |  |

## Pre-Health Studies

Pre-Chiropractic, Pre-Clinical Lab Sciences, Pre-Pharmacy<br>Pre-Physician's Assistant<br>Pre-Veterinary Medicine<br>Mary Weis SCC-K244 972.881.5725<br>Pre-Dental, Pre-Medicine<br>Jean Helgeson. SCC-J138 972.881.5885

Collin offers the courses that are most commonly recommended for the first two years of Pre-Chiropractic, Pre- Dental, Pre-Medicine, Pre-Pharmacy, and PreVeterinary 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
ENGL-1301 and ENGL-1302
Mathematics 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
ANTH-2351, PSYC-2301, or SOCI-1301
GOVT-2301 and GOVT-2302
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 discipline areas:

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

## WORKFORCE EDUCATION PROGRAMS

## ASSOCIATE OF APPLIED SCIENCE

 DEGREEThe 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 from 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 complete the graduation 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 below. However, some programs limit the core options that may be used to meet the requirements for the specific AAS degree.

| 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, 132 1414, 2305, 2312, 2318, 2320 | $\begin{aligned} & 1342,1350,1351, \\ & 2414,2415,2417,2419 \end{aligned}$ |
| Biology | BIOL 1406, 1407, 1408, 1409 2404, 2406, 2416, 2421 | $414,1415,2401,2402$ |
| Chemistry | CHEM 1405, 1411, 1412, 240 | 2425 |
| Environmental Science | ENVR 1401, 1402 |  |
| Geology | GEOL 1401, 1402, 1403, 140 | 1445, 1447 |
| Physics | $\begin{aligned} & \text { PHYS 1401, 1402, 1403, } 1402 \\ & 2426 \\ & \hline \end{aligned}$ | $1410,1415,2425,$ |
| Humanities / Fine Arts - 1 Course (3 Credit Hours) |  |  |
| Dance | DANC 2303 |  |
| English | $\begin{aligned} & \text { ENGL 2322, 2323, 2327, } 2328 \\ & 2351 \end{aligned}$ | $2333,2342,2343,$ |
| French | FREN 2303, 2304 |  |
| History | HIST 2311, 2312, 2321, 2322 |  |
| Humanities | HUMA 1301, 1305, 2319, 232 |  |
| Music | MUSI 1306, 1307 |  |
| Philosophy | PHIL 1301, 1304, 2303, 2306 | 321 |
| Spanish | SPAN 2321, 2322 |  |
| Theatre | DRAM 1310, 2361, 2362 |  |
| Visual Arts | ARTS 1301, 1303, 1304, 131 |  |


| Area | Courses |
| :---: | :---: |
| Social / Behavioral Sciences - 1 Course (3 Credit Hours) |  |
| Anthropology | ANTH 2346*, 2351 |
| Economics | ECON 1301, 2301, 2302 |
| Government | GOVT 2301, 2302 |
| History | HIST 1301, 1302, 2301 |
| Psychology | PSYC 2301, 2302 |
| Sociology | SOCI 1301 |
| Physical Education / Dance - 1 Course (1 Credit Hour) |  |
| Dance | DANC 1101, 1110, 1111, 1141, 1142, 1145, 1146, <br> 1147, 1148, 1151, 1152, 1222, 1223, 2141, 2142, <br> 2145, 2146, 2147, 2148, 2151, 2152, 2301, 2325 |
| Physical Education | PHED 1100, 1102, 1104, 1106, 1111, 1112, 1113 , 1114, 1115, 1116, 1117, 1118, 1120, 1121, 1123, 1124, 1125, 1126, 1127, 1129, 1130, 1131, 1133, 1136, 1137, 1140, 1147, 1148, 1253, 1338 |

## WORKFORCE CERTIFICATES AND OTHER 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 emphasis 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
- E-Business Development, contact Glen Grimes at 972.578.5520
- 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
- Nursing, contact Nell Ard at 972.548.6772
- 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 Ciccia SCC-G148 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 |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | Composition I <br> FLMC <br> 1301 |



SPCH 1311 Fundamentals of Speech Communication (See other Speech Core Options)
OPTION $1^{2}$

## Second Semester

ARTV $2335 \quad$| Portfolio Development for Animation |
| :--- |
| (Capstone) |

FLMC 2305 Film-Style 3-D Animation Production
PSYC 2301 General Psychology (See other Social/Behavioral Science Core Options)
OPTION $2^{3}$
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 ARTV-2355
3. Select one of the following: ARTV-2330 or ARTV-2351

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


## AAS - Animation <br> 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 |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | Composition I |
| FLMC | 1301 | History of Animation Techniques |

## Second Semester

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


| Third Semester <br> PHED / DANC |  |
| :--- | :--- |
| Any 1 credit hour activity course |  |
| FLMC 1331 |  |

SECOND YEAR
First Semester

| ARTS | 1301 | Art Appreciation |
| :---: | :---: | :---: |
| ARTV | 2345 | (See other Humanities / Fine Arts Core Options) |
|  |  | 3-D Modeling and Rendering II - |
|  |  | Maya |
| GAME | 1304 | Level Design |
| MATH | $\underline{1332}$ | Math for Liberal Arts I ${ }^{1}$ |
| SPCH | $\underline{1311}$ | Fundamentals of Speech |
| OPTION $1{ }^{2}$ |  | Communication |
|  |  | (See other Speech Core Options) |
|  |  |  |  |
| Second Semester |  |  |
| ARTV | 2335 | Portfolio Development for Animation (Capstone) |
| GAME | 2359 | Game and Simulation Group Project |
| PSYC | $\underline{2301}$ | General Psychology |
|  |  | (See other Social/Behavioral Science Core Options) |

OPTION $2^{3}$
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 ARTV-2355
3. Select one of the following: ARTV-2330 or ARTV-2351

* Elective (3 credit hours): ARTC-1394, FLMC-2331 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 - Flash |
| ARTV | 1341 | 3-D Animation I |
| GAME 1303 | Introduction to Game Design and    <br>     <br> 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 $1{ }^{1}$

## Second Semester

ARTV 2335 Portfolio Development for Animation (Capstone)
FLMC 2305 Film-Style 3-D Animation Production OPTION $2{ }^{2}$

1. Select one of the following: ARTV-2301 or ARTV-2355
2. Select one of the following: ARTV-2330 or ARTV-2351

## Certificate - Animation <br> Game Art Track <br> 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 - Flash |
| 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 - <br> Maya |
| :--- | :--- |
| GAME 1304 | Level Design |
| OPTION 1 ${ }^{1}$ |  |

## Second Semester

| ARTV 2335 | Portfolio Development for Animation <br> (Capstone) |
| :--- | :--- |
| GAME 2359 | Game and Simulation Group Project |
| OPTION 2 ${ }^{2}$ |  |

1. Select one of the following: ARTV-2301 or ARTV-2355
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-2355, |  |
| FLMC-1331 |  |

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

## Biotechnology

Department Chair:

| Daphne Babcock |
| :--- |$\quad$ SCC-I226 $\quad 972.578 .5518$

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 | General Biology I |
| :--- | :--- | :--- |
| BIOL | 1414 | Introduction to Biotechnology |
| BIOL | 1415 | Introduction to Biotechnology II |
| CHEM | 1411 | General Chemistry I |

## Second Semester

| BIOL | 2416 | Genetics $^{1}$ |
| :--- | :--- | :--- |
| BITC | 2386 | Internship - Biology Technician / <br> Biotechnology Laboratory Technician <br> (Capstone) $^{2}$ |
| BITC 2431 | Cell Culture Techniques $^{\text {Cen }}$ |  |
| 1. May substitute BIOL-2421 or CHEM-2423 |  |  |
| 2. May substitute BITC-2441 |  |  |

## Business Management

| Department Chair: <br> Christine DeLaTorre, Ph.D. |  |  |
| :--- | ---: | ---: |
|  | PRC-J214 | 972.548 .6637 |
| Academic Advisor: |  |  |
| Lisa Gibbs | PRC-F131 | 972.377 .1771 |
| Debra Lamb | SCC-G141 | 972.881 .5854 |

## 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
ENGL 1301 Composition I
HUMA 1301 Introduction to the Humanities
(See other Humanities / Fine Arts Core
Options)
MRKG 1311 Principles of Marketing

| Second Semester |  |
| :--- | :--- |
| ACNT | 1303 |
| Introduction to Accounting I ${ }^{1}$ |  |
| BMGT | 1344 | | Negotiations and Conflict |
| :--- |
| Management ${ }^{5}$ |

## SECOND YEAR

## First Semester

| BMGT | 1305 | Communications in Management |
| :--- | :--- | :--- |
| BMGT | 1341 | Business Ethics |
| BMGT | 2311 | Change Management |
| HRPO | 2301 | Human Resources Management |
| HRPO | 2307 | Organizational Behavior $^{6}$ |

Second Semester
BMGT 2309 Leadership
BMGT 2331 Principles of Quality Management
BMGT 2341 Strategic Management ${ }^{4}$ (Capstone)
BMGT 2347 Critical Thinking and Problem Solving
IBUS 2341 Intercultural Management

1. May substitute ACCT-2301
2. May substitute ECON-2301, ECON-2302, PSYC-2301 or PSYC-2302
3. 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
4. May substitute BMGT-2382 with written approval of the Department Chair
5. Offered spring semester only
6. Offered fall semester only

## Certificate - Business Management <br> 18 credit hours

## First Semester

BMGT 1305 Communications in Management
BMGT 1307 Team Building
BMGT 1327 Principles of Management

## Second Semester

BMGT 2309 Leadership
BMGT 2311 Change Management
BMGT 2341 Strategic Management (Capstone) ${ }^{1}$

1. May substitute BMGT-2382 with written approval of the
Department Chair

## Child Development

## Also see Child Development / Early Childhood and the 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 <br> 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 TECA1354, 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, provide 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 day 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
- Confirmation that confidentiality and professional discretion will be observed at all times
- Notarized affidavit
- 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 1301 Composition I
TECA 1311
TECA 1354
Educating Young Children
Child Growth and Development

## Second Semester

CDEC 1370 Introduction to Teaching ESL
PHED / DANC Any activity course
(See PHED / DANC Core Options)
PSYC 2301 General Psychology
(See other Social / Behavioral Science
Core Options)
SPCH 1311 Fundamentals of Speech
Communication
(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 | Teaching 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 / <br> Assistant (Capstone) |
| HUMA | 1301 | Introduction to the Humanities |
|  |  | (See other Humanities / Fine Arts Core Options) |
| MATH | 1314 | College Algebra <br> (See other Mathematics / Natural Science Core Options) |
| ELECTIVE * |  |  |
| * Electives (9 credit hours): CDEC-1317, CDEC-1321, <br> CDEC-2307, CDEC-2322, CDEC-2324, CDEC-2326, <br> 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 | Inroduction to Teaching ESL |
| CDEC | 2166 | Practicum - Child Care Provider / <br> Assistant (Capstone) |
| TECA | 1303 | Family, School, and Community |

## Certificate - Child Development

 Associate16 credit hours

First Semester

| CDEC | 1317 | Child Development Associate <br> Training I |
| :---: | :---: | :--- |
| CDEC | 2166 | Practicum - Child Care Provider <br> Assistant (Capstone) |
| CDEC | 2322 | Child Development Associate <br> Training II |
| CDED | 2324 | Child Development Associate |
| TECA | 1318 | Training III |
| TECA | 1354 | Child Grows of the Young Child 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 <br> Training I |
| :--- | :--- | :--- |
| CDEC | 2322 | Child Development Associate <br> 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<br>and Associate of Arts in Teaching (AAT)<br>Department Chair:<br>Elaine Zweig, Ph.D. SCC-B132 972.881.5967<br>Academic Advisor:<br>Brian Lenhart<br>SCC-G145 972.881 .5190

## Program Options:

Certificate - Early Childhood Educator
Certificate - Infant and Toddler Educator


#### Abstract

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 day 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
- Confirmation that confidentiality and professional discretion will be observed at all times
- Notarized affidavit
- 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 <br> (This program covers Special Education from Infancy through the School-Age child) <br> 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 <br> Instructional Techniques for Children <br> CDEC |
| :--- | :--- | :--- |
| 2340 |  | with Special Needs |
| TECA | 1303 | Family, School, and Community <br> 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 <br> CDEC | 2166 |
| :--- | :--- | :--- | :--- | | Practicum - Child Care Provider / |
| :--- |
| Assistant (Capstone) |

## Cisco Systems Computer Networking Technology

Program Director:
Dave Galley
Academic Advisor:
Catherine Smith
Program Options:
AAS - Cisco Systems Computer Networking
$\quad$ Technology
Certificate - Advanced Cisco Systems Computer
$\quad$ Networking Technology (CCNP)
MSAA - Cisco Systems Computer Networking
$\quad$ 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. Tech Prep students who took collegiate-level courses in computer networking technology while in high school may elect to receive articulated college credit.

## AAS - Cisco Systems Computer Networking Technology

69 credit hours

| FIRST YEAR |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
| ENGL | $\underline{1301}$ | Composition I |
| ITCC | 1301 | CCNA 1 Cisco Exploration 1 Network Fundamentals |
| ITCC | 1304 | CCNA 2 Cisco Exploration 2 Routing Protocols and Concepts |
| ITNW | 1358 | Network + |
| MATH | $\underline{1314}$ | College Algebra ${ }^{1}$ |

## Second Semester

| CPMT | 1405 | IT Essentials I: PC Hardware and <br> Software |
| :---: | :---: | :--- |
| ITCC | 2308 | CCNA 3 Cisco Exploration 3-LAN <br> Switching and Wireless |
| ITCC | 2310 | CCNA 4 Cisco Exploration 4 - <br> ITMT <br> 1440 |
| Accessing the WAN <br> Managing and Maintaining a <br> Microsoft Windows Server 2003 |  |  |
|  |  | Environment |

## Summer

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)

\left.| SECOND YEAR |  |  |
| :--- | :--- | :--- |
| First Semester |  |  |$\right]$| ITCC | 2454 | CCNP Routing - Implementing IP <br> Routing |
| :--- | :--- | :--- |
| ITCC | 2455 | CCNP Switch - Implementing IP <br> Switching |
| ITMT | 1450 | Implementing, Managing, and <br> Maintaining a Microsoft Windows <br> Server 2003 Network Infrastructure: |
| ITSY | 2300 | Network Services <br> Operating System Security |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | Fundamentals of Speech |
|  |  | Communication <br> (See other Speech Core Options) |

## 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, and ITSY courses are offered in eight-week express sessions.

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

12 credit hours

ITCC 1304

Second Semester

| Second Semester |  |  |
| :--- | :--- | :--- |
| ITCC | 2308 | CCNA 3 Cisco Exploration 3- LAN <br> Switching and Wireless |
| ITCC | 2310 | CCNA 4 Cisco Exploration 4- <br>  |
| Accessing the WAN |  |  |

CCNA 2 Cisco Exploration 2 Routing Protocols and Concepts

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

Note 1: Many ITCC, ITMT, ITNW, and ITSY courses are offered in eight-week express sessions
Note 2: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

CCNA 1 Cisco Exploration 1 Network Fundamentals Routing Protocols and Concepts CCNA 3 Cisco Exploration 3 - LAN Switching and Wireless Accessing the WAN

## FIRST YEAR

First Semester
ITCC 1301 CCNA 1 Cisco Exploration 1 -
Network Fundamentals

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 (3-5 credit hours): CPMT-2302, EECT-1371, ITNW-2473 (Recommended), ITSY-2301, ITSY-2341, ITSY2342, ITSY-2343, or ITSY-2572

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

Certificate - Advanced Cisco
Systems Computer Networking Technology (CCNP)
28 credit hours

## 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.

\author{

AAS - Computer-Aided Drafting and Design <br> 64 credit hours <br> FIRST YEAR <br> First Semester <br> | DFTG | 1305 | Technical Drafting |
| :--- | :--- | :--- |
| DFTG | 1309 | Basic Computer-Aided Drafting |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | $\underline{\text { Composition I }}$ |
| $\underline{\text { MATH }}$ | $\underline{1314}$ | $\underline{\text { College Algebra }}{ }^{1}$ |

}

1311
Fundamentals of Speech Communication
(See other Speech Core Options)

| Second Semester |  |  |
| :---: | :---: | :---: |
| CETT | 1403 | DC Circuits |
| DFTG | 2319 | Intermediate Computer-Aided Drafting |
| MATH | 1316 | Plane Trigonometry |
| PHED / | DANC | Any activity course |
|  |  | (See PHED / DANC Core Options) |
| ELECTIVE* |  |  |
| Summer |  |  |
| DFTG | 1333 | Mechanical Drafting |
| SECOND YEAR |  |  |
| First Semester |  |  |
| DFTG | 2328 | Architectural Drafting - Commercial |
| DFTG | 2332 | Advanced Computer-Aided Drafting |
| ENTC | 1323 | Strength of Materials |
| HUMA | $\underline{1301}$ | Introduction to the Humanities |
|  |  | (See other Humanities / Fine Arts Core Options) |
| PHYS | 1401 | General Physics I |
| Second Semester |  |  |
| DFTG | 2336 | Computer-Aided Drafting |
|  |  | Programming (Capstone) |
| DFTG | 2381 | Cooperative Education - Drafting and Design Technology / Technician, General |
| ECON | $\underline{1301}$ | Introduction to Economics |
|  |  | (See other Social / Behavioral Science Core Options) |
| PHYS 1402 <br> ELECTIVE * |  | General Physics II |
|  |  |  |
| 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, <br> BUSI-1301, DFTG-1317, DFTG-1345, DFTG-1358, <br> DFTG-1371, DFTG-1380, DFTG-2300, DFTG-2312, <br> DFTG-2321, DFTG-2335, or ENGL-2311 |  |  |

## Certificate - Computer-Aided Drafting and Design

30 credit hours

FIRST YEAR
First Semester
DFTG 1309 Basic Computer-Aided Drafting

| Second Semester |  |  |
| :--- | :--- | :---: |
| DFTG | 1305 |  |
| DFTG | 2319 |  |$\quad$ Technical Drafting $\quad$ Intermediate Computer-Aided

## 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 <br>  |
|  | Programming (Capstone) |  |

```
ELECTIVE *
ELECTIVE *
```

```
* Electives (9 credit hours): ARCE-1352, ARCE-2352,
    DFTG-1317, DFTG-1333, DFTG-1345, DFTG-1358,
    DFTG-1380, DFTG-2300, DFTG-2321, DFTG-2335,
    DFTG-2350, or DFTG-2381
```


## Certificate - Mechanical ComputerAided Drafting and Design

30 credit hours

FIRST YEAR
First Semeste
DFTG 1305
DFTG 1309
Technical Drafting 1
Basic Computer-Aided Drafting 1

| Second Semester |  |  |
| :--- | :--- | :--- |
| DFTG | 1333 | Mechanical Drafting |
| DFTG | 2319 | Intermediate Computer-Aided |
|  |  | Drafting |
| ENTC | 1323 | Strength of Materials |

SECOND YEAR
First Semester

| DFTG 1345 | Parametric Modeling and Design <br> DFTG <br> Mechanical Drafting - Fundamentals <br> of Sheetmetal Design <br> Geometric Dimensioning and <br> Tolerancing |
| :--- | :--- | :--- |
| DFTG 2350 |  |
| Second Semester |  |
| DFTG 2335 | Advanced Technologies in Mechanical <br> Design and Drafting (Capstone) |
| ELECTIVE * |  |
| * Elective (3 credit hours): ARCE-1352, DFTG-1317, |  |
| DFTG-1358, DFTG-1380, DFTG-2321, DFTG-2328, |  |
| DFTG-2332, DFTG-2336, or DFTG-2381 |  |

## Enhanced Skills Certificate - CADD <br> 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. 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 |
| :--- |
|  |

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

## Computer Networking Technology

Program Director:
Dave Galley
Academic Advisor:
Catherine Smith
Program Options:
AAS - Computer Networking Technology
Certificate - Computer Networking Technology
$\quad$ Software (MCSA)
Certificate - Computer Networking Technology
$\quad$ Advanced Software (MCSE)

## AAS - Computer Networking Technology

69 credit hours

| FIRST YEAR |  |  |
| :---: | :---: | :---: |
| First Semester |  |  |
| ENGL | 1301 | Composition I |
| ITMT | 1300 | Implementing and Supporting |
|  |  | Microsoft Windows XP Professional |
| ITMT | 1440 | Managing and Maintaining a |
|  |  | Microsoft Windows Server 2003 |
|  |  | Environment |
| ITNW | 1358 | Network + |
| MATH | 1314 | College Algebra ${ }^{1}$ |
| PHED / DANC |  | Any activity course |
|  |  | (See PHED / DANC Core Options) |


| Second Semester |  |  |
| :--- | :---: | :--- |
| CPMT | 1405 | IT Essentials I: PC Hardware and <br> Software |
| ITCC | 1301 | CCNA 1 Cisco Exploration 1 - <br> Network Fundamentals |
| ITMT | 1450 | Implementing, Managing, and <br> Maintaining a Microsoft Windows <br> Server 2003 Network Infrastructure: |
|  |  | Network Services |
| ITSC | 1316 | Linux Installation and Configuration |


| Summer |  |  |
| :---: | :---: | :---: |
| ECON | 1301 | Introduction to Economics |
| ITCC | 1304 | (See other Social / Behavioral Science Core Options) <br> CCNA 2 Cisco Exploration 2 - <br> Routing Protocols and Concepts |
| SECOND YEAR |  |  |
| First Semester |  |  |
| ITMT | 1455 | Planning, Implementing, and <br> Maintaining a Microsoft Server 2003 <br> Network Infrastructure |
| ITMT | 2400 | Planning, Implementing, and Maintaining a Microsoft Windows Server 2003 Active Directory Infrastructure |
| $\underline{\text { SPCH }}$ | 1311 | Fundamentals of Speech |
|  |  | Communication |

(See other Speech Core Options)

## ELECTIVE *

Second Semester

| HUMA 1301 | Introduction to the Humanities <br> (See other Humanities / Fine Arts Core <br> Options) |
| :--- | :--- | :--- |
| ITMT 2440 | Designing Security for Microsoft <br> Networks |
| ITSY 2300 | Operating System Security (Capstone) |
| 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

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

Note: Many ITCC, ITMT, ITNW, and ITSY courses are offered in eight-week express sessions.

Certificate - Computer Networking Technology Software (MCSA)

| FIRST YEAR |  |  |
| :--- | :--- | :--- |
| First Semester |  |  |
| ITMT $\quad 1300$ | Implementing and Supporting |  |
|  |  | Microsoft Windows XP Professional |
| ITNW | 1358 | Network + |

Second Semester

| ITMT | 1440 | Managing and Maintaining a <br>  <br>  <br>  <br> Microsoft Windows Server 2003 <br> ITMT 1450 |
| :--- | :--- | :--- |
|  | Environment |  |
|  |  | Implementing, Managing, and |
|  |  | Maintaining a Microsoft Windows |
|  |  | Server 2003 Network Infrastructure: |
|  | Network Services |  |

ELECTIVE *

* Elective (4 credit hours): ITMT-2403, ITMT-2440 or ITMT-2450

Note: Many ITCC, ITMT, ITNW, and ITSY courses are offered in eight-week express sessions.

\author{

Certificate - Computer Networking Technology Advanced Software (MCSE) <br> 29 credit hours <br> \begin{tabular}{lcl}
\multicolumn{2}{l}{ First Semester } \& <br>
ITMT \& 1300 \& Implementing and Supporting <br>
\& \& Microsoft Windows XP Professional <br>
ITNW \& 1358 \& Network+ <br>

ITMT \& 1440 \& | Managing and Maintaining a |
| :--- |
|  | <br>

\& | Microsoft Windows Server 2003 |
| :--- |
| Environment | <br>

ITMT \& 1450 \& | Implementing, Managing, and |
| :--- | <br>

\& | Maintaining a Microsoft Windows |
| :--- |
| Server 2003 Network Infrastructure: |
|  | \& Network Services

\end{tabular}

}

## Second Semester

ITMT 1455 Planning, Implementing, and Maintaining a Microsoft Server 2003 Network Infrastructure
ITMT 2400 Planning, Implementing, and Maintaining a Microsoft Windows Server 2003 Active Directory Infrastructure (Capstone)
ITMT 2440 Designing Security for Microsoft Networks

ELECTIVE *

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

Note: All ITCC, ITMT, ITNW and ITSY courses are offered in eight-week express sessions.

## Computer Systems

| Department Chair: |  |  |
| :--- | :--- | :--- |
| Glen Grimes <br> Academic Advisor: <br> Lisa Gibbs | SCC-J127 | 972.578 .5520 |
|  | PRC-F131 | 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 <br> 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 credit hours

## FIRST YEAR

First Semester

| COSC | 1315 | Fundamentals of Programming ${ }^{1}$ |
| :--- | :--- | :--- |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | Composition I <br> ITSE |
| 1311 |  | Beginning Web Programming |
| ITSW | 1307 | Introduction to Database - Access |
| MATH | 1314 | College Algebra $^{2}$ |

Second Semester

| CPMT | 1405 | IT Essentials I: PC Hardware and <br> Software <br> Technical and Business Writing |
| :--- | :---: | :--- |
| $\underline{\text { ENGL }}$ | $\underline{2311}$ | Tetwork+ <br> ITNW 1358 |

## SECOND YEAR

First Semester
ECON 1301 Introduction to Economics ${ }^{3}$
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 <br> $($ Security + ) |
| :--- | :--- | :--- |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | $\frac{\text { Fundamentals of Speech }}{\text { Communication }}$ <br> (See other Speech Core Options) |


| ITSE | 1330 | Introduction to C\# Programming |
| :--- | :--- | :--- |
| ITSE | 1356 | Extensible Markup Language (XML) |
| ITSE | 2309 | Database Programming - SQL |
| ITSW | 1304 | Introduction to Spreadsheets - Excel |

\(\left.$$
\begin{array}{ll}\text { SECOND YEAR } \\
\text { First Semester } \\
\underline{\text { ECON }} & \underline{1301}\end{array}
$$ $$
\begin{array}{ll}\underline{\text { Introduction to Economics }}{ }^{2} \\
\underline{\text { HUMA }} & \underline{1301}\end{array}
$$ \begin{array}{l}Introduction to the Humanities <br>
(See other Humanities / Fine Arts Core <br>

Options)\end{array}\right]\)| Network+ |  |  |
| :--- | :--- | :--- |
| ITNW | 1358 | C\# Database Development with <br> ITSE <br> 2338 |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | Fundamentals of Speech <br> $\underline{\text { Communication }}$ |
|  |  | (See other Speech Core Options) |

## Second Semester

| BMGT | 1307 | Team Building $^{3}$ |
| :--- | :--- | :--- |
| IMED | 1341 | Interface Design $^{4}$ |
| IMED | 2309 | Internet Commerce |
| INEW | 2330 | Comprehensive Software Project: <br>  <br> Planning and Design ${ }^{5}$ (Capstone) <br> ITSE <br> PHED / DANC |
|  | Advanced Oracle PL/SQL <br> Any activity course |  |
|  |  | See PHED / DANC Core Options) |

```
l 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, PSYC-2301, or PSYC-2302
3 May substitute BMGT-1341 or BMGT-1344
4 May substitute IMED-2345, INEW-2334, ITSE-1306, ITSE-1371, ITSE-1392, or ITSE-2302
5 May substitute ITSC-2380
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## AAS - Computer Systems Information System Track

62 credit hours

FIRST YEAR
First Semester
BCIS 1305
Business Computer Applications
ENGL 1301 Composition I
ITSE 1311
Beginning Web Programming

ITSW 1307 Introduction to Database - Access
MATH 1314 College Algebra ${ }^{1}$

| Second Semester |  |  |
| :---: | :---: | :---: |
| COSC | 1315 | Fundamentals of Programming ${ }^{2}$ |
| 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 ${ }^{3}$ |
| ECON | 1301 | Introduction to Economics ${ }^{4}$ |
| HUMA | 1301 | Introduction to the Humanities |
|  |  | (See other Humanities / Fine Arts Core Options) |
| ITSE | 1332 | Introduction to Visual Basic .NET Programming ${ }^{5}$ |
| SPCH | 1311 | Fundamentals of Speech |
|  |  | Communication |
|  |  | (See other Speech Core Options) |

## Second Semester

| BCIS | 2390 | Systems Analysis and Design ${ }^{6}$ <br> (Capstone) |
| :---: | :---: | :--- |
| BMGT | 1344 | Negotiations and Conflict <br> Management ${ }^{7}$ |
| ITSC | 1305 | Introduction to PC Operating Systems <br> 8 |

ITSE 2309 Database Programming - SQL ${ }^{9}$
ITSY 1400 Fundamentals of Information Security (Security +)
PHED / DANC Any activity course (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 BCIS-1320 or COSC-1436
3. May substitute BMGT-1341 or BUSI-1301
4. May substitute ECON-2301, ECON-2302, PSYC-2301, or PSYC-2302
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 credit hours

## FIRST YEAR

First Semester

| COSC | 1436 | Programming Fundamentals I - C++ |
| :--- | :--- | :--- |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | $\underline{\text { Composition I }}$ |
| ITSE | 1311 | Beginning Web Programming <br> ITSW |
| 1307 | Introduction to Database - Access $_{\text {MATH }}^{1314}$ | $\underline{\text { College Algebra }}{ }^{1}$ |


| Second Semester |  |  |
| :--- | :--- | :--- |
| BMGT | 1307 | Team Building ${ }^{2}$ |
| COSC | 1437 | Programming Fundamentals II - C++ |
| COSC | 2325 | Computer Organization and Machine <br>  <br> 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 ${ }^{3}$
HUMA 1301 Introduction to the Humanities
(See other Humanities / Fine Arts Core Options)
ITSE 1330 Introduction to C\# Programming ${ }^{4}$
SPCH 1311 Fundamentals of Speech
Communication
(See other Speech Core Options)

## Second Semester

| INEW | 2330 | Comprehensive Software Project: <br> Planning and Design ${ }^{5}$ (Capstone) |
| :--- | :--- | :--- |
| INEW | 2340 | Object-Oriented Design |
| ITSE | 2301 | Windows Programming Using C++ |
| PHED / DANC | Any activity course |  | (See PHED / DANC Core Options)

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, PSYC-2301, or PSYC-2302
4. May substitute ITSE-1371 or ITSE-1372
5. 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


## AAS - Computer Systems Java Software Development Track

63 credit hours

## FIRST YEAR

First Semester

| COSC | 1436 | Programming Fundamentals I - <br> $\mathrm{C}++^{1}$ |
| :--- | :--- | :--- |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | $\underline{\text { Composition I }}$ |
| ITSE | 1311 | Beginning Web Programming <br> ITSW |
| 1307 | Introduction to Database - Access <br> MATH <br> $\underline{1314}$ | $\underline{\text { College Algebra }}^{2}$ |


| Second Semester |  |  |
| :--- | :--- | :--- |
| BMGT | 1307 | Team Building $^{3}$ |
| 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 <br> ECON |
| :--- | :--- | :--- |
| $\underline{1301}$ | Introduction to Economics |  |
| $\underline{\underline{\text { HUMA }}}$ | $\underline{1301}$ | Introduction to the Humanities <br> (See other Humanities / Fine Arts Core |
| ITSE | 1330 | Options) <br> Introduction to C\# Programming |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | $\underline{\text { Fundamentals of Speech }}$ |
| Communication |  |  |

(See other Speech Core Options)

## Second Semester

INEW 2330 Comprehensive Software Project: Planning and Design ${ }^{6}$ (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, PSYC-2301, or PSYC-2302
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 Computer Applications ${ }^{1}$

First Semester

| ITNW | 1358 | Network + |
| :--- | :--- | :--- |
| ITSW | 1304 | Introduction to Spreadsheets -Excel $^{2}$ |
| ITSC | 1305 | Introduction to PC Operating Systems $^{\text {Int }}$ |

## Second Semester

CPMT 1405 IT Essentials I: PC Hardware and Software ${ }^{3}$
ITSC 2339 Personal Computer Help Desk Support ${ }^{4}$ (Capstone)
ITSY 1400 Fundamentals of Information Security (Security+)

[^2]3. May substitute IMED-1301
4. May substitute ITSC-2380

## Certificate - Computer Systems Database Development Track

21 credit hours

## Summer Semester

ITSE $1332 \quad$| 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: <br> Planning and Design ${ }^{1}$ (Capstone) |
| ITSE | 2304 | Visual Basic .NET Database <br> Development with ADO.NET ${ }^{2}$ |
| ITSE | 2354 | Advanced Oracle PL/SQL |

1. May substitute ITSC-2380
2. May substitute ITSE-2338

## Certificate - Computer Systems Information System Track

21 credit hours

## Summer Semester

BCIS 1305 Business Computer Applications ${ }^{1}$

## First Semester

| COSC | 1315 | Fundamentals of Programming ${ }^{2}$ |
| :--- | :--- | :--- |
| ITSW | 1304 | Introduction to Spreadsheets - Excel |
| ITSW | 1307 | Introduction to Databases - Access |

## Second Semester

| BCIS | 2390 | Systems Analysis and Design ${ }^{3}$ <br> (Capstone) |
| :--- | :--- | :--- |
| BMGT | 1307 | Team Building ${ }^{4}$ |
| ITSC | 1305 | Introduction to PC Operating Systems ${ }^{5}$ |

1. May substitute BCIS-1320, COSC-1315, or ITSE-1332
2. May substitute BCIS-1320, 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 |
| ITSE | 2301 | Windows Programming Using C++ |

## Summer Semester

INEW 2330 Comprehensive Software Project:
Planning and Design ${ }^{1}$ (Capstone)
TECHNICAL ELECTIVE *

1. May substitute ITSC-2380

* Technical Elective (6 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 ${ }^{1}$

## 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 ${ }^{2}$ (Capstone)

## TECHNICAL ELECTIVE *

1. May substitute COSC-1436
2. May substitute ITSC-2380

* Technical Elective (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 Computer Applications |
| :--- | :--- | :--- |
| 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 <br> Faculty Advisor: | PRC-H213 | 972.377 .1676 |
| Pete Brierley <br> Academic Advisor: | PRC-H230E | 972.377 .1686 |
| Catherine Smith | PRC-F134 | 972.377 .1780 |

## Convergence Technology Center Website:

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

| 72 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 ${ }^{1}$ |
| Second Semester |  |  |
| ENGL | $\underline{1301}$ | Composition I |
| ITCC | 2308 | CCNA 3 Cisco Exploration 3 - LAN Switching and Wireless |
| ITCC | 2310 | CCNA 4 Cisco Exploration 4 Accessing the WAN1 |
| ITMT | 1300 | Implementing and Supporting <br> Microsoft Windows XP Professional |
| ITMT | 1440 | Managing and Maintaining a Microsoft Windows Server 2003 Environment |
| PHED / | DANC | Any activity course <br> (See PHED / DANC Core Options) |
| Summer |  |  |
| ECON | $\underline{2301}$ | Principles of Macroeconomics <br> (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 1450 Implementing, Managing, and Maintaining a Midrosoft Windows Servre 2003 Network Intrastructure Network Services

SPCH 1321 Business and Professional Speaking (See other Speech Core Options)

## Second Semester

| HUMA 1301 |  | Introduction to the Humanities <br> (Other Humanities / Fine Arts Core <br> Options) |
| :--- | :---: | :--- | :--- |
| ITNW | 2346 | Small Office Home Office: Case Study <br> S (Capstone) |
| ITNW | 2473 | Information Storage Management <br> (EMC) |
| 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-2305, MATH-2312, MATH-2318, MATH-2320

* 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-2346 and ITNW-2350), and ITSY courses are offered in eight-week express sessions.

## Certificate - Convergence Technology <br> 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
ELECTIVE * Capstone

* 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-2346 and ITNW-2350), and ITSY courses are offered in eight-week express sessions.

## Certificate - IP Specialization

36 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 -
ITCC 1304 CCNA 2 Cisco Exploration 2 - Routing Protocols and Concepts

## Second Semester

| EECT | 1371 | Voice-over-Internet Protocol (CCNA <br> Voice) |
| :---: | :---: | :--- |
| EECT | 2337 | Wireless Telephony Systems <br> ITMT 1300 | | Implementing and Supporting |
| :--- |
| Microsoft Windows XP Professional |
| ITMT | $1440 \quad$| Managing and Maintaining a |
| :--- |
|  |
| Microsoft Windows Server 2003 |

## Summer

$\begin{array}{ll}\text { ITSY } 2300 & \text { Operating System Security } \\ \text { ELECTIVE * } & \text { Capstone }\end{array}$

* Elective (3 credit hours): ITNW-2346, or ITNW-2350

Note: Many CPMT, EECT, ITCC, ITMT, ITNW (except ITNW-2346 and ITNW-2350), and ITSY courses are offered in eight-week express sessions.

## MSAA - Home Technology Integration (HTI) Expert

9 credit hours

| CPMT 2302 | Digital Home Technology Integration |
| :--- | :--- |
| CPMT 2371 | Advanced Home Technology <br> Integration |
| ELECTIVE * |  |

* | Elective (3 credit hours): EECT-1371, EECT-2437, |
| :--- |
|  |
| ITNW-2346, 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-2346 and ITNW-2350), and ITSY courses are offered in eight-week express sessions.

## Culinary Arts

| Department Chair: |  |  |
| :--- | :--- | :--- |
| Karen Musa | PRC-L229 | 972.377 .1672 |
| Academic Advisor: |  |  |
| Lisa Gibbs | PRC-F131 | 972.377 .1771 |
| Debra Lamb | SCC-G141 | 972.881 .5854 |

## 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.

## 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

## FIRST YEAR

| First Semester |  |  |
| :--- | :--- | :--- |
| CHEF | 1301 | Basic Food Preparation |
| CHEF | 1305 | Sanitation and Safety ${ }^{1,2}$ |
| ENGL | $\underline{1301}$ | Composition I |
| HAMG | 1321 | Introduction to Hospitality Industry |
| IFWA | 1310 | Nutrition and Menu Planning |


| Second Semester |  |  |  |
| :--- | :--- | :--- | :---: |
| CHEF | 1341 | American Regional Cuisine |  |
| CHEF | 2302 | Saucier |  |
| CHEF | 2331 | Advanced Food Preparation |  |
| HUMA | 1301 | Introduction to the Humanities <br> (See other Humanities / Fine Arts Core |  |
| RSTO | 1325 | Options) <br> Purchasing for Hospitality Operations |  |


| Summer |  |
| :--- | :--- |
| CHEF | 1302 |$\quad$ Principles of Healthy Cuisine 0

## SECOND YEAR

First Semester

| CHEF | 1310 | Garde Manger |
| :--- | :--- | :--- |
| CHEF | 1345 | International Cuisine |
| $\underline{\text { ECON }}$ | $\underline{1301}$ | Introduction to Economics <br> (See other Social / Behavioral Science |
|  |  | Core Options) |

HAMG 1324 HospitalityHuman Resources
Management
PSTR 1301 Fundamentals of Baking

| Second Semester |  |  |
| :--- | :--- | :--- |
| CHEF | 1314 | A La Carte Cooking (Capstone) |
| CHEF | 2380 | Cooperative Education - Culinary Arts <br> / Chef Training |
| $\underline{\text { PHED / DANC }}$ | $\underline{\text { Any } 1 \text { credit hour activity course }}$ |  |

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-2305, HAMG-2307, HAMG-2332, HAMG-2337, HAMG-2380,
IFWA-1319, PSTR-1305, PSTR-1306, PSTR-1310,
PSTR-1312, PSTR-1340, 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

$24-26$ credit hours

## FIRST YEAR

First Semester

| CHEF | 1301 | Basic Food Preparation |
| :--- | :--- | :--- |
| CHEF | 1305 | Sanitation and Safety ${ }^{1,2}$ |
| IFWA | 1310 | Nutrition and Menu Planning |
| PSTR | 1301 | Fundamentals of Baking |

## Second Semester

CHEF 1341 American Regional Cuisine
CHEF 1345 International Cuisine
CHEF 2331 Advanced Food Preparation
(Capstone)
ELECTIVE *

1. Certification in ServSafe
2. Certification in Food Protection Management

* Elective (3 credit hours): CHEF-1302, CHEF-1310, CHEF-1314, CHEF-1380, CHEF-2302, CHEF-2380, CHEF-2581, HAMG-1313, HAMG-1319, HAMG-1321, HAMG-1324, HAMG-1340, HAMG-1380, HAMG-2301, HAMG-2305, HAMG-2307, HAMG-2332, HAMG-2337, HAMG-2380, PSTR-1305, PSTR-1306, PSTR-1310, PSTR-1312, PSTR-1340, PSTR-1380, PSTR-1391, PSTR-2301, TRVM-1327, TRVM-1380, TRVM-2301 or TRVM-2355


## Dental Hygiene

## Program Director:

$\begin{array}{lll}\text { Susan Moss } & \text { CPC-A120 } & 972.548 .6535 \\ \text { Academic Advisor: } & & \\ \text { Erin Darity } & \text { CPC-D117F } & 972.548 .6778\end{array}$

## 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) 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://ftp.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). 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.
- 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

Health Insurance - All Dental Hygiene students are required to show proof of health insurance prior to starting clinical rotations each semester. For information on student insurance plans, contact the Dental Hygiene Department at 972.548.6535.

## AAS - Dental Hygienist

72 credit hours

## PRE-ENTRANCE REQUIREMENTS

| $\underline{\text { BIOL }}$ | $\underline{2401}$ | $\underline{\text { Anatomy and Physiology I }}{ }^{1}$ |
| :--- | :--- | :--- |
| BIOL 2402 Anatomy and Physiology II <br> CHEM 1405 Introduction to Chemistry I 2 |  |  |

## FIRST YEAR

| First Semester |  |  |
| :--- | :--- | :--- |
| BIOL | 2421 | Microbiology |
| DHYG | 1301 | Orofacial Anatomy, Histology and <br> Embryology |
| DHYG | 1304 | Dental Radiology |
| DHYG | 1331 | Preclinical Dental Hygiene |
| ENGL | $\underline{1301}$ | $\underline{\text { Composition I }}$ |


| Second Semester |  |  |
| :--- | :--- | :--- |
| DHYG | 1207 | General and Dental Nutrition |
| DHYG | 1227 | Preventive Dental Hygiene Care |
| DHYG | 1235 | Pharmacology for the Dental Hygienist |
| DHYG | 1261 | Clinical I - Dental Hygienist |
| DHYG | 1319 | Dental Materials |
| $\underline{\text { PSYC }}$ | $\underline{2301}$ | $\underline{\text { General Psychology }}^{1}$ |

## SECOND YEAR

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

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)
HUMA 1301 Introduction to the Humanities (See other Humanities / Fine Arts Core Options)

SOCI 1301 Introduction to Sociology

1. No course substitutions
2. May substitute CHEM-1411

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 | SCC-G148 | 972.578 .5563 |

## Program Options:

AAS - Digital Video
Certificate - Digital Video

For over twenty years, the Communication Design department (formerly Applied Graphic Design Technology) at Collin has offered 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 ${ }^{1}$ |
| ARTV | 1211 | Storyboard |
| DRAM | 2366 | History of Film Making I |
| ENGL | $\underline{1301}$ | Composition I |

## Second Semester

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

## Third Semester

| ARTS | 1316 | Drawing I <br> MATH <br> RTVB |
| :--- | :--- | :--- |
| $\underline{1332}$ | Math for Liberal Arts I I |  |
| Scriptwriting $^{1329}$ |  |  |

## 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 |
| PHED/ DANC | Any 1 credit hour activity course |  |
|  |  | (See PHED / DANC Core Options) |

## Second Semester

| ARTS | 1301 | Art Appreciation |
| :---: | :---: | :---: |
|  |  | (See other Humanities / Fine Arts Core Options) |
| ARTV | 2335 | Portfolio Development for Animation (Capstone) |
| PSYC | $\underline{2301}$ | General Psychology |
|  |  | (See other Social / Behavorial Science Core Options) |
| SPCH | $\underline{1311}$ | Fundamentals of Speech |
|  |  | Communication |
|  |  | (See other Speech Core Options) |
| ELECT | VE * |  |

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 ${ }^{1}$ |
| 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 - Flash |
| :--- | :--- | :--- |
| 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

## E-Business Development

## Department Chair:

| Glen Grimes | SCC-J127 | 972.578 .5520 |
| :--- | :--- | :--- |
| Academic Advisor: |  |  |
| Lisa Gibbs | PRC-F131 | 972.377 .1771 |

## Program Options:

AAS - E-Business Development
Media Track
Web Development Track
Android Mobile Development Track
iOS Mobile Development Track
J2ME Mobile Development Track
C\# .NET Development Track
Visual Basic .NET Development Track

## Certificate - E-Business Development <br> Media Track <br> E-Commerce Track <br> Android Mobile Development Track iOS Mobile Development Track J2ME Mobile Development Track C\# .NET Development Track <br> Visual Basic .NET Development Track <br> Certificate - Web Development <br> MSAA - Interactive Web Programming <br> MSAA - Studio <br> 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, webbased 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
60-61 credit hours

FIRST YEAR
First Semester

| BCIS | 1305 | Business Computer Applications ${ }^{1}$ <br> ENGL$\frac{1301}{}$ |
| :--- | :--- | :--- |
| Composition I |  |  |
| ITSE 1311 Beginning Web Programming <br> ITSW 1307 Introduction to Database - Access $^{\text {MATH }}$ <br> $\underline{1314}$ $\underline{\text { College Algebra }^{2}}$  |  |  |

## Second Semester

IMED 1301 Introduction to Digital Media
IMED 1341 Interface Design
IMED 1345 Interactive Digital Media I - Flash
ITSE 2302 Intermediate Web Programming
MEDIA ELECTIVE *

Summer Semester
ECON 1301 Introduction to Economics ${ }^{3}$
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 |
| IMED | 2345 | Interactive Digital Media II - <br>  <br> Flash II |
| ITSE | 1301 | Web Design Tools - Graphics |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | Fundamentals of Speech |
|  |  | Communication <br> (See other Speech Core Options) |


| Second Semester <br> BUSG 2309 |
| :--- |
| Small Business <br> Management/Entrepreneurship ${ }^{5}$ |
| IMED 2311 Portfolio Development ${ }^{6}$ (Capstone) <br> ITSE 2313 Web Authoring - Dreamweaver <br> PHED / DANC Any activity course <br> (See PHED / DANC Core Options)  |

## AAS - E-Business Development Web Development Track

62 credit hours

## FIRST YEAR

First Semester

| COSC | 1315 | Fundamentals of Programming ${ }^{1}$ |
| :---: | :---: | :---: |
| ENGL | $\underline{1301}$ | Composition I |
| ITSE | 1311 | Beginning Web Programming |
| ITSW | 1307 | Introduction to Database - Access |
| MATH | 1314 | College Algebra ${ }^{2}$ |

## Second Semester

| IMED | 1341 | Interface Design |
| :--- | :--- | :--- |
| ITSE | 1356 | Extensible Markup Language (XML) |
| ITSE | 2302 | Intermediate Web Programming $^{\text {GRAPHIC OPTION }}$ 3 |
| GRAPHIC OPTION |  |  |

## Summer Semester

ECON 1301 Introduction to Economics ${ }^{4}$
HUMA 1301 Introduction to the Humanities
(See other Humanities / Fine Arts Core Options)

## SECOND YEAR

First Semester

| IMED | 2309 | Internet Commerce |
| :--- | :--- | :--- |
| ITNW | 1358 | Network + |
| SPCH | $\underline{1311}$ | $\underline{\text { Fundamentals of Speech }}$ |
|  |  | Communication <br> (See other Speech Core Options) |

WEB PROGRAMMING OPTION ${ }^{5}$
WEB PROGRAMMING OPTION ${ }^{5}$

## Second Semester

INEW 2330 Comprehensive Software Project: Planning and Design ${ }^{6}$ (Capstone)
ITSY 1400 Fundamentals of Information Security (Security + )
PHED / DANC Any activity course
(See PHED / DANC Core Options)
WEB PROGRAMMING OPTION ${ }^{5}$

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, PSYC-2301, or PSYC-2302
5. Web Programming Option: IMED-2345, INEW-2334, ITSE-1306, ITSE-1359, ITSE-1374, ITSE-1392, ITSE2309, or ITSE-2313
6. May substitute IMED-2311 or ITSC-2380

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

61 credit hours

## FIRST YEAR

First Semester

| COSC | 1315 | Fundamentals of Programming ${ }^{1}$ |
| :---: | :---: | :---: |
| ENGL | $\underline{1301}$ | Composition I |
| ITSE | 1311 | Beginning Web Programming |
| ITSW | 1307 | Introduction to Database - Access |
| MATH | $\underline{1314}$ | College Algebra ${ }^{2}$ |

COSC 1337
IMED 1341
ITSE 2302
ITSE 2309
TECHNICAL ELECTIVE *

Summer Semester

| ECON 1301 | Introduction to Economics ${ }^{4}$ <br> $\underline{\text { HUMA }} 1301$ <br>  <br>  <br>  <br>  <br>  <br>  <br> Introduction to the Humanities <br> Opee other Humanities / Fine Arts Core |
| :--- | :--- |

## SECOND YEAR

## First Semester

| IMED | 2309 | Internet Commerce |
| :---: | :---: | :---: |
| ITSE | 1373 | Android Mobile Programming I |
| ITSE | 1374 | Mobile Web ${ }^{5}$ |
| SPCH | 1311 | Fundamentals of Speech |
|  |  | Communication <br> (See other Speech Core Options) |
| TIV |  |  |

## Second Semester

INEW 2330 Comprehensive Software Project: Planning and Design ${ }^{6}$ (Capstone)
ITSE 2373 Android Mobile Programming II
PHED / DANC Any activity course
(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, PSYC-2301, or PSYC-2302
5. May substitute ITSE-1359 or ITSE-1392
6. May substitute ITSC-2380

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


## Second Semester

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

61 credit hours

FIRST YEAR
First Semester
COSC 1315 Fundamentals of Programming ${ }^{1}$
ENGL 1301 Composition I
ITSE 1311 Beginning Web Programming
ITSW 1307 Introduction to Database - Access
MATH 1314 College Algebra ${ }^{2}$

| Second Semester |  |  |  |
| :--- | :--- | :--- | :---: |
| IMED | 1341 | Interface Design |  |
| ITSE | 1370 | Introduction to iPhone (iOS) <br> Development |  |
| ITSE | 2302 | Intermediate Web Programming |  |
| ITSE | 2309 | Database Programming - SQL $^{3}$ |  |
| TECHNICAL ELECTIVE* |  |  |  |

Summer Semester
$\underline{\text { ECON }} \frac{1301}{\text { HUMA }} \underline{\text { Introduction to Economics }}{ }^{4}$

$\underline{l}$| Introduction to the Humanities |
| :--- |
| (See other Humanities / Fine Arts Core |
| Options) |

SECOND YEAR
First Semester

| IMED | 2309 | Internet Commerce |
| :--- | :--- | :--- |
| ITSE | 1371 | iPhone (iOS) Programming I - <br> Objective C |
| ITSE | 1374 | Mobile Web |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | $\underline{\text { Fundamentals of Speech }}$ |
|  |  | Communication <br> (See other Speech Core Options) |

TECHNICAL ELECTIVE *


COLLEGE

| ITSE | 1374 | Mobile Web $^{4}$ |
| :--- | :--- | :--- |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | $\underline{\text { Fundamentals of Speech }}$ <br>  <br>  <br> TECHNICAL ELECTIVE * |

Second Semester

| INEW | 2330 | Comprehensive Software Project: <br> Planning and Design ${ }^{5}$ (Capstone) |
| :--- | :--- | :--- |
| ITSE | 2372 | J2ME Mobile Programming II |
| PHED / DANC | Any activity course |  |

## (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, PSYC-2301, or PSYC-2302
4. May substitute ITSE-1359 or ITSE-1392
5. May substitute ITSC-2380

* Technical Elective (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 credit hours

FIRST YEAR
First Semester

| $\underline{\text { ENGL }}$ | $\underline{1301}$ | $\underline{\text { Composition I }}$ |
| :--- | :--- | :--- |
| ITSE | 1311 | Beginning Web Programming <br> ITSE 1332 | | Introduction to Visual Basic .NET |
| :--- |
|  |
| ITSW |
| 1307 |

## 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 Introduction to Economics ${ }^{3}$
HUMA 1301 Introduction to the Humanities
(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 Fundamentals of Speech Communication (See other Speech Core Options)
TECHNICAL ELECTIVE *

## Second Semester

INEW 2330 Comprehensive Software Project: Planning and Design ${ }^{4}$ (Capstone)
ITSE 2338 C\# Database Development with
ADO.NET and LINQ
PHED / DANC Any activity course
(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, PSYC-2301, or PSYC-2302
4. May substitute ITSC-2380

* Technical Elective (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 credit hours

## FIRST YEAR

First Semester
ENGL 1301 Composition I

| ITSE | 1311 | Beginning Web Programming |
| :--- | :--- | :--- |
| ITSE | 1332 | Introduction to Visual Basic .NET <br> Programming |
| ITSW | 1307 | Introduction to Database - Access |
| MATH | $\underline{1314}$ | College Algebra $^{1}$ |

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

$\underline{\text { ECON }} \frac{1301}{\text { HUMA }} \underline{1301} \quad$| Introduction to Economics |
| :--- |
|  |
| (See other Humanities / Fine Arts Core |
| Options) |

## SECOND YEAR

First Semester

| IMED | 2309 | Internet Commerce |
| :--- | :--- | :--- |
| ITSE | 2304 | Visual Basic .NET Database <br> Development with ADO.NET |
| ITSE | 2309 | Database Programming - SQL |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | Fundamentals of Speech <br>  |

TECHNICAL ELECTIVE *

Second Semester

| INEW | 2330 | Comprehensive Software Project: <br> Planning and Design ${ }^{3}$ (Capstone) |
| :--- | :--- | :--- |
| ITSE 2334 | Advanced Visual Basic .NET <br> Programming with ASP.NET |  |
| PHED / DANC | Any activity course |  |
| 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, PSYC-2301, or PSYC-2302
3. May substitute ITSC-2380

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


## Certificate - E-Business

 Development Media Track24 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 - Flash |
| ITSE | 1301 | Web Design Tools - Graphics |

## Second Semester

GRPH 1359 Vector Graphics for Production ${ }^{1}$
ITSE 2313 Web Authoring - Dreamweaver

## Summer Semester

IMED 2311 Portfolio Development ${ }^{2}$ (Capstone)

1. May substitute IMED-2345
2. May substitute INEW-2330 or ITSC-2380

## Certificate - E-Business

Development
E-Commerce Track
24 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 ${ }^{1}$ |

## Second Semester

| BUSG | 2309 | Small Business <br> Management/Entrepreneurship |
| :---: | :---: | :--- |
| ITSE | 2313 | Web Authoring - Dreamweaver ${ }^{2}$ |

## Summer Semester

IMED 2311 Portfolio Development ${ }^{3}$ (Capstone)

1. May substitute IMED-1345 or GRPH-1359
2. May substitute ITSE-2302
3. May substitute INEW-2330 or ITSC-2380

## Certificate - E-Business Development Android Mobile Development Track

Summer Semester

| COSC | 1315 | Fundamentals of Programming ${ }^{1}$ |
| :--- | :--- | :--- |
| ITSE | 1311 | Beginning Web Programming |

## Second Semester

ITSE 1373 Android Mobile Programming I

## Summer Semester

| INEW | 2330 | Comprehensive Software Project: <br> Planning and Design |
| :---: | :---: | :--- |
| (Capstone) |  |  |

1. May substitute COSC-1436
2. May substitute 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
24 credit hours

| Summer Semester |  |  |  |
| :--- | :--- | :--- | :---: |
| COSC | 1315 | Fundamentals of Programming ${ }^{1}$ |  |
| ITSE | 1311 | Beginning Web Programming |  |

## First Semester

| ITSE | 1370 | Introduction to iPhone (iOS) <br> Development |
| :---: | :---: | :--- |
| ITSE | 1371 | iPhone (iOS) Programming I - <br> Objective C |
| ITSE | 2309 | Database Programming - SQL |

## Second Semester

ITSE 2371 iPhone (iOS) Programming II TECHNICAL ELECTIVE *

## Summer Semester

INEW 2330 Comprehensive Software Project: Planning and Design ${ }^{3}$ (Capstone)

1. May substitute COSC-1436
2. May substitute ITSE-1356
3. May substitute 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 <br> Development <br> J2ME Mobile Development Track

24 credit hours

| Summer Semester |  |  |
| :--- | :--- | :--- |
| COSC | 1315 | Fundamentals of Programming ${ }^{1}$ |
| ITSE | 1311 | Beginning Web Programming |

## First Semester

COSC 1337 Programming Fundamentals II - Java
ITSE 2309 Database Programming - SQL
TECHNICAL ELECTIVE *

## Second Semester

ITSE 1372 J2ME Mobile Programming I

## Summer Semester

INEW 2330 Comprehensive Software Project: Planning and Design ${ }^{2}$ (Capstone)
ITSE 2372 J2ME Mobile Programming II

1. May substitute COSC-1436
2. May substitute 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

24 credit hours

| Summer Semester |  |  |  |
| :--- | :--- | :--- | :---: |
| ITSE | 1311 | Beginning Web Programming |  |
| ITSE | 1332 | Introduction to Visual Basic .NET |  |
|  |  | Programming $^{1}$ |  |

## First Semester

| ITSE | 1330 | Introduction to C\# Programming |
| :--- | :--- | :--- |
| ITSE | 2309 | Database Programming - SQL |

TECHNICAL ELECTIVE *

Second Semester

| ITSE | 2338 | C\# Database Development with <br> ADO.NET and LINQ |
| :--- | :--- | :--- |
| ITSE | 2353 | Advancd C\# Programming with <br> ASP.NET |

## Summer Semester

INEW 2330 Comprehensive Software Project: Planning and Design ${ }^{2}$ (Capstone)

1. May substitute COSC-1315 or COSC-1436
2. May substitute 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

24 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 <br> Advanced Visual Basic .NET <br> ITSE |
| 2334 |  | Programming with ASP.NET |

## Summer Semester

INEW 2330 Comprehensive Software Project: Planning and Design ${ }^{1}$ (Capstone)

1. May substitute 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 credit hours

| Summer Semester |  |  |  |
| :--- | :--- | :--- | :---: |
| COSC | 1315 | Fundamentals of Programming ${ }^{1}$ |  |
| ITSE | 1311 | Beginning Web Programming |  |

## First Semester

IMED 1341 Interface Design
ITSE 2302 Intermediate Web Programming
ITSW 1307 Introduction to Database - Access GRAPHIC OPTION ${ }^{2}$

## Second Semester

INEW 2330 Comprehensive Software Project: Planning and Design ${ }^{3}$ (Capstone)
WEB PROGRAMMING OPTION ${ }^{4}$
WEB PROGRAMMING OPTION ${ }^{4}$
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, ITSE1356, 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
ITSE
ITSE
ITSE
ITeractive Digital Media I - Flash

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 ${ }^{1}$ |
| 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 <br> 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 <br> Technology

69-70 credit hours

## FIRST YEAR

First Semester

| CETT | 1425 | Digital Fundamentals <br> $\underline{\text { ENGL }}$$\underline{1301}$ |
| :--- | :--- | :--- |
| ENGR 1201 <br> Introduction to Engineering  <br> MATH $\underline{1314}$ | College Algebra |  |
| RBTC | 1305 | Robotic Fundamentals |

## Second Semester

| CETT | 1403 | DC Circuits |
| :--- | :--- | :--- |
| CPMT | 2302 | Digital Home Technology Integration |
| DFTG | 1309 | Basic Computer-Aided Drafting |
| MATH | 1316 | Plane Trigonometry |
| SMFT | 1471 | Fundamentals of Solar Cell |
|  |  | Engineering |


| Summer <br> ECON <br> 1301 | Introduction to Economics <br> (See other Social / Behavioral Science <br> Core Options) |
| :--- | :--- |
| $\underline{\text { SPCH }} \quad 1311$ | Fundamentals of Speech |
|  |  |
| Communication <br> (See other Speech Core Options) |  |

## SECOND YEAR

First Semester

| CETT | 1405 | AC Circuits |
| :--- | :--- | :--- |
| CETT | 1445 | Microprocessor |
| HUMA | 1301 | $\underline{\text { Introduction to the Humanities }}$ |
|  |  | (See other Humanities / Fine Arts Core <br> Options) |
| PHYS | 1401 | General Physics I |

Second Semester
$\begin{array}{lll}\text { CETT } & 1457 & \text { Linear Integrated Circuits } \\ \text { EECT } & 1448 & \text { Digital Signal Processing (DSP) }\end{array}$
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 General Physics II ${ }^{2}$-ORElectronic Course*

1. 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
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

## 32-34 credit hours

First Semester

| CETT | 1403 | DC Circuits |
| :--- | :--- | :--- |
| CETT | 1425 | Digital Fundamentals |
| CETT | 1445 | Microprocessor |
| ENGR | 1201 | Introduction to Engineering |

OPTION 1 *

## Second Semester

CETT 1405 AC Circuits

EECT 1448 Digital Signal Processing (DSP) (Capstone)
SMFT 1471 Fundamentals of Solar Cell Engineering
OPTION 2 **

* Option 1:
- Students pursuing the Electronic Engineering track should complete MATH-1314.
- Students pursuing the Computer Maintenance track should complete CPMT-1405.
** Option 2:
- Students pursuing the Electronic Engineering track should complete CETT-1457.
- Students pursuing the Computer Maintenance track should complete CPMT-2302.


## Emergency Medical Services Professions

| Program Director: |  |  |
| :--- | :--- | :--- |
| Pat McAuliff | CPC-A206 | 972.548 .6836 |
| Academic Advisor:   <br> Tori Hoffman   | CPC-D117E | 972.548 .6779 |

## 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) 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

## 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, Emergency Services and Physical Education 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 EMS Paramedic Certificate (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

69-72 credit hours

## PREREQUISITES

| EMSP | 1160 | Clinical - Emergency Medical Technician - Basic ${ }^{1}$ |
| :---: | :---: | :---: |
| EMSP | 1501 | Emergency Medical Technician ${ }^{1}$ |
| ENGL | 1301 | Composition I |
| MATH | $\underline{1314}$ | College Algebra ${ }^{2}$ |
| MDCA | 1409 | Anatomy and Physiology for Medical Assistants |

FIRST YEAR
First Semester

| BIOL | 2401 | Anatomy and Physiology I |
| :--- | :--- | :--- |
| EMSP | 1338 | Introduction to Advanced Practice |
| EMSP | 1356 | Patient Assessment and Airway <br> Management |
| $\underline{\underline{\text { PHED }}}$ | $\underline{1100}$ | $\underline{\text { Beginning Weight Training }}{ }^{3}$ |
| $\underline{\underline{\text { SPCH }}}$ | $\underline{1315}$ | $\underline{\text { Public Speaking I }}{ }^{4}$ |

## Second Semester

BIOL 2402 Anatomy and Physiology II
EMSP 1161 Clinical - Emergency Medical
Technician - Advanced I
EMSP 2434 Medical Emergencies
EMSP 2444 Cardiology

## Summer

| COSC | 1301 | Computers and Technology |
| :--- | :--- | :--- |
| EMSP | 1162 | Clinical - Emergency Medical <br>  <br> Technician - Advanced II |
| EMSP | 1355 | Trauma Management |

## SECOND YEAR

## First Semester

| EMSP | 2260 | Clinical - Emergency Medical EMT <br> Paramedic - Advanced III |
| :--- | :--- | :--- |
| EMSP | 2330 | Special Populations |
| EMSP | 2338 | EMS Operations |
| $\underline{\text { PHIL }}$ | $\underline{2306}$ | Introduction to Ethics <br> (See other Humanities / Fine Arts Core |
| $\underline{\text { PSYC }}$ | $\underline{2301}$ | Options) <br> $\underline{\text { General Psychology }}$ <br> (See other Social / Behavioral Science <br> Core Options) |


| Second Semester |
| :--- |
| EMSP 2143 | | Assessment Based Management |
| :--- |
| (Capstone) |

EMSP $2463 \quad$| Clinical - Emergency Medical EMT |
| :--- |
| Paramedic - Advanced IV |

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-1113, PHED-1114, PHED-1116, PHED-1117, PHED-1118, PHED-1120, PHED-1121, PHED-1126, PHED-1127, PHED-1131,
PHED-1133, PHED-1136, PHED-1137, PHED-1140,
PHED-1147, PHED-1148, PHED-1253 or PHED-1338
4. May substitute SPCH-1321

## Certificate - EMS Paramedic

42 credit hours

## PREREQUISITES

| EMSP | 1160 | Clinical - Emergency Medical <br>  <br> Technician - Basic |
| :--- | :--- | :--- |
| EMSP | 1501 | Emergency Medical Technician ${ }^{1}$ |
| MDCA | 1409 | Anatomy and Physiology for Medical <br>  | | Assistants |
| :--- | :--- |

## FIRST YEAR

| First Semester |  |  |
| :--- | :--- | :--- |
| EMSP | 1338 | Introduction to Advanced Practice |
| EMSP | 1356 | Patient Assessment and Airway <br>  |

## Second Semester

| EMSP | 1161 | Clinical - Emergency Medical <br>  <br> Technician - Advanced I |
| :--- | :---: | :--- |
| EMSP | 2434 | Medical Emergencies |
| EMSP | 2444 | Cardiology |

Summer Semester

| EMSP | 1162 | Clinical - Emergency Medical <br> Technician - Advanced II |
| :--- | :--- | :--- |
| EMSP | 1355 | Trauma Management |

## SECOND YEAR

First Semester

| EMSP | 2260 | Clinical - Emergency Medical EMT <br> Paramedic - Advanced III |
| :--- | :---: | :--- |
| EMSP | 2330 | Special Populations |
| EMSP | 2338 | EMS Operations |


| Second Semester |  |  |
| :--- | :--- | :--- |
| EMSP | 2143 | Assessment Based Management <br> (Capstone) |
| EMSP | 2463 | Clinical - Emergency Medical EMT <br> Paramedic - Advanced IV |

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 - Basic |
| EMSP | 1501 | Emergency Medical Technician |
| MDCA | 1409 | Anatomy and Physiology for Medical <br>  | | Assistants |
| :--- |

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:   <br> Tori Hoffman   <br>  CPC-D117E 972.548 .6779 |  |  |

## 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 pickup 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, Emergency Services and Physical Education Office or at the Fire Science website: http://www.collin.edu/firescience .

## AAS - Basic Firefighter Certification

67-70 credit hours

## FIRST YEAR



## SECOND YEAR

First Semester

| ENGL | 2311 | Technical and Business Writing |
| :--- | :--- | :--- |
| FIRT | 1327 | Building Construction in the Fire <br>  |
| Service |  |  |

FIRT 1338 Fire Protection Systems
PSYC $\underline{2301}$ General Psychology ${ }^{4}$

| Second Semester |  |  |
| :--- | :---: | :--- |
| FIRS | 1301 | Firefighter Certification I |
| FIRS | 1407 | Firefighter Certification II |
| FIRS | 1313 | Firefighter Certification III |
| FIRS | 1319 | Firefighter Certification IV |
| FIRS | 1323 | Firefighter Certification V |
| FIRS | 1329 | Firefighter Certification VI |

## Third Semester

| EMSP | 1160 | Clinical - Emergency Medical <br> Technician - Basic |
| :---: | :---: | :--- |
| EMSP | 1501 | Emergency Medical Technician |

FIRS 1433 Firefighter Certification VII (Capstone)

1. 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
2. May substitute PHED-1102, PHED-1104, PHED-1106, PHED-1111, PHED-1112, PHED-1113, PHED-1114, PHED-1116, PHED-1117, PHED-1118, PHED-1120, PHED-1121, PHED-1126, PHED-1127, PHED-1131, PHED-1133, PHED-1136, PHED-1137, PHED-1140, PHED-1147, PHED-1148, PHED-1253 or PHED-1338
3. May substitute BIOL-1408
4. May substitute ANTH-2346, ANTH-2351, ECON-1301, ECON-2301, ECON-2302, GOVT-2302, HIST-1301, HIST-1302, HIST-2301, PSYC-2302 or SOCI-1301

## Certificate - Basic Firefighter

29 credit hours

First Semester

| EMSP | 1160 | Clinical - Emergency Medical <br> Technician - Basic |
| :--- | :---: | :--- |
| EMSP | 1501 | Emergency Medical Technician |
| 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 <br>  |

## Fire Science

Also see Fire Academy

## Program Director:

Pat McAuliff CPC-A206 972.548.6836
Academic Advisor:
Tori Hoffman CPC-D117E 972.548.6779

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 STATEMENTRegulations 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, Emergency Services and Physical Education 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 $^{1}$ |
| :--- | :--- | :--- |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | $\underline{\text { Composition I }}$ |
| FIRT 1301 Fundamentals of Fire Protection $^{\text {MATH }}$$\underline{\underline{1332}}$ | Math for Liberal Arts I |  |
| $\underline{\underline{\text { PHED }}}$ | $\underline{1100}$ | $\underline{\text { Beginning Weight Training }}{ }^{3}$ |
| $\underline{\text { PSYC }}$ | $\underline{2301}$ | $\underline{\text { General Psychology }^{4}}$ |


| Second Semester |  |  |
| :--- | :--- | :--- |
| CHEM | 1405 | Introduction to Chemistry I ${ }^{5}$ |
| FIRT | 1315 | Hazardous Materials I |
| GOVT | 2301 | American Government I (Federal and <br> Texas Constitutions) |
| $\underline{\text { HUMA }}$ | $\underline{1301}$ | $\underline{$ Introduction to the Humanities $}$(See other Humanities / Fine Arts Core <br> Options) |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | Fundamentals of Speech |
|  |  | $\underline{\text { Communication }}$ (See other Speech Core Options) |


| SECOND YEAR |  |  |
| :--- | :--- | :--- |
| First Semester |  |  |
| ENGL | 2311 | Technical and Business Writing |
| FIRT | 1327 | Building Construction in the Fire <br> 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-1113, PHED-1114,
PHED-1116, PHED-1117, PHED-1118, PHED-1120,
PHED-1121, PHED-1126, PHED-1127, PHED-1131,
PHED-1133, PHED-1136, PHED-1137, PHED-1140,
PHED-1147, PHED-1148, PHED-1253 or PHED-1338
4. May substitute ANTH-2346, ANTH-2351, GOVT-2302, HIST-1301, HIST-1302, HIST-2301, PSYC-2302 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.

## Geographic Information Systems (GIS) Specialization

| Department Chair: <br> Glen Grimes | SCC-J127 | 972.578 .5520 |
| :--- | :--- | :--- |
| Faculty Contact: <br> George Jackson | PRC-H118 | 972.377 .1613 |
| Academic Advisor: <br> Lisa Gibbs | PRC-F131 | 972.377 .1771 |
| CoLLIN <br> CouEGE |  |  |

COLLEGE

## Summer

$\begin{array}{lll}\text { ENGL } & 2311 & \text { Technical and Business Writing } \\ \text { SPCH } & 1311 & \text { Fundamentals of Speech }\end{array}$
Communication (See other Speech Core Options)

## SECOND YEAR

| First Semester |  |  |
| :--- | :--- | :--- |
| COSC | 1315 | Fundamentals of Programming ${ }^{2}$ |
| $\underline{\text { ECON }}$ | $\underline{1301}$ | $\underline{\text { Introduction to Economics }}{ }^{3}$ |
| IMED | 2309 | Internet Commerce |
| ITNW | 1358 | Network+ |
| ITSW | 1304 | Introduction to Spreadsheets - Excel |


| Second Semester |
| :--- |
| BCIS $\quad 2390$ |$\quad$| Systems Analysis and Design |
| :--- |
| GISC 2231 |$\quad$| Advanced Problems in Geographic |
| :--- |
| Information Systems (GIS) (Capstone) |

ITSY $2300 \quad$ Operating System Security
ELECTIVE *

## Certificate - Geographic Information Systems (GIS) Specialization

18 credit hours

| First Semester |  |  |
| :--- | :---: | :--- |
| BCIS | 1305 | Business Computer Applications |
| GISC | 1311 | Introduction to Geographic |
|  |  | Information Systems (GIS) |
| ITSW | 1307 | Introduction to Database - Access |


| Second Semester |  |  |
| :--- | :--- | :--- |
| BCIS | 2390 | Systems Analysis and Design |
| GISC | 2420 | Intermediate Geographic Information |
|  |  | Systems (GIS) |


| Third Semester |  |
| :--- | :--- |
| GISC 2231 | Advanced Problems in Geographic |
|  |  |
|  | Information Systems (GIS) (Capstone) |

# Graphic Design and Web 

Also see, Photography, Commercial

## Department Chair:

Laura Flores SCC-K241 972.578.5527
Academic Advisors:
John Ciccia SCC-G148 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 | 1325 | Introduction to Computer Graphics |
| ARTC | 2311 | History of Communication <br> Graphics |
| ARTS | 1316 | Drawing I |
| ARTV | 1211 | Storyboard <br> ENGL <br> $\underline{1301}$ |
| $\underline{\underline{\text { Composition I }}}$ |  |  |
| $\underline{\text { Math for Liberal Arts I }}{ }^{1}$ |  |  |

Second Semester

| ARTC | 1302 | Digital Imaging I |
| :--- | :--- | :--- |
| ARTC | 1305 | Basic Graphic Design |
| ARTC | 1353 | Computer Illustration I |
| ARTV | 1303 | Basic Animation - Flash |
| IMED | 1316 | Web Design I |
|  |  |  |
| Third Semester |  |  |
| ARTC | 1313 | Digital Publishing I - InDesign |
| ARTC | 1327 | Typography |
| ARTC | 2305 | Digital Imaging II - Photoshop ${ }^{2}$ |

## SECOND YEAR

First Semester

| ARTC | 1321 | Illustration Techniques I |
| :--- | :--- | :--- |
| ARTC | 1349 | Art Direction I |
| ARTC | 2347 | Design Communication II |
| ARTS | 2348 | Digital Photography I ${ }^{3}$ |
| $\underline{\text { PHED / DANC }}$ | Any 1 credit hour activity course <br> (See PHED / DANC Core Options) |  |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | Fundamentals of Speech <br> Communication |
|  |  | (See other Speech Core Options) |


| Second Semester |  |  |
| :--- | :--- | :--- |
| ARTC | 2335 | Portfolio Development for Graphic <br> Design (Capstone) |
| ARTC | 2349 | Art Direction II |
| $\underline{\text { ARTS }}$ | $\underline{1301}$ | $\underline{\text { Art Appreciation }}$ |
|  |  | (See other Humanities / Fine Arts Core <br> Options) <br> General Psychology |

ARTC 2335 Portfolio Development for Graphic Design (Capstone)
ARTC 2349 Art Direction II
ARTS 1301 Art Appreciation (See other Humanities / Fine Arts Core Options)
PSYC 2301 General Psychology
(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 <br> Web Track

72 credit hours

## FIRST YEAR

First Semester

| ARTC | 1325 | Introduction to Computer Graphics <br> ARTC |
| :--- | :--- | :--- |
| 2311 | History of Communication <br> Graphics |  |
| ARTS | 1316 | Drawing I |
| ARTV | 1211 | Storyboard |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | $\underline{\text { Composition I }}$ |
| $\underline{\text { MATH }}$ | $\underline{1332}$ | $\underline{\text { Math for Liberal Arts I }}{ }^{1}$ |

## Second Semester

| ARTC | 1302 | Digital Imaging I |
| :--- | :--- | :--- |
| ARTC | 1305 | Basic Graphic Design |
| ARTC | 1353 | Computer Illustration I |
| ARTV | 1303 | Basic Animation - Flash |
| IMED | 1316 | Web Design I |

Third Semester
ARTC 1313 Digital Publishing I - InDesign
ARTC 1327 Typography
ARTV 2301 2-D Animation I - Flash

## SECOND YEAR

First Semester
ARTC 1349 Art Direction I
ARTS 2348 Digital Photography I ${ }^{2}$

| ARTV 1343 <br> ARTV 2330 | Digital Sound <br> 2-D Animation II - Flash ${ }^{3}$ |
| :--- | :--- | :--- |
| $\underline{\text { PHED / DANC }}$ | $\underline{\text { Any 1 credit hour activity course }}$ |
| $\underline{\text { (See PHED / DANC Core Options) }}$ |  |

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
3. May substitute IMED-2315

* Technical Elective (3 credit hours): ARTC-2305, ARTC-2340, ARTC-2347, ARTS-1317, ARTV-1345, ARTV-2330, FLMC-1331, GRPH-1380, IMED-2315 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 - Flash |

IMED 1316 Web Design I

## SECOND YEAR

First Semester

| ARTC | 1313 | Digital Publishing I - InDesign |
| :--- | :--- | :--- |
| 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 - Flash |
| IMED | 1316 | Web Design I |

## SECOND YEAR

First Semester
ARTC 1327 Typography
ARTC 1349 Art Direction I
ARTV 2301 2-D Animation I - Flash

## Second Semester

| ARTC | 2335 | Portfolio Development for Graphic <br> Design (Capstone) |
| :--- | :--- | :--- |
| ARTV 2330 | 2-D Animation II - Flash ${ }^{1}$ |  |

1. Mau substitute IMED-2315

## MSAA - Graphic Design

12 credit hours

| ARTC 1302 | Digital Imaging I |
| :--- | :--- | :--- |
| ARTC 1313 | Digital Publishing I - InDesign |
| 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 * |  |
| * |  |
|  | ARectives ( 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: <br> Catherine Smith <br> Department Website: <br> http://www.collin.edu/iad | PRC-F134 | 972.377 .1780 |

## 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 statelicensed professions and all state requirements must be met before either title can be used.

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

All new students: Please contact one of the Green Interior and Architectural Design faculty or the college academic advisor prior to registering for any INDS courses. Please call 972.377 .1676 or 972.377 .1716 to make an appointment with a faculty member.

## AAS - Green Interior and Architectural Design

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
INDS 1371

Color Theory and Application
Introduction to Green Design

| Second Semester |  |  |
| :---: | :---: | :---: |
| INDS | 1319 | Technical Drawing for Interior |
|  |  | Designers |
| INDS | 1351 | History of Interiors I |
| INDS | 1372 | Computer-Aided Drafting for Interior Designers |
| INDS | 1373 | Green Interiors I |
| MATH | 1314 | College Algebra ${ }^{1}$ |
| PHED / DANC |  | Any activity course |
|  |  | (See PHED / DANC Core Options) |


| Summer |  |  |
| :--- | :--- | :--- |
| ENGL | $\underline{1301}$ |  |
| Composition I |  |  |
|  | 1311 | $\underline{\text { Cundamentals of Speech }}$ |
|  |  | Communication <br> (See other Speech Core Options) |

## SECOND YEAR

## First Semester

| HUMA | 1301 |  | Introduction to the Humanities <br> (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 | 2330 | Interior Design Building Systems |
| INDS | 2335 | Residential Design II |
| INDS | 2374 | Sustainable Living |

## Summer

| INDS | 1271 | Perspectives on Sustainable Living and <br> Environmentally Conscious Building 2 |
| :---: | :---: | :--- |
| INDS | 2373 | Green Interiors II (Capstone) |

1. 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
2. May substitute INDS-1280

## Certificate - Level II - Green Interior and Architectural Design

54 credit hours
FIRST YEAR
First Semester
DFTG 1309
INDS 1301
INDS 1341
INDS 1371
Basic Computer-Aided Drafting
Basic Elements of Design
Color Theory and Application
Introduction to Green Design

Second Semester

| INDS | 1319 | Technical Drawing for Interior <br> Designers |
| :--- | :---: | :--- |
| INDS | 1351 | History of Interiors I |
| INDS | 1372 | Computer-Aided Drafting for Interior <br>  <br> Designers |
| INDS | 1373 | Green Interiors I |

## 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 | 2330 | Interior Design Building Systems |
| INDS | 2335 | Residential Design II |
| INDS | 2374 | Sustainable Living |

Summer
INDS 2373 Green Interiors II (Capstone)

## Certificate - Level I - Green Interior and Architectural Design

21 credit hours

| First Semester |  |  |
| :--- | :--- | :--- |
| DFTG | 1309 | Basic Computer-Aided Drafting |
| INDS | 1315 | Materials, Methods and Estimating |
| INDS | 1371 | Introduction to Green Design |


| Second Semester |  |  |
| :---: | :---: | :---: |
| CNBT | 2317 | Green Building |
| INDS | 1373 | Green Interiors I |
| INDS | 2374 | Sustainable Living |
| Summer |  |  |
| INDS | 2373 | Green Interiors II (Capstone) |
| MSAA - Green Interior and |  |  |
| Architectural Design |  |  |

12 credit hours

First Semester
$\begin{array}{lll}\text { DFTG } & 1309 & \text { Basic Computer-Aided Drafting } \\ \text { INDS } & 1371 & \text { Introduction to Green Design }\end{array}$
INDS 1371 Introduction to Green Design
Second Semester
INDS $1373 \quad$ Green Interiors I
INDS $1375 \quad$ 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<br>\section*{Program Director:}<br>Michelle Millen, BS, RHIT<br>CPC-E307 972.548.6676<br>\section*{Academic Advisor:}<br>Tori Hoffman CPC-D117E 972.548.6779

## 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 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 the successful completion of the program, the graduate can make application to AHIMA to take the credentialing examination. After passing the certification examination, the graduate can use the designation RHIT 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 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 Health Information Management website 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 . Admission is limited to 25 students per semester. Application deadlines are the $2^{\text {nd }}$ Friday in November, for spring eligibility; $2^{\text {nd }}$ Friday in May, for fall eligibility. Eligibility will be based on the following requirements:

- Complete Collin College Admission requirements
- 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. 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
- Completion of immunizations required by the Texas Department of State Health Services (TDSHS) *
- Submission to the Health Sciences, Emergency Services and Physical Education Office E302, at the Central Park Campus (CPC) a complete Health Information Management Admission Packet to include:
- 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 one- to two-page 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, Emergency Services and Physical Education 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.

The 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

## AAS - Health Information Management

69 credit hours

## PREREQUISITES

## First Semester

| $\underline{\text { ENGL }}$ | $\underline{1301}$ | Composition I <br> HITT |
| :--- | :--- | :--- |
| 1305 | Medical Terminology I |  |
| HPRS | 1271 | Introduction to the Healthcare System |
| HPRS | 1310 | Introduction to Pharmacology |
| HPRS | 2301 | Pathophysiology |

## Second Semester

BIOL $2404 \quad \frac{\text { Human Anatomy and Physiology }}{\text { Basic }^{1}}$

| BMGT 1307 <br> PHED / DANC | Team Building ${ }^{2}$ <br> Any one credit hour activity course |
| :--- | :--- |
| (See PHED / DANC Core Options) |  |
| $\underline{\text { PHIL }}$ | $\underline{2303}$ | | Introduction to Logic |
| :--- |

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 <br>  <br> POFM 1300 |

## Second Semester

| HITT | 1160 | Clinical I - Health Information / <br> Medical Record 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 <br> HITT |
| :--- | :---: | :--- |
| 2339 |  | Health Information Organization and <br> Supervision |
| HITT | 2346 | Advanced Medical Coding <br> HITT 2361 | | Clinical II - Health Information / |
| :--- |
| Medical Records Technology ${ }^{5}$ |

1. No course substitutions
2. May substitute BMGT-1305, BMGT-1327, BMGT-1341 or BMGT-1344
3. 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, HUMA-2319, HUMA-2323, MUSI-1306, MUSI-1307, PHIL-1301, PHIL-2306, PHIL-2307, SPAN-2321 or SPAN-2322
4. May substitute PSYC-2302

# Health Information Management / Medical Coding and Billing 

Also see Health Information Management

Program Director:
Michelle Millen, BS, RHIT
CPC-E307 972.548.6676
Academic Advisor:
Tori Hoffman CPC-D117E 972.548.6779

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 <br> 40 credit hours

## PREREQUISITES

| BIOL | 2404 | Human Anatomy and Physiology <br> 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 | Medical Coding Basics |


| Second Semester |  |  |  |
| :--- | :--- | :--- | :---: |
| HITT | 1342 | Ambulatory Coding |  |
| HPRS | 2321 | Medical Law and Ethics for Health <br>  <br> MDCA <br> 1343 |  | | Professionals |
| :--- |
| Medical Insurance / Billing |

Third Semester

| HITT | 1266 | Practicum - Health Information / <br> Medical Records Technology |
| :---: | :---: | :--- |
| (Capstone) |  |  |
| HITT | 2245 | Coding Certification Exam Review <br> HITT 2346 | | Advanced Medical Coding |
| :--- |

## Hospitality and Food Service Management

## Department Chair:

| Karen Musa | PRC-L229 | 972.377 .1672 |
| :--- | :--- | :--- |
| Academic Advisors: |  |  |
| Lisa Gibbs | PRC-F131 | 972.377 .1771 |
| Debra Lamb | SCC-G141 | 972.881 .5854 |

## 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 <br> 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 <br> Hotel / Restaurant Management Track

64 - 69 credit hours

## FIRST YEAR

First Semester

| CHEF | 1305 | Sanitation and Safety ${ }^{1,2}$ <br> ENGL <br> 1301 |
| :--- | :--- | :--- |
| Composition I |  |  |
| HAMG | 1321 | Introduction to Hospitality Industry |
| HAMG | 1340 | Hospitality Legal Issues |
| HAMG | 2307 | Hospitality Marketing and Sales |

## Second Semester

| HAMG 1313 | Front Office Procedures <br> HAMG 1324 |
| :--- | :--- |
| Hospitality Human Resources <br> Management |  |
| HUMG 2337 | Hospitality Facilities Management <br> HUMA |
| Introduction to the Humanities |  |
| (See other Humanities / Fine Arts Core |  |
| RSTO | 1325 | | Options) |
| :--- |
| Purchasing for Hospitality 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 ${ }^{3}$

## SECOND YEAR

First Semester

| HAMG 2301 | Principles of Food and Beverage <br> Operations |
| :--- | :--- |
| HAMG 2380 | Cooperative Education - Hospitality <br> Administration / Management, General |
| $\underline{\text { SPCH }} \quad \underline{1321}$ | Business and Professional Speaking |
| TRVM 2301 | Introduction to Convention / Meeting <br> Management |

Second Semester

| HAMG 2305 | Hospitality Management and <br> Leadership (Capstone) |
| :--- | :--- |
| HAMG 2332 | Hospitality Financial Management <br> PHED / DANC <br> Any activity course |
| RSTO 2307 <br> ELECTIVE * | Catering |

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

| $\underline{\text { ENGL }}$ | $\frac{1301}{}$ | $\frac{\text { Composition I }}{\text { HAMG }}$ |
| :--- | :--- | :--- |
| 1321 | Introduction to Hospitality Industry |  |
| HAMG | 1340 | Hospitality Legal Issues |
| TRVM | 1327 | Special Events Design |

TRVM 2301


## SECOND YEAR

First Semester

| HAMG 2301 | Principles of Food and Beverage <br> Operations |  |
| :--- | :--- | :--- |
| HAMG 2307 | Hospitality Marketing and Sales |  |
| $\underline{\text { SPCH }}$ | $\underline{1321}$ | Business and Professional Speaking <br> (See other Speech Core Options) |
| TRVM 2380 | Cooperative Education - Tourism and <br> 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

TRVM 2333 \begin{tabular}{l}
Applied Convention / Meetings <br>
Management (Capstone) <br>

TRVM 2355 $\quad$| Exposition and Trade Show |
| :--- |
| Operations | <br>

ELECTIVE *
\end{tabular}

* Elective (3 credit hours): BUSG-2309, CHEF-1301,
CHEF-1305, CHEF-1380, CHEF-2581, TRVM-1323,
TRVM-1380, TRVM-2341 or TRVM-2380


## Program Director:

Dave Galley PRC-H213 972.377.1676

Academic Advisor:
Catherine Smith PRC-F134 972.377.1780

## Program Options:

AAS - Information Systems Cybersecurity<br>Certificate - Information Systems Cybersecurity<br>Certificate - CISSP Information Systems Cybersecurity Professional

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

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 credit hours |  |  |
| :---: | :---: | :---: |
| FIRST YEAR |  |  |
| First Semester |  |  |
| CPMT | 1405 | IT Essentials I: PC Hardware and Software |
| ENGL | 1301 | Composition I |
| ITMT | 1300 | Implementing and Supporting <br> Microsoft Windows XP Professional |
| ITMT | 1440 | Managing and Maintaining a Microsoft Windows Server 2003 Environment |
| ITNW | 1358 | Network + |


| Second Semester |  |  |
| :---: | :---: | :---: |
| ECON | $\underline{2301}$ | Principles of Macroeconomics <br> (See other Social / Behavioral Science Core Options) |
| ITCC | 1301 | CCNA 1 Cisco Exploration 1 Network Fundamentals |
| ITMT | 1450 | Implementing, Managing, and Maintaining a Microsoft Windows Server 2003Network Infrastructure: Network Services |
| $\begin{aligned} & \text { ITSC } \\ & \text { PHED / } \end{aligned}$ | $\begin{gathered} 1316 \\ \text { DANC } \\ \hline \end{gathered}$ | Linux Installation and Configuration Any activity course |
| ELECTIVE * |  |  |
| Summer |  |  |
| ITCC | 1304 | CCNA 2 Cisco Exploration 2 Routing Protocols and Concepts |
| MATH | $\underline{1314}$ | College Algebra ${ }^{1}$ |
| 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 |
| SPCH | $\underline{1311}$ | Fundamentals of Speech |
|  |  | Communication <br> (See other Speech Core Options) |

## Second Semester

HUMA 1301 Introduction to the Humanities (See other Humanities / Fine Arts Core Options)
ITSY 2341 Security Management Practices
ITSY 2342 Incident Response and Handling
ITSY 2343 Computer System Forensics
ITSY 2371 e-Commerce and Biometric Authentication (Capstone)

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 (4-5 credit hours): ITMT-2440, ITSY-1400, or ITSY-2572

Note: All ITCC, ITMT, ITNW, and ITSY courses are offered in eight-week express sessions.

## Certificate - Information Systems Cybersecurity

39 credit hours

## First Semester

| ITCC | 1301 | CCNA 1 Cisco Exploration 1 - <br> Network Fundamentals |
| ---: | :---: | :--- |
| ITCC | 1304 | CCNA 2 Cisco Exploration 2 - <br> Routing Protocols and Concepts |
| ITMT | 1440 | Managing and Maintaining a <br> Microsoft Windows Server 2003 |
|  |  | Environment |
| ITNW | 1358 | Network + |

Second Semester

| ITMT | 1450 | Implementing, Managing, and <br> Maintaining a Microsoft Windows |
| :--- | :--- | :--- |
|  |  | Server 2003Network Infrastructure: <br>  <br>  <br> Network Services |
| ITSY | 2300 | Operating System Security |
| ITSY | 2301 | Firewalls and Network Security |
| ITSY | 2342 | Incident Response and Handling |
| ELECTIVE * |  |  |

## Summer

| ITSY | 2341 | Security Management Practices |
| :--- | :--- | :--- |
| ITSY | 2343 | Computer System Forensics |
| ITSY | 2371 | e-Commerce and Biometric |
|  |  | Authentication (Capstone) |

Note: All ITCC, ITMT, ITNW, 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 <br> of Knowledge Domain Instruction <br> (Capstone) |  |  |

Note: All ITCC, ITMT, ITNW, and ITSY courses are offered in eight-week express sessions.

## Interpreter Preparation Program / Deaf

Also see Associate of Arts - American Sign Language.

## Department Chair:

Ana Giron $\quad$ SCC-G215 972.881.5724
Academic Advisor:
Caryn Hawkins
PRC-F133 972.377.1655

## 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

71-72 credit hours

## FIRST YEAR

First Semester

| ENGL | $\underline{1301}$ | Composition I <br> MATH <br> 1314$\quad$College Algebra${ }^{1}$ |
| :--- | :--- | :--- |


| SGNL | 1401 | American Sign Language (ASL): <br> Beginning I $^{+}$ |
| :--- | :--- | :--- |
| SLNG | 1347 | Deaf Culture |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | Fundamentals of Speech <br> Communication $^{2}$ |


| Second Semester |  |  |
| :--- | :--- | :--- |
| DRAM | 1351 | Acting I |
| ENGL | 1302 | Composition II |
| SGNL | 1402 | American Sign Language (ASL): <br> Beginning II |
|  |  | Fingerspelling and Numbers |
| SLNG | 1311 | Introduction to the Interpreting <br> Profession |
| SLNG | 1321 |  |
| PHED / DANC | Any one credit hour activity course |  |
| (See PHED / DANC Core Options) |  |  |

## SECOND YEAR

First Semester

| PHIL | $\underline{2306}$ | Introduction to Ethics ${ }^{3}$ |
| :---: | :---: | :---: |
|  |  | (See other Humanities / Fine Arts Core Options) |
| PSYC | $\underline{2301}$ | General Psychology ${ }^{4}$ |
| SGNL | 2301 | American Sign Language (ASL): Intermediate $\mathrm{I}^{+}$ |
| SLNG | 2301 | Interpreting I |
| SOCI | 2319 | Minority Studies |
| TECH | ICAL | ORE * |
| Second | Semes |  |
| SGNL | 2302 | American Sign Language (ASL): Intermediate $\mathrm{II}^{+}$ |
| SLNG | 2266 | Practicum I - Sign Language Interpretation and Translation |
| SLNG | 2311 | Interpreting in Specialized Settings |
| SLNG | 2403 | Transliterating |
| TECH | ICAL | ORE * |
| Third | emeste |  |
| SLNG | 2267 | Practicum II - Sign Language Interpretation and Translation (Capstone) |
| SLNG | 2331 | Interpreting III |

[^3] 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 ${ }^{+}$
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 $^{+}$
SLNG 1311 Fingerspelling and Numbers
ELECTIVE *

Third Semester
SGNL 2301 American Sign Language (ASL): Intermediate I ${ }^{+}$

## SECOND YEAR

First Semester

| SGNL | 2302 | American Sign Language (ASL): <br> Intermediate II |
| :--- | :---: | :--- |
| SLNG | 1321 | Introduction to the Interpreting <br> 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
Academic Advisors:

| Lisa Gibbs | PRC-F131 | 972.377 .1771 |
| :--- | :--- | :--- |
| Debra Lamb | SCC-G141 | 972.881 .5854 |

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 | 1307 | Team Building |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | $\underline{\underline{\text { Composition I }}}$ |
| $\underline{\text { MATH }}$ | $\underline{1332}$ | $\underline{\text { Math for Liberal Arts I }}{ }^{1}$ |
| MRKG 1311 Principles of Marketing <br> $\underline{\text { SPCH }}$ $\underline{1321}$ $\underline{\underline{\text { Business and Professional Speaking }}}$ <br>   (See other Speech Core Options) |  |  |

## Second Semester

| BMGT 1305 | Communications in Management <br> BUSG 2309 | Small Business Management / <br> Entrepreneurship |
| :--- | :--- | :--- |
| $\underline{\text { HUMA 1301 }}$ | $\underline{l}$Introduction to the Humanities |  |
|  |  | (See other Humanities / Fine Arts Core <br> Options) |
| IBUS 1354 | International Marketing Management ${ }^{4}$ |  |
| MRKG 2349 | Advertising and Sales Promotion 4 |  |
| $\underline{\text { PHED/DANC }}$ | $\underline{\text { Any activity course }}$ |  |

(See PHED / DANC Core Options)

## SECOND YEAR

First Semester
ACNT 1303 Introduction to Accounting I ${ }^{2}$
BMGT 1327 Principles of Management
IBUS 2341 Intercultural Management
MRKG 1301 Customer Relationship Management ${ }^{5}$
MRKG 2333 Principles of Selling ${ }^{5}$

| Second Semester |  |  |
| :--- | :--- | :--- |
| BMGT | 1341 | Business Ethics |
| BMGT | 2347 | Critical Thinking and Problem Solving |
| $\underline{\text { ECON }}$ | $\underline{1301}$ | $\underline{\text { Introduction to Economics }}{ }^{3}$ |
| MRKG $_{2348}$ | Marketing Research and Strategies |  |

## Second Semester

BMGT 1341 Business Ethics
BMGT 2347 Critical Thinking and Problem Solving

MRKG 2348 Marketing Research and Strategies ${ }^{4}$

MRKG 2381 Cooperative Education - Marketing / Marketing Management, General (Capstone)

1. 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
2. May substitute ACCT-2301
3. May substitute ECON-2301, ECON-2302, PSYC-2301 or PSYC-2302
4. Offered spring semester only
5. Offered fall semester only

## Certificate - Marketing

18 credit hours

## First Semester

| MRKG | 1301 | Customer Relationship Management ${ }^{1}$ |
| :--- | :--- | :--- |
| MRKG 1311 | Principles of Marketing |  |
| MRKG 2333 | Principles of Selling ${ }^{1}$ |  |

## Second Semester

| MRKG 1380 | Cooperative Education - <br> Marketing/Marketing Management, <br> General (Capstone) |
| :--- | :--- |
| MRKG 2348 | Marketing Research and Strategies ${ }^{2}$ |
| MRKG 2349 | Advertising and Sales Promotion ${ }^{2}$ |

1. Offered fall semester only
2. Offered spring semester only

## Music, Commercial

Music also has an academic transfer program.
Also see Music, Commercial / Audio Engineering

## Department Chair:

Christopher Morgan, Ph. D.
SCC-B183 972.516 .5010
Academic Advisors:
John Ciccia SCC-G148 972.578.5563

Program Options:

## AAS - Commercial Music 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.

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

61-64 credit hours

## FIRST YEAR

First Semester
ARTC 1325 Introduction to Computer Graphics
MUSB 1305 Survey of the Music Business
MUSC 1327 Audio Engineering I ~
MUSI 1303 Fundamentals of Music

## Second Semester

| MUSC | 1313 | Commercial Music Theory I |
| :--- | :--- | :--- |
| MUSC | 2427 | Audio Engineering II ~ |
| MUSI | 1116 | Aural Skills I 1 |
| $\underline{\text { SPCH }}$ | $\underline{1321}$ | $\underline{\text { Business and Professional Speaking }}$ |
|  |  | (See Speech Core Options) |

## ELECTIVE *

ELECTIVE *

## SECOND YEAR

First Semester
$\begin{array}{lll}\underline{\text { ENGL }} & \underline{1301} & \begin{array}{l}\text { Composition I } \\ \text { MATH } \\ \underline{1314}\end{array} \\ \underline{\text { College Algebra }}\end{array}$
(See Mathematics / Natural Science
Core Options)
MUSB 2301 Music Marketing
MUSC 1331 MIDI I
MUSP 1113 Introductory Group Piano I ${ }^{2}$
ELECTIVE *

| Second Semester |  |
| :---: | :---: |
| MUSB 2350 | Commercial Music Projec (Capstone) $^{3}$ |
| MUSC 1405 | Live Sound I |
| MUSC 2355 | MID |
| MUSI 1307 | Introduction to Music Literature |
| MUSP 1114 | In |
| PHED / DANC | Any activity cours |
| PSYC 2301 | (See PHED / DANC Core Options) <br> General Psychology <br> (See Social/Behavioral Science Core Options) |
| 1. Required for Commercial Music Majors <br> 2. May substitute MUSI-1114, 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, departmental permission required |  |
| ~ Audio Engineering courses (MUSC-1327, MUSC-2427, MUSC-2447 and MUSC-2448) are offered in both eightand 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-1391, MUSB-2345, MUSB-2355, |  |
| MUSB-2380, MUSC-1209, MUSC-1303, 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-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, |  |

## Certificate - Music Business

33-34 credit hours

## FIRST YEAR

First Semester
MUSB 1305 Survey of the Music Business
MUSB 2301 Music Marketing

| MUSC | 1303 | History of Popular Music |
| :--- | :--- | :--- |
| MUSC | 1327 | Audio Engineering I |
| SPCH | 1321 | Business and Professional Speaking |

## Second Semester

| MUSB | 1341 | Concert Promotion and Venue <br> Management |
| :--- | :--- | :--- |
| MUSB | 1391 | Special Topics in Music Business |
| MUSB | 2345 | Live Music and Talent Management |
| MUSB | 2350 | Commercial Music Project (Capstone) |
| MUSB 2355 | Legal Aspects of the Entertainment <br> Industry |  |

ELECTIVE *

* Elective - (minimum of 3 credit hours): MUSB-2380, MUSC-1331, MUSC-1405 or MUSC-2427


## Music, Commercial/Audio Engineering

Music also has an academic transfer program. Additionally, see Music, Commercial

## Department Chair:

Christopher Morgan, Ph.D.

$$
\text { SCC-B183 } 972.516 .5010
$$

## Academic Advisors:

John Ciccia SCC-G148 972.578.5563

## Program Option: <br> Certificate - Audio Engineering

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.

## Certificate - Audio Engineering

31 credit hours

FIRST YEAR
First Semester

| MUSB | 1305 | Survey of the Music Business |
| :--- | :--- | :--- |
| MUSC | 1323 | Audio Electronics |
| MUSC | 1327 | Audio Engineering I ~ |
| MUSC | 1331 | MIDI I |
| MUSC | 2427 | Audio Engineering II ~ |

## Second Semester

MUSB 2301 Music Marketing
MUSC 1405 Live Sound 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 eightand 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.

## Nursing

Nursing also has an academic transfer program.

## Program Director:

Nell Ard, Ph.D., RN, CNE, ANEF
CPC-B336 972.548 .6772
Academic Advisor:
Erin Darity
Program Options:

| AAS - Nursing |
| :--- |
| LVN / Paramedic Bridge to the AAS - Nursing |
| $\quad$ Program |


| ESC - Healthcare Case Management |
| :--- |
| MSAA - Certified Nurse Assistant |

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 enthusiastically support the ADN program. Several healthcare facilities throughout the Metroplex are used for the clinical experience. The role of the nurse continues to change in an evolving healthcare system.

Students planning to transfer to a college or university 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. 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 500
Atlanta, GA 30326
404.975.5000
www.nlac.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 Program Director, the Health Sciences, Emergency Services and Physical Education Office or the Nursing website: 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
- 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.

## AAS - Nursing

72 credit hours

## PREREQUISITES

| BIOL | 2401 | Anatomy and Physiology I |
| :--- | :--- | :--- |
| BIOL | 2402 | Anatomy and Physiology II |
| BIOL | 2421 | Microbiology |
| MATH | $\underline{1342}$ | Elementary Statistical Methods ${ }^{1}$ |


| FIRST YEAR |  |  |
| :--- | :--- | :--- |
| First Semester |  |  |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | $\underline{\text { Composition I }}$ |
| $\underline{\text { PSYC }}$ | $\underline{2301}$ | $\underline{\text { General Psychology }^{1}}$ |
| RNSG | 1219 | Integrated Nursing Skills I |
| RNSG | 1360 | Clinical I - Nursing - Registered Nurse <br> Training |
| RNSG | 1523 | Introduction to Professional Nursing <br> for Integrated Programs |

## Second Semester

PSYC 2314 Life Span Psychology
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 <br> Nurse Training |
| :---: | :---: | :--- |
| RNSG | 2514 | Integrated Care of the Patient with <br> Complex Health Care Needs |
| SOCI | 1301 | Introduction to Sociology ${ }^{2}$ |

## 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 be able 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) $P N$ to $R N$. 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, glucose monitoring, medication administration - except intravenous medications, and sterile dressing changes. 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. If their previous work history indicates experiences in medical / surgical and mental health, the student will be allowed to challenge the second semester of the nursing program. The student will 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: catheterization, nasogastric tube insertion, 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 <br> 67 credit hours

## PREREQUISITES

| BIOL | 2401 | Anatomy and Physiology I |
| :--- | :--- | :--- |
| BIOL | 2402 | Anatomy and Physiology II |
| BIOL | 2421 | Microbiology |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | Composition I <br> $\frac{\text { MATH }}{\text { Elementary Statistical Methods }}$ <br> $\frac{1342}{\text { PSYC }}$ <br> $\frac{\underline{2301}}{\text { PSYC }}$ |
| $\frac{\text { General Psychology }}{}{ }^{1}$ |  |  |
| $\frac{\text { Life Span Psychology }}{}$ |  |  |

## 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.

## ENHANCED SKILLS CERTIFICATE

The Enhanced Skills Certificate in Healthcare Case Management is designed to introduce students to the practice and specialized topics concerning healthcare case management. The certificate targets practicing nurses, social workers, respiratory therapists or other healthcare professionals by teaching a multifaceted healthcare case management approach focusing on the coordination and integration of the direct delivery of patient services. The certificate also includes utilization management, medical necessity and the effective and efficient utilization of healthcare resources. The case management process presented explores how the cost and quality components of healthcare services and patient care are balanced by achieving acceptable optimal outcomes while managing cost of care. Course topics explored include the historical perspective of healthcare delivery, the evolution of case management, the roles and models of case management, case management concepts, case management practice including health promotion and illness prevention, disease management, education, referrals, consultation, and collaboration. Exercises with contrived cases give students the opportunity to practice what they have learned.

## ESC - Healthcare Case Management ${ }^{1}$

9 credit hours

| HPRS | 2371 | The Case Management Process |
| :---: | :---: | :--- |
| HPRS | 2372 | Case Management Coordination and <br> Financial Management |
| HPRS | 2373 | Case Studies in Healthcare Case <br> Management |

1. Prerequisite: Student should have been awarded an AAS or BS in Nursing, or current certification or licensure in a healthcare field or profession.

## MSAA - Certified Nurse Assistant

14 credit hours

| DSAE | 1340 | Diagnostic Electrocardiography |
| :--- | :--- | :--- |
| ECRD | 1111 | Electrocardiography |
| NURA | 1160 | Clinical - Nursing Aide and Patient <br>  <br> NURA Assistant |
| NURA | 1301 | Nurse Aide for Health Care |
| PLAB | 1323 | Phlebotomy |
| PLAB | 1360 | Clinical - Phlebotomy |

## Office Systems Technology

| Department Chair: |  |
| :---: | :---: |
| Mary Milford | PRC-H119 |
| Faculty Contacts: |  |
| Linda Thompson | CPC-C201B |
| Mary Jane Tobaben | SCC-J116 |
| Academic Advisor: |  |
| Lisa Gibbs | PRC-F131 |
| Deidra Thompson | SCC-G140 |
| Program Options: |  |
| AAS - Office Systems Technology |  |
| Certificate - Office Systems Technology |  |
| Certificate - Medical Office Support |  |
| MSAA - Accounting Support |  |
| MSAA - Office Sys | 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

60-64 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 |
| $\underline{\text { ENGL }}$ | $\underline{1301}$ | Composition I |
| POFT | 1307 | Proofreading and Editing <br> POFT |
| 1319 | Records and Information <br> Management I <br> Intermediate Keyboarding |  |
| POFT | 2301 | In |

## Second Semester

ACNT 1303 Introduction to Accounting I
ECON 1301 Introduction to Economics
(See other Social / Behavioral Science Core Options)
MATH 1332 Math for Liberal Arts I ${ }^{1}$
PHED/DANC Any activity course
(See other PHED / DANC Core Options)
POFI 2301 Word Processing - MS Word
POFT 2203 Speed and Accuracy Building

| HUMA 1301 | Introduction to the Humanities <br> (See other Humanities / Fine Arts Core <br> Options) |
| :--- | :--- |
| ELECTIVE * |  |

## SECOND YEAR

First Semester

| ACNT | 1311 | Introduction to Computerized <br> Accounting |
| :---: | :---: | :--- |
| ITSC | 1309 | Integrated Software Applications I - <br> MS Office |
| POFT | 2312 | Business Correspondence and <br> Communication |
| ELECTIVE * |  |  |

## Second Semester

POFT 1349 Administrative Office Procedures II (Capstone)
SPCH 1311 Fundamentals of Speech
Communication
(See other Speech Core Options)

## ELECTIVE *

ELECTIVE *

1. May substitute MATH-1324 or MATH-1314

* Electives (12 hours): BMGT-2309, HITT-1305, HITT-1311, HPRS-2321, IMED-1301, ITSW-1304, ITSW-1307, LGLA1307, LGLA-2333, MDCA-1343, POFI-1301, POFI-2331, POFM-1300, POFT-1380, or POFT-2380


## Certificate - Office Systems Technology <br> 26-33 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 |

## Summer

| First Semester |  |  |
| :--- | :---: | :--- |
| ITSC | 1309 | Integrated Software Applications I - |
| POFT | 1307 | MS Office |
| POFoofreading and Editing |  |  |
| POFT | 1319 | Records and Information <br> Management I <br> POFT 2301 |

## Second Semester

| POFI | 2301 | Word Processing - MS Word <br> POFT |
| :--- | :--- | :--- |
| 1349 | Administrative Office Procedures II <br> (Capstone) |  |
| POFT | 2203 | Speed and Accuracy Building <br> POFT 2312 | | Business Correspondence and |
| :--- |
| Communication |

ELECTIVE *

* Elective (3 hours): ACNT-1303, ACNT-1311, POFI-2331, or POFT-1380


## Certificate - Medical Office Support

35-39 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.
\(\left.\begin{array}{lll}POFT \& 1127 \& Introduction to Keyboarding <br>

POFT \& 1329 \& Beginning Keyboarding\end{array}\right]\)| First Semester |  |  |
| :--- | :--- | :--- |
| HITT | 1305 | Medical Terminology I |
| POFI | 1301 | Computer Applications I - MS Word <br>  <br> POFT |
| 1307 | Productivity |  |
| POFT | 2203 | Speed and Accuracy Building |
| POFT | 2301 | Intermediate Keyboarding |


| Second Semester |  |  |
| :--- | :---: | :--- |
| HPRS | 2321 | Medical Law and Ethics for Health <br> Professionals |
| ITSC | 1309 | Integrated Software Applications I - <br> MS Office |
| POFM | 1300 | Medical Coding Basics <br> 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

Paralegal/Legal Assistant also has an academic transfer program.

## Department Chair:

| Marsha Griggs | PRC-L232 | 972.881 .5185 |
| :--- | :--- | :--- |
| Academic Advisor: |  |  |
| Lisa Gibbs | PRC-F131 | 972.377 .1771 |
| Deidra Thompson | SCC-G140 | 972.578 .5564 |

## 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 credit hours

## FIRST YEAR

First Semester

| ENGL | $\underline{1301}$ | Composition I <br> LGLA |
| :--- | :--- | :--- |
| 1307 | Introduction to Law and the Legal <br> Professions |  |

LGLA 2303 Torts and Personal Injury Law
MATH 1314 College Algebra ${ }^{1}$

Second Semester

| ENGL | 1302 | Composition II |
| :--- | :--- | :--- | :--- |
| GOVT | $\underline{2301}$ | $\underline{\text { American Government I (Federal and }}$ |
| LGLA 1303  <br> Texas Constitutions)   <br> Legal Research   |  |  |
| LGLA | 1342 | Federal Civil Litigation |

## Summer

LGLA 2311 Business Organizations
PHED / DANC Any activity course
(See PHED / DANC Core Options)
PHIL 2303 Introduction to Logic ${ }^{3}$
(See other Humanities / Fine Arts Core Options)
LAW ELECTIVE *

## SECOND YEAR

## First Semester

LGLA 1305 Legal Writing
LGLA 1344 Texas Civil Litigation
LGLA 1355 Family Law
SPCH 1311 Fundamentals of Speech
Communication
(See other Speech Core Options)
LAW ELECTIVE *

## Second Semester

LGLA 1353 Wills, Trusts, and Probate Administration
LGLA 2239 Certified Legal Assistant Review ${ }^{4}$ (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 GOVT-2302
3. May substitute PHIL-1301, PHIL-2306, or PHIL-2307 (PHIL-2303 is recommended for students planning to take the LSAT.)
4. 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


## Paralegal General Certificate

35 credit hours

## First Semester

| LGLA | 1307 | Introduction to Law and the Legal <br> 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 ${ }^{1}$ (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 COSC1301.
** Law Electives (6 credit hours): LGLA-1323, LGLA-1343, LGLA-1380, LGLA-2307, LGLA-2309, LGLA-2311, LGLA2313, 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

| Department Chair: |  |  |
| :--- | :--- | :--- |
| Karen Musa | PRC-L229 | 972.377 .1672 |
| Academic Advisor: |  |  |
| Lisa Gibbs | PRC-F131 | 972.377 .1771 |
| Debra Lamb | SCC-G141 | 972.881 .5854 |

## 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.

## 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

FIRST YEAR
First Semester

| CHEF | 1301 | Basic Food Preparation |
| :---: | :---: | :---: |
| CHEF | 1305 | Sanitation and Safety ${ }^{1,2}$ |
| ENGL | 1301 | Composition I |
| HAMG | 1321 | Introduction to Hospitality Industry |
| PSTR | 1301 | Fundamentals of Baking |

Second Semester

| HAMG 1324 | Hospitality Human Resources <br> Management |  |
| :--- | :--- | :--- |
| HUMA 1301 | $\underline{l}$Introduction to the Humanities <br> (See other Humanities / Fine Arts Core <br> Options) |  |
| IFWA | 1310 | Nutrition and Menu Planning <br> PSTR 1305 | | Breads and Rolls |
| :--- |
| RSTO |
| 1325 | | Purchasing for Hospitality Operations |
| :--- |

Third Semester
HAMG 1319 Computers in Hospitality
MATH 1332 Math for Liberal Arts I ${ }^{3}$
PSTR 1306 Cake Decorating I

SECOND YEAR
First Semester

| $\underline{\text { ECON }}$ | $\underline{1301}$ |  | Introduction to Economics <br> (See other Social / Behavioral Science |
| :--- | :--- | :--- | :--- |
|  |  | Core Options) <br> PSTR | 1310 | | Pies, Tarts, Teacakes, and Cookies |
| :--- |
| PSTR | $1312 \quad$| Laminated Dough, Pate a Choux, and |
| :--- |

## Second Semester

| PHED / DANC |  | Any 1 credit hour activity course |
| :--- | :--- | :--- |
| PSTR 2301 |  | Chocolates and Confections |
| Pee PHED D DANC Core Options) |  |  |
| PSTR | 2331 |  |
| Advanced Pastry Shop (Capstone) |  |  |
| PSTR 2380 | Cooperative Education - Baking and <br> Pastry Arts / Baker / Pastry Chef |  |
| $\underline{\text { SPCH }} \quad \underline{1321}$ | Business and Professional Speaking |  |
| 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-1310, CHEF-1314, CHEF-1341, CHEF-1345, CHEF-1380, CHEF-2302, CHEF-2331, CHEF-2380, HAMG-1313, HAMG-1340, HAMG-1380, HAMG-2301, HAMG-2305, HAMG-2307, HAMG-2332, HAMG-2337, HAMG-2380, PSTR-1391, PSTR-2350, RSTO-1301 (must be 21or 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 ${ }^{1,2}$ |
| IFWA | 1310 | Nutrition and Menu Planning |
| PSTR | 1301 | Fundamentals of Baking |

## Second Semester

PSTR 1310 Pies, Tarts, Teacakes, and Cookies (Capstone)
PSTR 1312 Laminated Dough, Pate a Choux, and Donuts
PSTR 1340 Plated Desserts
ELECTIVE *

1. Certification in ServSafe

2 Certification in Food Protection Management

* Elective (3 credit hours): PSTR-1305, PSTR-1306 or PSTR-1391


## Photography, Commercial

Also see Graphic Design and Web.
Photography also has an academic transfer program.

## Department Chair:

Laura Flores SCC-K241 972.578.5527
Academic Advisors:
John Ciccia SCC-G148 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 |
| $\underline{\text { ARTS }}$ | $\underline{1313}$ | $\underline{\text { Historical Foundation of Photography / }}$ |
|  |  | $\underline{\text { Imaging Technology }}$ |
|  |  | Options) <br> Oee other Humanities / Fine Arts Core |
| ARTS | 2348 | Digital Photography I <br> MATH$\underline{\text { Math for Liberal Arts I }^{1}}$ |

## Second Semester

| ARTC | 1349 | Art Direction I |
| :--- | :--- | :--- |
| ARTS | 2349 | Digital Photography II |
| ENGL | $\underline{1301}$ | Composition I <br> PHTC |
| 1353 | Portraiture I |  |
| PHTC | 2331 | Architectural Photography |


| Third Semester |  |  |
| :--- | :--- | :--- |
| ARTV | 1211 | Storyboard |
| $\underline{\text { SPCH }}$ | 1311 | Fundamentals of Speech <br> $\underline{\text { Communication }}$ <br> (See other Speech Core Options) |

## SECOND YEAR

First Semester

| ARTS | 2336 | Papermaking / Bookbinding I <br> ARTV |
| :--- | :--- | :--- |
| 1351 |  |  |
| PHED / DANC |  |  |$\quad$| Digital Video |
| :--- |
| Any one credit hour activity course |

## Second Semester

| ARTC | 1313 | Digital Publishing I - InDesign |
| :--- | :--- | :--- |
| PHTC | 2343 | Portfolio Development (Capstone) |
| $\underline{\text { PSYC }}$ | $\underline{2302}$ | $\underline{\text { Applied Psychology }}$ |
|  |  | (See other Social / Behavioral Science <br>  |
|  | Core Options) |  |

OPTION $1{ }^{2}$
OPTION $2^{3}$

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 | Historical Foundation of Photography / <br>  <br> ARTS 2348 | | Imaging Technology |
| :--- |
| 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 <br> Management) |
| :--- | :--- | :--- |
| PHTC 1345 | Illustrative Photography I |  |
| PHTC | 2343 | Portfolio Development (Capstone) |
| OPTION 1 |  |  |
| OPTION 2 ${ }^{2}$ |  |  |

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 Coordinator:

Amber Allen, BA, RPSGT, RST
CPC-B203B 214.491.6238

## Academic Advisor:

Tori Hoffman CPC-D117E
972.548.6779

## Program Options: <br> 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 70 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 that are board registered in respiratory care (RRT), nursing (RN), physician assistant (PA), or electroencephalography (REEGT) that wish to pick up additional certification in polysomnography, as well as board registered polysomnographic technologists (RPSGT) that were on-the-job trained and wish to pursue a formal education in polysomnography. 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. 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 or the Health Sciences, Emergency Services and Physical Education 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

| $\underline{\text { ENGL }}$ | $\frac{1301}{\text { MATH }}$ | $\underline{\text { Composition I }}$ |
| :--- | :--- | :--- |
| PSGT 1314  <br> College Algebra ${ }^{1}$   |  |  |
| PSGT | 1310 | Introduction to Polysomnography <br> RSPT |
| 1307 | Cardiopulmonary Anatomy and <br> Physiology |  |

## Second Semester

| PSGT | 1205 | Neurophysiology of Sleep |
| :--- | :--- | :--- |
| PSGT | 1340 | Sleep Disorders |
| PSGT | 1400 | Polysomnography I |
| RSPT | 1237 | Basic Dysrhythmia Interpretation |
| $\underline{\text { SPCH }}$ | $\underline{1311}$ | Fundamentals of Speech |
|  |  | Communication |
|  |  |  |

Third Semester (Summer)
PSGT 1360 AAS Clinical I - Polysomnography

## SECOND YEAR

First Semester

| $\underline{\text { PHED }}$ | $\underline{1100}$ |  |
| :--- | :--- | :--- |
|  |  | Beginning Weight Training <br> (Any 1 credit hour activity course - <br> See PHED / DANC Core Options) |
| PSGT | 2205 | Sleep Scoring and Staging |
| PSGT | 2360 | Clinical II - Polysomnography |
| PSGT | 2411 | Polysomnography II <br> $\underline{\text { PSYC }}$ <br> $\underline{2301}$ |
| General Psychology |  |  |
|  |  | (See other Social / Behavioral Science <br> Core Options) |

## Second Semester

PHIL 2303 Introduction to Logic

|  |  | (See other Humanities / Fine Arts Core <br> Options) |
| :--- | :--- | :--- |
| PSGT | 2250 | Infant and Pediatric Polysomnography |
| PSGT | 2271 | Pharmacology for Polysomnography |
| PSGT | 2272 | Polysomnography Exam Preparation <br> (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

Students must be board registered in respiratory care (RRT), nursing (RN), physician assistant (PA), polysomnographic technology (RPSGT) or electroencephalography (REEGT) and provide documentation of registry.

| 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 <br> (Capstone) |
| :---: | :---: | :--- |
| PSGT | 2361 | Clinical III - Polysomnography |

## Real Estate

| Department Chair: |  |  |
| :--- | :--- | :--- |
| Mary Milford | PRC-H210 | 972.365 .1801 |
| Academic Advisor: <br> Lisa Gibbs | PRC-F131 | 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

| $\underline{\text { ENGL }}$ | $\frac{1301}{\text { GOVT }} 2302$ | Composition I <br> American Government II (Federal and <br> Texas Topics) |
| :--- | :--- | :--- |


| MATH 1332 | Math for Liberal Arts I ${ }^{1}$ |
| :---: | :---: |
| PHED / DANC | Any activity course |
|  | (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 |
| SPCH 1311 | Fundamentals of Speech |
|  | Communication |
|  | (See other Speech Core Options) |

## SECOND YEAR

First Semester

| BUSI | 1301 | Introduction to Business <br> ECON |
| :--- | :--- | :--- |
| $\underline{1301}$ | $\underline{\text { Introduction to Economics }}^{2}$ |  |
| PSYC | 2302 | Applied Psychology $^{3}$ |
| RELE | 1300 | Contract Forms and Addenda |
| RELE | 1315 | Property Management |

## Second Semester

HUMA 1301 Introduction to the Humanities
(See other Humanities / Fine Arts Core Options)
RELE 1319 Real Estate Finance
RELE 2331 Real Estate Brokerage ${ }^{4}$ (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, BMGT1327 , BUSG-2309,GOVT-2301, ITSW-1304, or RELE1380.


## 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, RELE1315, RELE 1321, RELE-1380, or RELE-2381, TRECapproved 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:

Tori Hoffman $\quad$ CPC-D117E 972.548 .6779

## 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 , 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<br>1248 Harwood Road<br>Bedford, Texas 76021-4244<br>Phone: 817.283.2835<br>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 . 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 or the Health Sciences, Emergency Services and Physical Education 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 successfully on 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 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 completion of all respiratory care course work, 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

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.

- Complete the written and skills exam in RSPT-2139 according to the standards set by the American Heart Association.
- Be in good academic standing


## 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 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) BIOL 2421 Microbiology
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 | 2421 | Microbiology |
| HPRS | 1204 | Basic Health Profession Skills |

FIRST YEAR

| First Semester  <br> MATH 1314 | College Algebra |
| :--- | :--- | :--- |
| RSPT 1160 Clinical I - Respiratory Care Therapist <br> RSPT 1201 Introduction to Respiratory Care <br> RSPT 1307 Cardiopulmonary Anatomy and <br> Physiology <br> 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 <br> Therapist |
| :---: | :---: | :--- |
| RSPT | 2471 | Respiratory Care Procedures III |

## SECOND YEAR

## First Semester

| $\underline{\text { ENGL }}$ | $\underline{1301}$ | $\underline{\text { Composition I }}$ |
| :--- | :--- | :--- |
| $\frac{\text { PSYC }}{\text { General Psychology }}{ }^{2}$ |  |  |
| $\underline{\text { RSPT }}$ | $\underline{2301}$ | $\frac{\text { Gen }}{\text { Critical Care Monitoring }}$ |
| RSPT | 2353 | Neonatal / Pediatric Cardiopulmonary <br> Care |
| RSPT | 2360 | Clinical IV - Respiratory Care <br> Therapist |

## Second Semester

| PHIL | $\underline{2303}$ |  | Introduction to Logic <br> (See other Humanities / Fine Arts Core <br> Options) |
| :--- | :--- | :--- | :--- |
| RSPT | 2130 | Respiratory Care Examination <br> Preparation |  |
| RSPT | 2139 | Advanced Cardiac Life Support |  |
| RSPT | 2231 | Simulations in Respiratory Care <br> 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 PSYC-2302 or SOCI-1301

Note: The communication competency is met throughout the degree.

## Semiconductor Manufacturing Technology

## Program Director:

Dave Galley $\quad$ PRC-H213 972.377.1676
Academic Advisor:
Catherine Smith PRC-F134 972.377.1780

## Program Options:

AAS - Semiconductor Manufacturing Technology<br>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

68 credit hours

FIRST YEAR
First Semester

| CETT | 1403 | DC Circuits |
| :--- | :--- | :--- |
| CETT | 1425 | Digital Fundamentals |
| ENGL | $\underline{1301}$ | Composition I <br> ENGR <br> 1201 |
| $\underline{\text { Introduction to Engineering }}$ |  |  |
| $\underline{\text { MATH }}$ | $\underline{1314}$ | $\underline{\text { College Algebra }}{ }^{1}$ |


| Second Semester |  |  |
| :--- | :--- | :--- |
| CETT | 1405 | AC Circuits |
| DFTG | 1309 | Basic Computer-Aided Drafting |
| MATH | 1316 | Plane Trigonometry |
| PHYS | 1401 | General Physics I |

## Summer

| $\underline{\text { ECON }} 1301$ | Introduction to Economics <br> (See other Social / Behavioral Science <br> Core Options) |  |
| :--- | :--- | :--- |
| $\underline{\text { SPCH }} \quad \underline{1311} \quad$ | Fundamentals of Speech |  |
|  |  | Communication <br> (See other Speech Core Options) |

## SECOND YEAR

First Semester

| CETT | 1380 | Cooperative Education - Computer <br> Engineering Technology/Technician |
| :--- | :---: | :--- |
| CETT | 1429 | Solid State Devices |
| ELMT 2437 | Electronic Troubleshooting, Service, <br> and Repair |  |


| HUMA 1301 | Introduction to the Humanities <br> (See other Humanities / Fine Arts Core <br> Options) |
| :--- | :--- | :--- |
| PHED / DANC |  |
| SMFT 1343 | Any activity course <br> (See PHED / DANC Core Options) <br> Semiconductor Manufacturing <br> Technology I |
| Second Semester |  |

## Certificate - Semiconductor Manufacturing Operator

35 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 I |  |

## Second Semester

| CETT | 1380 | Cooperative Education - Computer <br> Engineering Technology/Technician |
| :---: | :---: | :--- | :--- |
| CETT | 1405 | AC Circuits |
| ELMT | 2435 | Certified Electronics Technician <br> ELraining (Capstone) |
| ELMT 2437 | Electronic Troubleshooting, Service, <br> and Repair |  |

SMFT 2343 Semiconductor Manufacturing
Technology II

## Surgical Technology

## Program Director:

| Don Martin | CPC-B304 | 214.491 .6216 |
| :--- | :--- | :--- |
| Academic Advisor: |  |  |
| Erin Darity | CPC-D117F | 972.548 .6778 |

Erin Darity
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) 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, Emergency Services and Physical Education Office in E302 on the Central Park Campus (CPC) of a completed and signed Surgical Technology Program Application Form by the first Friday in June. The Application Form is available on line in the Admission Packet at www.collin.edu/surgtech.
- Completion of or current enrollment in the four preentrance 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-1271. If prerequisite courses are being completed during the summer 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 twopage 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, Emergency Services and Physical Education 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 ageappropriate 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
The Central Sterile Processing (CSP) curriculum is approved by the International Association of Healthcare Central Service Materiel Management (IAHCSMM). Recipients of this certificate are eligible to sit for the national certification exam.

Students interested in the program should see the academic advisor for consultation and consult the college website for more specific information. An admission packet is available upon request from the Dean of Health Sciences, Emergency Services and Physical Education Office and on the Surgical Technology website.

## AAS - Surgical Technology

64-66 credit hours

FIRST YEAR
First Prerequisite Semester

| BIOL | $\underline{2401}$ | Anatomy and Physiology I ${ }^{1}$ |
| :---: | :---: | :---: |
| ENGL | $\underline{1301}$ | Composition I |
| HPRS | 1204 | Basic Health Profession Skills |
| PHED | DANC | Any activity course |
| SPCH |  | (See PHED / DANC Core Options) |
|  | 1311 | Fundamentals of Speech |
|  |  | Communication |

(See other Speech Core Options)

Second Prerequisite Semester
BIOL 2402 Anatomy and Physiology II
COSC 1301 Computers and Technology
HITT 1305 Medical Terminology I
PHIL 2303 Introduction to Logic
(See other Humanities / Fine Arts Core
Options)
$\underline{\text { PSYC } 2301 ~ G e n e r a l ~ P s y c h o l o g y ~}{ }^{2}$

## SECOND YEAR

First (Summer) Semester

| SRGT | 1260 | Clinical - Surgical Technology I |
| :--- | :--- | :--- |
| SRGT | 1409 | Fundamentals of Peri-operative |
|  | Concepts and Techniques |  |


| Second Semester |  |  |
| :--- | :--- | :--- |
| HPRS | 2300 | Pharmacology for Health Professions |
| SRGT | 1541 | Surgical Procedures I |
| SRGT | 1561 | Clinical - Surgical Technology II |
| Third Semester |  |  |
| BIOL | 2421 | Microbiology |
| SRGT | 1171 | Transition to Practice for the Surgical |
|  |  | Technologist |
| SRGT | 1542 | Surgical Procedures II <br> SRGT 2130 | | Professional Readiness |
| :--- |
| SRGT |
| 2561 | | Clinical - Surgical Technology III |
| :--- |
|  |

## NEW SPRING 2013

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)

[^4]
## 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-volumeprofit 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; CollegeLevel Reading. 3 credit hours. (A)
Note: Students may take either ANTH 2301 or ANTH 2302 but not both.

## 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; CollegeLevel Reading. 3 credit hours. (A)
Note: Students may take either ANTH 2301 or ANTH 2302 but not both.

## 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-InDesign

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 20th century. Assessment: Placement in at least 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 at least 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 at least 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 Historical Foundation of Photography/Imaging Technology

Introduction to technology in the visual arts, designed to enhance artistic awareness. Includes a foundational approach to photography history and culture through the exploration of a variety of art works from the northern Renaissance use of the camera obscura to the paradigm change of computer technology. 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 issues. 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. Prerequisite:
ARTS 1316. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## ARTS 2317 Painting II

Increases the student's ability to use various techniques, color, and composition with acrylics, oils, and other media. Explores realistic and abstract approaches to painting. Emphasis on design, imagination, personal expression and painting style. Lab required. Prerequisite:
ARTS 2316. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## ARTS 2323 Figure Drawing I

Drawing of the life model including instruction in anatomical and creative approaches to figure drawing. Emphasis on personal expression and creativity. Lab required. Prerequisite:
ARTS 1316. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## ARTS 2324 Figure Drawing II

Continuation of study of the life model; emphasis on personal expression and creativity. Lab required. Prerequisite: ARTS 2323. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## ARTS 2326 Sculpture I

Study of three-dimensional form and introduction to sculpture techniques including basic methods of modeling, construction, and simple casting procedures. Exploration of various media including stone, wood, metal, plaster, and paper.
Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## ARTS 2327 Sculpture II

Continued application of three-dimensional form and sculpture techniques gaining experience in composition and problem solving in various media. Emphasis on creative expression and personal style. Lab required. Prerequisite:
ARTS 2326. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## ARTS 2333 Printmaking I

Introduction to the process of intaglio and relief printing including linoleum cuts, etching, aquatint, collagraph, and monotypes. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## ARTS 2334 Printmaking II

Continued application of the intaglio and relief printing processes gaining experience in composition and problem solving in various techniques. Emphasis on creative expression and personal style. Lab required. Prerequisite: ARTS 2333. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## ARTS 2336 Papermaking/Bookbinding I

Elements of structure and principles of design using two- and three-dimensional concepts in the fiber forms of papermaking and bookbinding. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

## ARTS 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 JewelrylArt Metals II

Continuation of ARTS 2341, Jewerly/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 Photograhy 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 2348.3 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, including a 35 mm SLR camera, film, and photographic paper.

## ARTS 2357 Photography IIIDarkroom

 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. Prerequisite: ARTS 1316. 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-Flash

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 IMaya

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-Flash

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-Flash

 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 postproduction. 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 IIMaya

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 2355 Character Rigging and Animation

Advanced work in 3-D animation. Emphasis on character modeling, rigging and animation. Lab required. Prerequisite: ARTV 1341. 3 credit hours. (W)

BCIS 1305 Business Computer Applications 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 grasp 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 1320 Introduction to Business Programming - Java

Introduction to business programming techniques using Java. Using object-oriented and structured programming techniques, students will design, create, and debug customized business applications with Java. Lab required. 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. 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 General Biology I

For science majors. Current knowledge in the fundamentals of biology from the molecular to cellular level of organization. General topics covered include basic biochemistry, metabolism, energetics, cell structure, DNA, genetics, viruses, and bacteria. 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 General Biology II

For science majors. Continuation of BIOL 1406. The biology of the protists, fungi, plants and animals with emphasis on the body systems. Also includes development, diversity, animal behavior and ecology. Dissection included. 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 Introduction to Biology I
For non-science majors. Survey of biology including molecular and cellular biology, genetics, DNA, microbiology, evolution, and ecology. Emphasis upon current topics in biology. Lab required. 4 credit hours. (A)

BIOL 1409 Introduction to Biology II For non-science majors. Continuation of

BIOL 1408. The biology of the protistans, fungi, plants and animals with emphasis on general human anatomy and physiology. Current topics in biology will be discussed. Dissection included. Lab required. Prerequisite: BIOL 1408. 4 credit hours. (A)

## BIOL 1411 General Botany

For science majors. Study of structure and function of plants. Includes plant cells, tissues, organs, an evolutionary survey, and life histories of algae, fungi, mosses, liverworts, ferns and seed-producing plants. Plants' reproductive and functional interactions with their environment and with man. Lab required. 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; CollegeLevel 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 investigatethe mechanisms involved in the transfer of information from DNA sequences to proteins to biochemical functions. The course will integrate biological and chemical concepts with techniques that are used in research and industry. Critical thinking will be applied in laboratory exercises using inquiry-based approaches, troubleshooting and analyzing experimental data. Lab required.
Prerequisite/Concurrent enrollment: BIOL 1414. 4 credit hours. (A)
Note: This course is also offered through the Center of Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

## BIOL 2389 Academic Co-op Biology

 Integrates on-campus study with practical hands-on work experience in biology. In conjunction with class seminars, the student will set specific goals and objectives in the study of biology. Contact the Cooperative Work Experience Office. Prerequisite: BIOL 1406 or BIOL 1408. 3 credit hours. (A)BIOL 2401 Anatomy and Physiology I
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 or consent of Department Chair. 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

Introduction to contemporary ecological problems of plant and animal communities. An analysis of ecosystems at the species, population, and community levels of organization, with a discussion of the effects of human interaction. Lab required, including field trips. 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 2421 Microbiology

Classification, cell structure, metabolism, and historical concepts of microorganisms including bacteria, viruses, fungi, protozoa, Chlamydia and Rickettsia. Infectious diseases and immunology will be emphasized. Practical microbiology will include diagnostic microbiology of water, food, sewage, soil, and industrial applications. Laboratory methods are stressed, and experimentation with pure cultures of medical, environmental, and industrial importance is used extensively. Lab required. Prerequisite: BIOL 2402 with a grade of " C " or better within the last five years or consent of Department Chair. 4 credit hours. (A)

## BIOM 1280 Cooperative EducationBiomedical 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. 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. Prerequisites: Declared major of Biotechnology and have completed 9 hours of biotechnology courses and consent of Department Chair. Major Requirement: Biotechnology. 3 credit hours. (W) 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 1391 Special Topics in Business Administration and Management, General

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. 3 credit hours. (W)

## Sales Management

Sales Management has the primary goal of teaching people how to manage others in the workplace. In this course students practice determining the needs of subordinates, cohorts, and superiors; controlling the work environment so as to encourage personnel to achieve; understanding necessary practices for promoting personnel so that they can fit into their new positions well; and evaluating practices so as to make adjustments as needed. Students also perform activities that teach them how adult learning differs from non-adult learning.

## BMGT 2309 Leadership

Concepts of 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 proactive participative style. 3 credit hours. (W)

## BMGT 2331 Principles of Quality Management

Quality throughout organizations. 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

A study of the 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

Instruction in interpreting data for effective problem solving and recommending corrective action with emphasis on a structured approach to critical thinking and problem solving in a team environment. Prerequisites: BMGT 1327 and MRKG 1311. 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/EntrepreneurshipStarting, 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 <br> 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 IApplication 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 Teaching 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. 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 1301 with a grade of "C" or better, CHEF 1305 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. 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 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 1301 with a grade of "C" or better, CHEF 1305 with a grade of "C" or better, and CHEF 2331.
Prerequisite/Concurrent enrollment: RSTO 1304. 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. 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 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. 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 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. 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 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 2301. 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. To be completed during the last semester of the Culinary Arts degree. 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 TrainingCareer-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

Study of carbon chemistry that considers covalent bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups and introductory synthesis. Lab experiments develop organic techniques. Lab and recitation required. Prerequisite: CHEM 1412 within the last five years with a grade of "C" or better. 4 credit hours. (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

Includes methods of structural analysis, advanced synthesis and reactions, biochemistry and organometallic topics. Lab experiments emphasize techniques in synthesis, purification and analysis. Lab and recitation required. Prerequisite: CHEM 2423 within the last 5 years with a grade of "C" or better. 4 credit hours. (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; CollegeLevel 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

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: PHTC 1311 or consent of Instructor. 3 credit hours. (A)

## COMM 2389 Academic Co-op

 CommunicationFor 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: BCIS 1320 or 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++

Introduces the fundamental concepts of structured programming. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy. Assessment: Placement in MATH 1332. 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 day, 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, selfregulation, 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 A multidisciplinary overview and analysis of the major agencies, personnel, and decision-making points which comprise the criminal justice system. Includes problems and issues confronting legislatures, police, courts, corrections, and the community, as they respond to crime in a free society. Legal precedents guiding the decisions of criminal justice agents are also discussed. 3 credit hours. (A)

## CRIJ 1306 Court Systems and Practices

Study of procedural regulations that guide the processing of criminal cases through the criminal justice system, with emphasis on the Texas Code of Criminal Procedure and rules of evidence. Includes a discussion of the criminal defendant's due process rights from arrest through confinement as well as issues related to the administration of capital punishment. 3 credit hours. (A)

## CRIJ 1307 Crime in America

Survey of the nature, location, and impact of crime in America. Includes historical foundations of crime, theoretical explanations of criminality and delinquency, the recording and measurement of crime, descriptions of criminal careers, and an analysis of public policies concerning crime control. 3 credit hours. (A)

## CRIJ 1310 Fundamentals of Criminal Law

Nature of criminal law, historical and philosophical development of law in society, major definitions and concepts, classifications of crime, elements of crimes and penalties using
the Texas statutes as illustrations, criminal responsibility. 3 credit hours. (A)

## CRIJ 1313 Juvenile Justice System

The juvenile justice system: history, philosophy, and evaluation of the juvenile court; juvenile court practices and procedures; neglect, dependency and delinquency, jurisdiction of the court, the role of the police officer, the correctional officer, and the social welfare worker in the juvenile justice system. 3 credit hours. (A)

## CRIJ 2313 Correctional Systems and Practices

Corrections in the criminal justice system, correctional role, institutional operations, alternatives to institutionalization, treatment and rehabilitation, current and future issues. 3 credit hours. (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 restraints; 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.

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## 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 2222. 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 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 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 at least 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 1358 Electrical/Electronics Drafting Electrical and electronic drawings stressing modern representation used for block diagrams, schematic diagrams, logic diagrams, wiring/assembly drawings, printed circuit board layouts, motor control diagrams, power distribution diagrams, and electrical one-line diagrams. Lab required. 3 credit hours. (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)

[^5]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

 DraftingApplication 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 Technologyl 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 disease management, health promotion, communication and behavior modification. Prerequisites: BIOL 2421, 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 2421, 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 or CHEM 1411. 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 or CHEM 1411, and DHYG 1311. 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 or CHEM 1411. 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

Formerly DHYG 1123
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<br>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: AASDental 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: AASDental 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 on types of plays, directing, acting, theatre history, and technical production. Assessment: Placement in at least 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 fundamentals of stage makeup, character makeup, corrective techniques, beards, mustaches, and threedimensional 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 at least 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 at least 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) Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.

## 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)

DSAE 1340 Diagnostic Electrocardiography Cardiac testing including the techniques and interpretation of patient physical assessment for culturally and socially diverse patients/clients. Covers electrocardiography, stress testing, Holter monitoring, vital signs, and cardiovascular pharmacology. Course requires communication/documentation utilizing appropriate nursing terminology and analysis of
interpretations. Collaboration with members of the interdisciplinary health care team is emphasized to facilitate risk reduction and improve patient/client outcomes. Lab required. Prerequisite: Current Healthcare Provider Cardiopulmonary Resuscitation (CPR) Certification from American Heart Association (AHA). 3 credit hours. (W)

## ECON 1301 Introduction to Economics

A survey of microeconomic and macroeconomic principles of non-business majors.
Microeconomic topics will include supply and demand, consumer behavior, price and output decisions by firms under various market structures, factor markets, market failures, international trade, and exchange rates. Macroeconomic topics will include national income, unemployment, inflation, business cycles, aggregate supply and demand, monetary and fiscal policy, and economic growth. 3 credit hours. (A)

## ECON 2301 Principles of Macroeconomics

An analysis of the economy as a whole including measurement and determination of Aggregate Demand and Aggregate Supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, and fiscal policy and monetary policy. 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)
## ECRD 1111 Electrocardiography

Fundamentals of cardiovascular anatomy and physiology. Includes basic electrocardiography procedures, interpretation of basic dysrhythmias, and appropriate treatment modalities for culturally and socially diverse patients/clients. Course requires communication/documentation utilizing appropriate nursing terminology and analysis of interpretations. Collaboration with members of the interdisciplinary health care team is emphasized to facilitate risk reduction and improve patient/client outcomes. Prerequisite: Current Healthcare Provider Cardiopulmonary Resuscitation (CPR) Certification from American Heart Association (AHA). Prerequisite/Concurrent enrollment: DSAE 1340. 1 credit hour. (W)

## 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 fieldbased 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/TechnicianCareer-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## EECT 1381 Cooperative Education -

 Electrical, Electronic and Communications Engineering Technology/TechnicianCareer-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## 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)

## 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)

## 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 - 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 - 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 - 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 1338 Introduction to Advanced Practice

Fundamental elements associated with emergency medical services to include preparatory practices, pathophysiology, medicaiton administration, and related topics. Lab required. Prerequisite: MDCA 1409 or consent of Program Director. 3 credit hours. (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 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 2260 Clinical-Emergency Medical EMT Paramedic -Advanced III

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 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 multicasualty incidents and rescue situations; utilize air medical resources; identify hazardous materials and other specialized incidents. Lab required. Prerequisites: EMSP 1161, EMSP 1338, EMSP 1355, EMSP 1356, EMSP 2434, and EMSP 2444. 3 credit hours. (W)

## EMSP 2434 Medical Emergencies

Knowledge and skills in the assessment and management of patients with medical emergencies, including medical overview, neurology, gastroenterology, immunology, pulmonology, urology, hematology, endocrinology, toxicology, and other related topics. Lab required. 4 credit hours. (W)

## EMSP 2444 Cardiology

Assessment and management of patients with cardiac emergencies. Includes single and multilead ECG interpretation. Lab required. 4 credit hours. (W)

## EMSP 2463 Clinical-Emergency Medical EMT Paramedic -Advanced IV

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. 4 credit hours. (W)

## ENGL 0300 Developmental Writing I

A skills improvement course designed to help students improve basic thinking and writing skills. Focus is on paragraph and short essay writing. Basic grammar, punctuation, and
sentence construction studied as needed. Lab required. Assessment: Placement in ENGL 0300. 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 0300, ENGL 0305, ENGL 0315, and GRAM 0300 may be taken for a combined total of no more than 9 credit hours.

## ENGL 0305 Developmental Writing II

A skills improvement course designed to help students improve thinking and writing skills. 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. Assessment: Placement in ENGL 0305. Prerequisite: ENGL 0300. 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 0300, ENGL 0305, ENGL 0315, and GRAM 0300 may be taken for a combined total of no more than 9 credit hours.

ENGL 0315 Writing, Reading, and Reasoning
A skills improvement course designed to help students reach competencies necessary for ENGL 1301. Focuses on reading and writing medium length expository essays, with special emphasis on writing about issues arising from class readings. Students will learn to write effective, logical essays, to develop reading comprehension strategies, and to analyze, synthesize, and make value judgments using critical thinking. Lab required. Assessment: Placement in ENGL 0315.Prerequisite:
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 0300, ENGL 0305, ENGL 0315, and GRAM 0300 may be taken for a combined total of no more than 9 credit hours.

## 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 IShort 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. 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 2312 equivalent or higher level. 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 equivalent or higher level. 2 credit hours. (A)
## ENGR 1304 Engineering Graphics

Introduction to computer-aided drafting using CAD software and sketching to generate twoand 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. Prerequisites: COSC 1436 and MATH 2413 equivalent, or MATH 2417 equivalent, or higher level. 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 2415 equivalent, MATH 2419 equivalent, or higher level. 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: PHYS2425.

Prerequisite/Concurrent enrollment: MATH2414. 3 credit hours. (A)

## ENGR 2302 Engineering Mechanics II

Basic theory of engineering mechanics, using calculus, involving the motion of particles, rigid bodies, and systems of particles; Newton's Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems. Prerequisite: ENGR 2301. 3 credit hours. (A)

## ENGR 2305 Electrical Circuits I

Principles of electrical circuits and systems. Basic circuit elements (resistance, inductance, mutual inductance, capacitance, independent and dependent controlled voltage, and current sources). Topology of electrical networks; Kirchhoff's laws; node and mesh analysis; DC circuit analysis; operational amplifiers; transient and sinusoidal steady-state analysis; AC circuit analysis; first-and second-order circuits; Bode plots; and use of computer simulation software to solve circuit problems. Prerequisites: MATH 2414 and PHYS 2425. Prerequisite/Concurrent enrollment: MATH 2320. Corequisite: ENGR 2105. 3 credit hours. (A)

ENGR 2306 Introduction to Digital Systems Introduction to theory and design of digital logic, circuits, and systems. Number systems, operations and codes; logic gates; Boolean Algebra and logic simplification; Karnaugh maps; combinational logic; functions of combinational Logic; flip-flops and related devices; counters; shift registers; sequential logic; memory and storage. Prerequisite: MATH 1314. Corequisite: ENGR 2106. 3 credit hours. (A)

## ENGR 2308 Engineering Economics

Methods used for determining the comparative financial desirability of engineering alternatives. Provides the student with the basic tools required to analyze engineering alternatives in terms of their worth and cost, an essential element of engineering practice. The student is introduced to the concept of the time value of money and the methodology of basic engineering economy techniques. The course will address some aspects of sustainability and will provide the student with the background to enable them to pass the Engineering Economy
portion of the Fundamentals of Engineering exam. Prerequisite: MATH 2413.
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. Prerequisites: COSC 1436 and MATH 2413 equivalent, or MATH 2417 equivalent, or higher level. 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 Strength of Materials

Simple structural elements with emphasis on forces, deformation, and material properties. Includes concepts of stress, strain, and elastic properties. Behavior phenomena such as fracture, fatigue, and creep are introduced. Prerequisite/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; singlefrequency 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 Listening and Speaking: Intermediate

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 nonnative speakers' skills in understanding both formal and informal speech styles of English. Focus is given to students' spoken grammar, pronunciation, vocabulary, and exposure to North American culture. Lab required.
Assessment: 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 Listening and Speaking: Advanced

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 North American culture. Lab required. Assessment: Placement in ESLC 0310. Prerequisite: 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 0320 ESL Pronunciation and Accent Reduction

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. Assessment: Placement in ESLC 0305 and ESLR 0305. Prerequisite: ESLC 0305 or consent of Instructor. 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 ESL Grammar: Intermediate I

An intermediate English grammar course designed for non-native speakers of English and is focused on verb usage. Course content supports ESLW 0305 objectives for grammar usage. Lab required. Assessment: 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 ESL Grammar: Intermediate II 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. Assessment: Placement in ESLG 0310. Prerequisite: 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 0315 ESL Grammar: Advanced

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 0315 objectives for grammar usage and successful transition into English 1301. Lab required. Assessment: Placement in ESLG 0315. Prerequisite: ESLG 0310. Prerequisite/Concurrent enrollment: ESLW 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 0305 ESL Reading: Intermediate I

Instruction in intermediate reading comprehension for non-native speakers who score 60-74 on the Compass/ESL Test. 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. Assessment: Placement in 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. ESLR 0305, ESLR 0310, ESLR 0315, and ESLV 0305 may be taken for a combined total of no more than 9 credit hours.

## ESLR 0310 ESL Reading: Intermediate II

 Instruction in high-intermediate reading comprehension for non-native speakers who score 75-84 on the Compass/ESL Test. Focuses on teaching vernacular vocabulary and syntax inthe informal register, context clues, topics, main ideas, supporting details, transitions, and organizational patterns for improving comprehension of abridged academic and literary texts. Lab required. Assessment: Placement in ESLR 0310. Prerequisite: 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. ESLR 0305, ESLR 0310, ESLR 0315, and ESLV 0305 may be taken for a combined total of no more than 9 credit hours.

## ESLR 0315 ESL Reading: Advanced

Instruction in advanced reading comprehension to prepare non-native students for admission to reading-restrictive classes. To enroll, students must score 85-95 on the Compass/ESL Test. ESLR 0315 focuses on cultural allusions, connotation of vocabulary, augmentation of reading rate for non-native speakers, implied main ideas, facts and opinion, inferences and conclusions, authors' purpose, tone, point of view, vocabulary, and graphic aids in unabridged academic texts. Lab required. Assessment: Placement in ESLR 0315. Prerequisite: 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. ESLR 0305, ESLR 0310, ESLR 0315, and ESLV 0305 may be taken for a combined total of no more than 9 credit hours.

## ESLV 0305 ESL Vocabulary: Idioms

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 0305, ESLR 0310, ESLR 0315, and ESLV 0305 may be taken for a combined total of no more than 9 credit hours.

## ESLW 0305 ESL Writing: Intermediate I

Instruction in intermediate writing skills for nonnative speakers. Focuses on sentence-level writing and paragraph development. Introduces students to pre-academic, experiential writing. Trains students to develop and organize ideas in a variety of rhetorical modes. Lab required. Assessment: Placement in 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.

## ESLW 0310 ESL Writing: Intermediate II

 Instruction in high-intermediate writing skills for non-native speakers. Focuses on multiparagraph essays. Introduces students to academic writing. Trains students to develop and organize ideas in a variety of rhetorical modes. Lab required. Assessment: Placement in ESLW 0310. Prerequisites: ESLG 0305 and 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.
## ESLW 0315 ESL Writing: Advanced

 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. Assessment: Placement in ESLW 0315. Prerequisites:ESLG 0310 and ESLW 0310.
Prerequisite/Concurrent enrollment: 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.

## 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 take 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 take 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 cirriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Officer I certification. Lab required. Prerequisite: FIRS 1433 or consent of Program Director. 3 credit hours. (W)

## FIRT 1343 Fire Officer II

Meets the cirriculum 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 cirriculum requirements of the Texas Commission of Fire Protection (TCFP) for Fire Instruction I certification. Prerequisite:
FIRS 1433. 3 credit hours. (W)

## FIRT 2307 Fire Instructor II

Development of individual lesson plans for a specific topic including learning objectives, instructional aids, and evaluation instruments. Includes techniques for supervision and coordination of activities of other instructors to meet the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for Fire Instructor II certification. Prerequisite: FIRT 2305 or consent of Program Director. 3 credit hours. (W)

## FIRT 2309 Firefighting Strategies and Tactics I

Analysis of the nature of fire problems and selection of initial strategies and tactics including an in-depth study of efficient and effective use of staffing and equipment to mitigate the emergency. Prerequisite: FIRT 1301 or consent of Program Director. 3 credit hours. (W)

## FIRT 2351 Company Fire Officer

A capstone course covering fire ground operations and supervisory practices. Includes performance evaluation of incident commander, safety officer, public information officer, and shift supervisor duties. 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: ARTC 1341 or 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 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 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; CollegeLevel 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; CollegeLevel 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 the use of 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 rasterbased 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 CartographyIGIS

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: GISC 1421. 4 credit hours. (W)

## GISC 2420 Intermediate Geographic

 Information Systems (GIS)This course focuses on the study of spatial data structures and the display, manipulation, and analysis of geographic information. Students will study the technical aspects involved in spatial data handling, analysis, and modeling. Instruction will include theories and procedures associated with the implementation and management of GIS projects. A variety of GIS software packages will be used in the laboratory. Lab required. Prerequisites: GISC 1311 and ITSW 1307. 4 credit hours. (W)

## GOVT 2301 American Government I (Federal and Texas Constitutions)

Origin and development of the U.S. and Texas constitutions, structure and powers of national, state and local government including the legislative, executive, and judicial branches, and federalism. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)
Note: Students transferring a government course from out-of-state must enroll in this course to complete the Texas legislative requirement.

## GOVT 2302 American Government II (Federal and Texas Topics)

Examination of political participation, the election process, public policy, civil liberties and civil rights in the U.S. and Texas. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (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 institutionsand how political systems function. Assessment: Placement in ENGL 1301; College-Level Reading. Prerequisite: Consent of Instructor. 3 credit hours. (A)

## GOVT 2311 Mexican-American Politics

This course explores the impact of MexicanAmericans on U.S. politics and political institutions and public policy. 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)

## GRAM 0300 Developmental Grammar

 A skills improvement course designed to help students strengthen writing. Particular emphasis is given to grammar and punctuation, and this course utilizes lecture, class discussions, tests, and writing exercises to teach individuals to recognize and correct common usage errors within the context of their own writing. This course may be taken concurrently with any English course. Lab required. No prerequisite. Exit writing assessment required. 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 0300, ENGL 0305, ENGL 0315, and GRAM 0300 may be taken for a combined total of no more than 9 credit hours.

GRPH 1359 Vector Graphics for Production
A study and use of vector graphics for production. 3 credit hours. (W)

## GRPH 1380 Cooperative Education - PrePress/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)
## HAMG1319 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. 3 credit hours. (W)

## HAMG 1321 Introduction to Hospitality Industry

Introduction to the elements of the hospitality industry. 3 credit hours. (W)

## HAMG1324 Hospitality Human Resources

 ManagementPrinciples and procedures of human resource management in the hospitality industry. 3 credit hours. (W)

## HAMG1340 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)

## HAMG1380 Cooperative EducationHospitality Administration/ Management, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 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. 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)

## HAMG2332 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. Prerequisites: 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 addresses in Texas History include: Spanish colonization and Spanish Texas; Mexican Texas; the Republic of Texas; statehood and secession; oil, industrialization, and urbanization; civil rights; and modern Texas. Assessment: Placement in ENGL 1301; CollegeLevel 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 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 Enlightment, 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 preColombian 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 MexicanAmerican 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 individual 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 1266 Practicum-Health Information/Medical Records Technology

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.
Prerequisites: HITT 1342 and POFM 1300.
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

Formerly SRGT 1301
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, healthrelated 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. 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.
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 IAHCSMM Certification program: A) Inventory Control-prepares the student with organizational skills needed to control, track and distribute inventory through the use of different techniques in inventory control and distribution, as well as the use of bar codes and radio frequency identification to track inventories. B) Sterile Storage and Distribution-introduces the basic procedures of packaging processes through a comparison of reusable and disposable packaging materials, basic package closure methods, and factors, which affect shelf-life and stock rotation. Lab required. 3 credit hours. (W)

## HPRS 1470 Central Sterile Processing I

This course will teach subsections of the IAHCSMM Certification program related to: A) Introduction to Central Service-an introduction to the central service role, surgical supplies, basic and specialty surgical instruments, and packaging and sterilization. B) Infection Control and Occupational Safetyrelated to the principles and practice of infection control and OSHA guidelines along with common safety and hazards protocols.
C) Regulations and Standards-teaches the difference between the regulations and voluntary and regulatory standards, the role and responsibilities of federal agencies that impact Central Services, and the important aspects of the regulations and standards they administer. Lab required. 4 credit hours. (W)

HPRS 1471 Central Sterile Processing III
An exploration of the subsections of the IAHCSMM Certification program: A) Instrument and Instrument Identification-identifying surgical instruments by name and purpose, examination of the process by which surgical instruments are manufactured and prepared for the sterilization
process. B) Endoscopic Instruments-proper care, handling and processing of endoscopic instruments. C) Decontamination-describe how reusable equipment, instruments, and supplies are cleaned and decontaminated by means of manual or mechanical cleaning processes and chemical disinfection and the proper use of Personal Protective Equipment (PPE) and Standard Precautions. D) Preparation and Handling-relates to basic principles of various packaging materials and closure methods used for sterilization preparation as they relate to the Association of Advancement of Medical Instrument (AAMI) standards. E) Sterilizationrelates 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 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 2300 Pharmacology for Health Professions

A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Prerequisites: SRGT 1260 and SRGT 1409. Corequisites: SRGT 1541 and SRGT 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)

## HPRS 2371 The Case Management Process

Principles, concepts, process, roles, settings, and clinical practice of healthcare case managers are reviewed with a focus on standards of practice, managed care, quality of care and cost containment. Legal and ethical considerations and evidence-based practice are applied to case-based scenarios. Prerequisite: Awarded an AAS or BS in Nursing or current certification or licensure in a healthcare field of profession. 3 credit hours. (W)

## HPRS 2372 Case Management Coordination and Financial Management

The concept of coordination of care is studied within the case management continuum of care. Identification, availability, and cost of available resources of care are explored. A case management resource path is developed for a specific disease, condition or injury. Prerequisite/Concurrent enrollment: HPRS 2371. 3 credit hours. (W)

## HPRS 2373 Case Studies in Healthcare Case Management

Case-based scenarios are used to provide student experience in healthcare case management. Students develop plans of care for cases in selected fields of clinical practice. Prerequisite: Consent of Instructor. Prerequisite/Concurrent enrollment: HPRS 2371 and HPRS 2372. 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. 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 worldcultures. 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; CollegeLevel Reading. 3 credit hours. (A)

## HUMA 1305 Introduction to MexicanAmerican Studies

Introduction to the field of MexicanAmerican/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)

HUMA 2319 Cultural Identity in the U.S.
Emphasizes the cultural, historic, social, and/or economic aspects of various U.S. cultures. Explores human values from perspectives such as national origin, language, race, and religion. May investigate these values through art, performance, and intellectual life. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)
Note: This course may be repeated once for credit with a change in content for a total of 6 credit hours.

## HUMA 2323 World Cultures

Study of human cultures throughout history. Addresses the various guises and manifestations of individual and cultural identity as expressed in the artistic, performative, and intellectual lives of peoples throughout the world. Assessment: Placement in ENGL 1301; CollegeLevel Reading. 3 credit hours. (A)
Note: Students may take either ANTH 2346 or HUMA 2323 for credit but not both.

## 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, politicallegal 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 - Flash Exploration of the use of graphics and sound to create interactive digital media applications and/or animations using industry standard authoring software. 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 jobseeking techniques. 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:
DFTG 1309, INDS 1301, INDS 1319, INDS 1341, 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

Historical survey of English, American, Asian, and 20th Century styles and periods of architecture, interiors, and furnishings. Lab required. Prerequisite: INDS 1351. 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: ITSE 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 2307 Textiles for Interior Design

 The study of interior design textiles including characteristics, care, codes, and applications. Prerequisites: DFTG 1309, INDS 1301, and INDS 1341 or consent of Program Director. 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 2319, 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 multitier 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 Developmental Integrated Reading and Writing

This is a combined lecture/lab, performancebased 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. Completion of this course is equivalent to completion of ENGL 0315 and READ 0310. Lab required. Assessment: 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. Prerequisites: ENGL 0305 and 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.

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 INetwork 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 2Routing 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 3LAN 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

Formerly ITCC 2471
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

 SwitchingFormerly ITCC 2472
How to implement, monitor, and maintain switching in converged enterprise campus networks. How to plan, configure, and verity 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

Formerly ITCC 2473
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. Prerequisite: 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 1300 Implementing and Supporting Microsoft Windows XP Professional

Addresses the implementation and desktop support needs of customers that are planning to deploy and support Microsoft Windows XP Professional in a variety of stand-alone and network operating system environments. Indepth, hands-on training for Information Technology (IT) professionals responsible for the planning, implementation, management, and support of Windows XP Professional. Microsoft Exam \#70-270. Prerequisite: ITNW 1358 or consent of Program Director. Lab required. 3 credit hours. (W)

## ITMT 1370 Configuring and Supporting Microsoft Windows 7

Addresses the implementation and desktop support needs of customers that are planning to deploy and support Microsoft Windows 7 in a variety of 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 1440 Managing and Maintaining a Microsoft Windows Server 2003 Environment

Managing accounts and resources, maintaining server resources, monitoring server performance, and safeguarding data in a Microsoft Windows Server 2003 environment. Microsoft Exam \#70-290. Lab required. Prerequisite: ITMT 1300 or consent of Instructor or Program Director. 4 credit hours. (W)

ITMT 1450 Implementing, Managing and Maintaining a Microsoft Windows Server 2003 Network Infrastructure: Network Services Implementing routing; implementing, managing, and maintaining Dynamic Host Configuration Protocol (DHCP), Domain Name System (DNS), and Windows Internet Name Service (WINS);
securing Internet Protocol (IP) traffic with Internet Protocol security (IPSec) and certificates; implementing a network access infrastructure by configuring the connections for remote access clients; and managing and monitoring network access. Microsoft Exam \#70-291. Lab required. Prerequisite: ITMT 1440. 4 credit hours. (W)

ITMT 1455 Planning, Implementing, and Maintaining a Microsoft Server 2003 Network Infrastructure
Planning and maintaining a Windows Server 2003 network infrastructure. Microsoft Exam \#70-293. Lab required. Prerequisite: ITMT 1450. 4 credit hours. (W)

## ITMT 2400 Planning, Implementing, and

 Maintaining a Microsoft Server 2003 Active Directory InfrastructureWindows Server 2003 directory service environment. Includes forest and domain structure; Domain Name System (DNS); site topology and replication; organizational unit structure and delegation of administration; Group Policy; and user, group, and computer account strategies. Microsoft Exam \#70-294. Lab required. Prerequisite: ITMT 1455 or consent of Instructor or Program Director. 4 credit hours. (W)

## ITMT 2401 Windows Server 2008 Network

 Infrastructure ConfigurationA 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: ITMT 2402. 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: ITNW 1358. 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 2440 Designing Security for Microsoft Networks

Assembling the design team, modeling threats, and analyzing security risks in order to meet business requirements for securing computers in a networked environment. Includes decisionmaking skills through an interactive tool that simulates real-life scenarios. Focuses on collecting information and sorting through details to resolve a given security requirement. Microsoft Exam \#70-298. Lab required. Prerequisite: ITMT 2400. 4 credit hours. (W)

## ITMT 2450 Implementing and Managing Microsoft Exchange

Updating and supporting a reliable, secure messaging infrastructure used for creating, storing, and sharing information by using Microsoft Exchange Server 2003. Includes a significant amount of hands-on practices, discussions, and assessments to assist students in becoming proficient in the skills necessary to update and support Exchange Server 2003. Microsoft Exam \#70-284. Lab required. Prerequisite: ITMT 1440. 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 AdministratorA 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 2451. 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 1380 Cooperative Education -

 Computer Systems Networking and TelecommunicationsCareer-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

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 2346 Small Office Home Office: Case Study I

Application of network concepts learned in previous courses. Includes responsibilities and tasks required to successfully perform in the Small Office Home Office (SOHO) environment. 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. Case Study I challenges the student to apply the network concepts learned in previous courses to a case-study based problem in a Small OfficeHome Office environment. Lab required. Prerequisite: ITMT 1440. 3 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 1450. 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 1300 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)

## 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 handson setup, administration, and management of Linux. Lab required. Prerequisite: ITNW 1358 or consent of Instructor or Program Director.
3 credit hours. (W)

## ITSC 1364 Practicum - Computer and

 Information Sciences, GeneralA basic or intermediate type of non-health professions work-based instruction that provides basic career exploration or helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The emphasis is on practical work experience. Indirect supervision is provided by the work supervisor. A practicum may be a paid or unpaid learning experience. Prerequisite: Consent of Department Chair. 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: BCIS 1320 or 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

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 iPhone (iOS) 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. Prior programming experience in
either C or an Object-Oriented Programming language is recommended for this course. 3 credit hours. (W)

## ITSE 1371 iPhone (iOS) Programming IOjective 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: BCIS 1320 or COSC 1315 or COSC 1436 or consent of Instructor or Department Chair. 3 credit hours. (W)

## ITSE 1372 J2ME Mobile Programming I

Course explores developing applications for hand-held, mobile devices (cell phones, etc.) including the J2ME Java language extensions, the Sun Integrated Development Environment (IDE), and the platform standards. This course will focus on the issues associated with programming of mobile devices. Prerequisite: COSC 1337 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 Developement 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: BCIS 1320 or 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: BCIS 1320 or COSC 1315 or COSC 1436 or consent of Instructor or Department Chair.
## ITSE 2301 Windows Programming Using C++

Introduction to computer programming for Windows using C++. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data, and file structures, input/output devices, and
files. Uses Visual C++ in an integrated development environment. Prerequisite: COSC 1437 or consent of Instructor or Department Chair. 3 credit hours. (W)

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 PLISQL

 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 J2ME Mobile Programming II

Course continues to explore the development of applications of hand-held, mobile devices (cell phones, etc.) including the J2ME Java language extensions, the Sun Integrated Development Environment (IDE), and the platform standards. This course will focus on advanced topics
related to programming mobile devices with J2ME. 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)

[^6]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 2401 Firewalls and Network Security Identify elements of firewall design, types of security threats and responses to security attacks. Use best practices to design, implement, and monitor a network security plan. Examine security incident postmortem reporting and ongoing network security activities. Lab required. Prerequisite: ITSY 2300 or consent of Instructor or Program Director. 4 credit hours. (W)

ITSY 2442 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; and implementing and modifying security measures. Lab required. Prerequisite: ITSY 2300 or consent of Instructor or Program Director. 4 credit hours. (W)

## ITSY 2443 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 2442 or consent of Instructor or Program Director. 4 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)

## 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 posttrial 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

This course presents fundamental concepts of the law of wills, trusts, and probate administration with emphasis 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

 Fundamentals of 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 0131 Beginning Algebra I

This course is an introduction to algebra that also includes the review of foundations of algebra (real number system, operations with real numbers, exponents and order of operations). The course is designed to develop an understanding of solving linear equations, graphing linear equations and introduction to functions. Graphing calculator is required. Lab required. Assessment: Placement in MATH 0305. Prerequisite: MATH 0302. 1 credit hour. (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 0132 Beginning Algebra II

This course is designed to develop an understanding of rules of exponents, polynomials, operations with polynomials, and factoring of the polynomials. The course also includes solving quadratic equations by factoring. Graphing calculator is required. Lab required. Assessment: Placement in MATH 0132. Prerequisite: MATH 0131. 1 credit hour. (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 0133 Beginning Algebra III

This course is designed to develop an understanding of problem solving techniques, rational expressions and equations. Graphing calculator is required. Lab required.
Assessment: Placement in MATH 0133. Prerequisite: MATH 0132.1 credit hour. (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 0141 Intermediate Algebra I

Solving linear inequalities, algebra of functions, and composition of functions, slope, and different forms of an equation of a line will be discussed in this course. Graphing calculator is required. Lab required. Assessment: Placement in MATH 0310. Prerequisite: MATH 0305 or MATH 0133. 1 credit hour. (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 0142 Intermediate Algebra II

Solving systems of linear equations and inequalities, radical expressions and functions, operations with radical expressions, and radical equations are discussed in this course. Graphing calculator is required. Lab required. Assessment: Placement in MATH 0142. Prerequisite: MATH 0141.1 credit hour. (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 0143 Intermediate Algebra III
The study of complex numbers, rationalizing denominators of radical expressions, quadratic equations, solving nonlinear inequalities, and
circles is included in this course. Graphing calculator is required. Lab required. Assessment: Placement in MATH 0143. Prerequisite: MATH 0142. 1 credit hour. (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 0302 Pre-algebra

Study of mathematical operations with signed numbers, algebraic expressions, and polynomials; involves solving linear equations and geometric applications. Lab required. Assessment: 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

Study of rational numbers, expressions, linear and quadratic equations, absolute value equations, polynomials, factoring, rational expressions, rational equations, exponents and graphing linear equations. Lab required. Assessment: Placement in MATH 0305. Prerequisite: 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 0310 Intermediate Algebra

Study of exponents, functions, radical expressions and equations, quadratic equations and functions, linear and quadratic inequalities, systems of equations and inequalities, and graphing linear equations and inequalities. Lab required. Assessment: Placement in

MATH 0310. Prerequisite: 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 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 graphs and applications of functions, sets, logic, 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 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)

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. This course is designed specifically for students who seek middle grade (4-8) teacher certification and includes the foundational math concepts taught at the middle grade level. Prerequisite: MATH 1314, MATH 1350, or MATH 1414. 3 credit hours. (A)

## 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. Graphing 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, trigonometic, 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: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Mathematics Department for further information.

## MATH 2414 Calculus II

Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals.

Graphing calculator required. Lab included. Prerequisite: MATH 2413. 4 credit hours. (A) Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Mathematics Department for further information.

## MATH 2415 Calculus III

Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green's Theorem, the Divergence Theorem, and Stokes' Theorem. Graphing calculator required. Lab included. Prerequisite: MATH 2414 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: 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: 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. Prerequisites: HITT 1305 (or SRGT 1301) and POFM 1300.3 credit hours. (W)

## MDCA 1409 Anatomy and Physiology for Medical Assistants

Emphasis on structure and function of human cells, tissues, organs, and systems with overview of common pathophysiology. Lab required. Prerequisites: EMSP 1501, and consent of Program Director. 4 credit hours. (W)

## MRKG1301 Customer Relationship Management

General principles of customer service including skills, knowledge, attitudes, and behaviors. 3 credit hours. (W)

## MRKG1311 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)

## MRKG1380 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)

## MRKG2333 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 <br> Practical experiences in analyzing marketing studies using data-driven decision-making

processes. Includes interrelationships among marketing price, place, promotion, and product responsibility. 3 credit hours. (W)

## MRKG2349 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)
## MRKG2381 Cooperative EducationMarketing/Marketing Management, General

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

## MUAP 1101-1191 Secondary Applied 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 1101-2295.

| 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 | 1111 | 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 Performing Arts majors (Music, Dance, Theatre) only. Private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in at least 4 (four) Performing Arts credits, including one MUSI, MUSB, or MUSC course, at least 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, perform in 1 (one) Departmental recital, and participate in a jury for 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 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 the20th 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 will 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 1391 Special Topics in Music Business

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)

## Music Marketing with Emerging Technologies

Topics address marketing with new technologies including web-based networking and social media, global music marketing, creative commons, placing music in film and television, and mobile music applications.
Prerequisite: MUSB 1305.

## 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 1303 History of Popular Music

A survey of commercial music industry trends and developments through historical analysis. Topics include the evolution of the music industry with emphasis on the development of popular musical styles and the impact of culture and technology on industry growth. 3 credit hours. (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 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)

## 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: MUSC 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

## Formerly MUSI 1301

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 nonmusic majors only. Music majors must take MUSI 1307. Assessment: Placement in at least 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 History of Jazz

Development of jazz music in the 20th century studied through text, audio, and video recordings. Includes the personalities and elements that shaped jazz and the social issues of the times as displayed by the music of each decade. 3 credit hours. (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 sightreading. 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

An instructional program designed to integrate on-campus study with practical hands-on work experience in music. In conjunction with class seminars, the individual 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.

## NURA 1160 Clinical - Nursing Aide and Patient Care Assistant

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts to provide safe, quality patient/client care in a health care setting for culturally and socially diverse patients/clients while promoting safe patient/client environments and risk reduction. Direct supervision is provided by the clinical professional, a registered nurse. Corequisite: NURA 1301 or consent of Program Director. 1 credit hour. (W)

## NURA 1301 Nurse Aide for Health Care

Preparation for entry level nursing assistants to achieve a level of knowledge, skills, and abilities essential to provide safe, basic care to patients/residents of long-term care and hospital facilities. Topics include patient/resident's rights, communication with patients/residents and families, safety, observation, reporting and assisting patients/residents in maintaining basic comfort and reducing patient/resident risks. Emphasis is on effective interaction and communication with members of the health care team. Lab required. Corequisite: NURA 1160 or consent of Program Director. 3 credit hours. (W)

## PHED 1100 Beginning Weight Training

 Introduction to weight training and body building; learn the basic techniques for strength development and cardiovascular conditioning. Various weight machines, free weights and aerobic machines are used to establish an individual fitness program. 1 credit hour. (A) 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 1113 Softball

Fundamental skills of throwing, batting, fielding, and base running as well as knowledge of the rules and terminology, and 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 1124 Intermediate Golf

Develops advanced skill techniques and strategies 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 1133 Introduction to Racquet Sports

Introduction to the rules, scoring, and fundamental techniques in the following sport: tennis, badminton, racquetball. Participation will help develop muscular and cardiovascular fitness and hand eye coordination. 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 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 1253 Lifeguard Training

Skills, methods, and techniques involved in lifesaving and water safety are reviewed. Successful completion leads to American Red Cross Lifesaving Certification. Student must provide documentation that the American Red Cross requirements for Lifeguard Training have been met prior to enrolling in this course. Lab required. Prerequisite: Consent of Instructor. 2 credit hours. (A)

## 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)

## PHIL 1301 Introduction to Philosophy

Critical and reflective thinking as applied to basic problems of existence and to the meaning of human life. Selective philosophical problems are examined through the views of major philosophers. Includes ancient, medieval, and modern thought. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

## PHIL 1304 Comparative Religion

Study of religious traditions: Eastern, Western, ancient, and modern. Emphasis on such topics as the nature of God, religious experience, immortality, and human freedom. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

## PHIL 1316 History of World Religions IEastern Religions

This course is designed to introduce students to a historical study of Hinduism, Buddhism, and the religions of China, Japan and other Asian countries. In addition to the history of these religions, beliefs and practices of the principal religions will be topics of discussion. The course will provide students with a condensed introduction to Asian civilizations as students explore the complex interaction of religion and society throughout this region of the world.
Assessment: Placement in College-Level Reading. 3 credit hours. (A)

## PHIL 1317 History of World Religions IIWestern Religions

This course is designed to introduce students to a historical study of western religions; emphasis will be placed on Judaism, Christianity and Islam, and other religions found in the West. Students will be introduced not only to the historical developments and inter-relations between these religions, but also the beliefs and practices of these religions. Assessment: Placement in College-Level Reading. 3 credit hours. (A)

## PHIL 2303 Introduction to Logic

Symbolic and informal logic; emphasis on logical argument, fallacies, inductive and deductive proof, and correct reasoning. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

## PHIL 2306 Introduction to Ethics

Traditional theories and problems in the field of moral philosophy. Using seminal works from the history of western philosophical thought, this course examines the meaningfulness of ethical discourse and explores what makes an action right or wrong, good or evil. Includes contemporary issues in light of historical ethics. Assessment: Placement in ENGL 1301; CollegeLevel Reading. 3 credit hours. (A)

## PHIL 2307 Introduction to Social and Political Philosophy

Focuses on the concepts of force, power, and authority as well as on natural rights, justice, education, freedom, and responsibility. Assessment: Placement in ENGL 1301; CollegeLevel Reading. 3 credit hours. (A)

## PHIL 2321 Philosophy of Religion

A critical investigation of important philosophical concerns with respect to religious ideas of faith, such as the existence and nature of God, the problem of evil, and ideas of the sacred and profane. 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 General Physics I

Algebra-based physics course for the science major in areas of biology, medicine, and pharmacy. Includes laws of motion of objects, heat, work and energy, and sound. Lab required. Assessment: Placement in MATH 2312; College-Level Reading. Prerequisites: High school pre-calculus or equivalent 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.

## PHYS 1402 General Physics II

A continuation of PHYS 1401. Includes electricity, magnetism, light, optics, relativity and atomic physics. Lab required. Prerequisite: PHYS 1401 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.

## 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 LevelReading. 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.

## PLAB 1323 Phlebotomy

Skill development in the safe, competent performance of a variety of blood collection
methods using proper techniques and standard precautions. Includes vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture, and specimen collection on culturally and socially diverse patients/clients including adults, children and infants. Emphasis on infection prevention, patient/client identification, risk reduction, specimen labeling, quality assurance, specimen handling, processing, accessioning, professionalism, ethics, and medical terminology. Lab required. Prerequisite: Current Healthcare Provider Cardiopulmonary
Resuscitation (CPR) Certification from American Heart Association (AHA). Corequisite: PLAB 1360. 3 credit hours. (W)

## PLAB 1360 Clinical - Phlebotomy

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts for culturally and socially diverse patients/clients to facilitate risk reduction. Collaboration with members of the interdisciplinary health care team is reviewed. Direct supervision is provided by the clinical professional. Prerequisite: Current Healthcare Provider Cardiopulmonary
Resuscitation (CPR) Certification from American Heart Association (AHA). Corequisite: PLAB 1323. 3 credit hours. (W)

## 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 Medical Coding Basics

Presentation and application of basic coding rules, principles, guidelines, and conventions utilizing various coding systems. Lab required. Prerequisite/Concurrent enrollment: 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. Prerequisite: POFI 2301 or 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 - Polysomnograpic Technology. 2 credit hours. (W)

## PSGT 1260 Certificate Clinical IPolysomnography

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Admitted to the Certificate -Polysomnographic Technology Program. Corequisite: PSGT 1400. Major Requirement: Certificate - Polysomnographic Technology. 2 credit hours. (W)

PSGT 1310 Neuroanatomy and Physiology Basic neuroanatomy and physiology. Includes neurologic history, neurologic exam, and diagnostic tools applied to the study of various neurologic disorders. Lab required. Major Requirement: AAS 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. 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 polysmonography 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. 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

 CookiesFocus 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. 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:
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 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 studentâ $€^{\text {TM }}$ 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 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)

## PSYC 2301 General Psychology

Introduction to scientific psychology as applied to human behavior, including research methods, physiological factors, learning, motivation, emotions, personality, adjustment, stress, psychological disorders and therapies. These principles will be applied to the human experience. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

## PSYC 2302 Applied Psychology

Application of psychological principles to human relations issues in organizational settings. Emphasis on self-understanding, interpersonal relations, and career development. Assessment: Placement in ENGL 1301. 3 credit hours. (A)

## PSYC 2306 Human Sexuality

Understanding of human sexuality - includes an appreciation of different approaches to sexuality as well as an awareness of one's own sexuality and its impact on adjustment to life.
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 Psychology

A life-span approach to human development studies the processes of life from conception through adulthood and aging. Includes physical, cognitive, and psychosocial aspects of human growth, development and behavior. These principles will be applied to daily lifestyles. Assessment: Placement in ENGL 1301; CollegeLevel 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 0300 Developmental Reading I

Raises the reading level of students through the acquisition of basic vocabulary and comprehension skills. Lab required.
Assessment: Placement in READ 0300. 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 0305 Developmental Reading II
Offers additional instruction in developing vocabulary and comprehension skills. Effective study skills are introduced. Lab required. Assessment: Placement in READ 0305. Prerequisite: READ 0300. 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 III

Seeks to further improve student's vocabulary, comprehension and study skills. Lab required. Assessment: Placement in READ 0310. Prerequisite: 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.

## RELE 1300 Contract Forms and Addenda

Promulgated Contract Forms, which shall include, but is not limited to, unauthorized practice of law, broker-lawyer commitee, 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

A study of 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, the 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

A study of 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

An overview of 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

A study of real estate professionalism and ethics; characteristics of successful salespersons; time management; psychology of marketing; listing procedures; advertising; negotiation and closure of 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

A study of law of agency including principalagent 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 1219 Integrated Nursing Skills I

Study of the concepts and principles necessary to perform safe, basic nursing skills for patientcentered 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 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 patientcentered 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 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 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 patientcentered 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 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 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: AASNursing. 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 patient/client 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, patientcentered 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: AASNursing. 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)

## 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. Major Requirement: AAS-Respiratory
Care. 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: AASRespiratory 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. Corequisite: BIOL 2421 or consent of Program Director. 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: AASRespiratory 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 EducationRestaurant, 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 audiovisual aids. Prerequisite: RUSS 2311 or consent of Instructor or Department Chair. 3 credit hours. (A)

## SGNL 1401 American Sign Language (ASL):

 Beginning IIntroduction 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 IIncludes the integration of ASL expressive and receptive skills using bilingual techniques. Also includes a study of vocabulary, idioms, culture, ASL linguistics, manual and non-manual aspects of ASL, and cross-cultural communication techniques. Highly interactive, centering on lab exercises, peer critiques, guest lectures, and on the application of basic ethical behavior. Class is conducted primarily without voice. Lab required. Prerequisite: SGNL 1402 or credit by exam. 3 credit hours. (A)

## SGNL 2302 American Sign Language (ASL):

 Intermediate IIContinuation of SGNL 2301; further application of introductory level interpreting and transliterating skills with appropriate RID guidelines governing ethical behavior. Provides students the opportunity to interpret for guest speakers. Class is conducted primarily without voice. Lab required. Prerequisite: SGNL 2301 or credit by exam. 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 2302. 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 2267 Practicum II-Sign Language Interpretation and Translation

 Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisites: SLNG 2266 and SLNG 2311 or SLNG 2331. 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. This course focuses on skills building and developing fluency in interpreting. Continuing to incorporate and add to information from SLNG 1321 such as the physical and mental requirements of interpreting, the TX DARS/ODHHS/BEI and National RID Professional Code of Conduct, and general business practices. Includes methods and techniques of interpreting through practical application by using role-plays. Continued focus on the differences between interpreting and transliterating and various special settings. This
class is conducted with and without voice. Lab required. Prerequisite: SLNG 1321. 3 credit hours. (W)

## SLNG 2311 Interpreting in Specialized Settings

Overview of interpreting/transliterating with special populations (e.g., deaf/blind, high visual, oral) and/or special settings (e.g., religious, artistic, medical, legal, mental health). Reinforces interpreting theories and techniques in relation to the special population(s) and/or setting(s). Lab required. Prerequisite:
SLNG 2301. 3 credit hours. (W)

## SLNG 2331 Interpreting III

A practice-oriented course to strengthen skills in the integration and application of interpreting using complex source materials. Continued exposure to simulated interpreting/transliterating experiences. The course will develop voicing skills with a focus on chunking, dynamic equivalence, word selection, register, receptive skills, proper location of voice interpreters, team interpreting, the use of a CDI, and other aspects of voicing. Special requirements of voice interpreting will also be included, such as methods and techniques of voice-overs, voicing for Deaf individuals who use ASL, as well as Deaf individuals who may not use ASL. Lab required. Prerequisite: SLNG 2301 or SLNG 2311, 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 I

A study of the processes, materials, and equipment used in the manufacturing of semiconductors, including an overview of the semiconductor industry, related terminology, and standard safety practice. Lab required. 3 credit hours. (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 Technology, Measurement Technology and Characterization Methods used in Semiconductor Solar Cell Manufacturing

The course will include an in-depth coverage of materials measurement techniques, statistical process control/capability analysis, six sigma process characterization, and FEMA from the perspective of Photovoltaic Solar Cell materials characterization, electrical characterization and optical characterization technology and techniques. The course is taught from an engineering perspective using an appropriate level of mathematics for the engineering models presented. Lab required. Prerequisites: SMFT 1471 and SMFT 1473, or consent of Program Director. 4 credit hours. (W)

## SMFT 2343 Semiconductor Manufacturing Technology II

The continuation of Semiconductor
Manufacturing Technology I covering the processes, materials, and equipment used in the
manufacturing of semiconductors. Topics address process-yield analysis and process troubleshooting. Lab required. Prerequisite: SMFT 1343 or consent of Instructor or Program Director. 3 credit hours. (W)

## SOCI 1301 Introduction to Sociology

 Introduction to the scientific study of social factors that influence human behavior. Includes analysis of culture and socialization processes, social interaction, deviance, social stratification/inequality, race relations, global interdependence, and gender. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)
## SOCI 1306 Social Problems

In-depth examination of selected social problems, their nature, cause, extent, and effects upon society. Social problems will be analyzed at the local, state, national, and international levels. Includes inequality based on race, gender, age, and class. Assessment: Placement in ENGL 1301. 3 credit hours. (A)

## SOCI 2301 Marriage and Family

A functional approach to understanding the structural, developmental, and institutional aspects of marriage; a multicultural perspective on the family with consideration given to courtship, mate selection, marriage and its dynamics, conflict, family violence, child-rearing patterns, the later years of marriage, divorce, and remarriage. Assessment: Placement in ENGL 1301. 3 credit hours. (A)

## SOCI 2306 Human Sexuality

Understanding of human sexuality; includes an appreciation of different approaches to sexuality as well as an awareness of one's own sexuality and its impact on adjustment to life.
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

Examines the historical, social, and cultural factors that account for present circumstances and affect future prospects of specific subordinate groups in society. Special emphasis on the causes, persistence, and consequences of prejudice and discrimination and the ways and extent to which each may be reduced.

Assessment: Placement in ENGL 1301; CollegeLevel 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)

## SOCW2361 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; CollegeLevel Reading. 3 credit hours. (A)

## SOCW2362 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 1300 Conversational Spanish I

Intensive practice in spoken Spanish. Prerequisite: SPAN 1412 or consent of Instructor or Department Chair. 3 credit hours. (A)

## SPAN 1310 Conversational Spanish II

Continuation of Spanish 1300. Prerequisite:
SPAN 1300 or consent of Instructor or Department Chair. 3 credit hours. (A)

## SPAN 1411 Beginning Spanish I

Introduction to the four basic skills of speaking, reading, writing and listening to Spanish with attention to selected aspects of Hispanic culture; designed for students with little or no previous language training. Instruction enhanced by the use of slides, tapes, computer software, and video cassettes. Lab required. 4 credit hours. (A)

## SPAN 1412 Beginning Spanish II

Continuation of SPAN 1411. Lab required. Prerequisite: SPAN 1411 or consent of Instructor or Department Chair. 4 credit hours. (A)

## SPAN 2311 Intermediate Spanish I

 Continued development of speaking, listening, reading and writing skills. Instruction enhanced by the use of slides, tapes and other audiovisual aids. Prerequisite: SPAN 1412 or consent of Instructor or Department Chair. 3 credit hours. (A)
## SPAN 2312 Intermediate Spanish II

Extensive written and oral work and extensive reading of literary works in Spanish of moderate difficulty. Prerequisite: SPAN 2311 or consent of Instructor or Department Chair. 3 credit hours. (A)

SPAN 2313 Spanish for Native Speakers I Designed for students for whom Spanish is the primary or secondary method of communication at home, but who have no formal instruction in the language. In addition to grammar and vocabulary review, this course will allow students to develop advanced written and oral communication skills. Prerequisite: SPAN 1412 or consent of Instructor or Department Chair. 3 credit hours. (A)

SPAN 2315 Spanish for Native Speakers II Designed for students for whom Spanish is the primary or secondary method of communication at home, but who have no formal instruction in the language. In addition to grammar and vocabulary review, this course will allow students to develop advanced written and oral communication skills. Prerequisite: SPAN 2313 or consent of Instructor or Department Chair. 3 credit hours. (A)

## SPAN 2321 Spanish Literature I

Study of Spanish literature from its origin to 1700 through lectures, discussions, and reading of major literary works with some attention to historical contexts. Prerequisite: SPAN 2312 or consent of Instructor or Department Chair. 3 credit hours. (A)

## SPAN 2322 Spanish Literature II

Study of Spanish literature from 1700 to the present. Lectures, discussions, and readings of major literary works with some attention to historical contexts. Prerequisite: SPAN 2312 or consent of 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 Fundamentals of Speech Communication

Survey of basic factors affecting human interaction through communication; emphasis on the development of oral communication competencies; practice in delivering oral presentations. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

## SPCH 1315 Public Speaking I

Study and practice in the preparation and delivery of oral presentations; practice in different types of speeches and forms of delivery; evaluation of speakers and speeches. Assessment: Placement in ENGL 1301; CollegeLevel Reading. 3 credit hours. (A)

## SPCH 1318 Interpersonal Communication

Theories and exercises in verbal and nonverbal communication with focus on interpersonal relationships. The course focuses on interpersonal contexts such as gender communication, romantic and family relationships, conflict, intercultural communication, and listening. Assessment: Placement in ENGL 1301; College-Level Reading. 3 credit hours. (A)

## SPCH 1321 Business and Professional Speaking

Study of the importance of oral communication in business; practice in small group communication; study of the relationship of communication to organizational conflict, management and international business; practice in conducting and participating in business interviews and presentations. Assessment: Placement in ENGL 1301; CollegeLevel 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. MajorRequirement: 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 clinicalprofessional. 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. 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. 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. Prerequisite: TRVM 2301 or consent of Instructor or Department Chair. 3 credit hours. (W)

## TRVM 2341 International Convention/

 Meeting ManagementApply 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)


[^0]:    * Leading to Initial Texas Teacher Certification

[^1]:    * The Admissions and Records Office (ARO) is the point of record for determining the number of credit hours that transfer into the institution.

[^2]:    1. May substitute BCIS-1320, COSC-1315, or ITSE-1332
    2. May substitute ITSW-1307
[^3]:    1. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-1414,
[^4]:    1 No course substitutions
    2. May substitute SOCI-1301

[^5]:    DFTG 1380 Cooperative Education - Drafting and Design Technologyl 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

[^6]:    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.

