COLLIN COLLEGE

CATALOG

LIBRARY

2014-2015

Collin College is an equal opportunity institution and provides educational and employment opportunities without discrimination on the basis of race, color, religion, sex, age, national origin, disability, veteran status or other legally protected class. In accordance with the Americans with Disabilities Act of 1990 and Section 504 of the Vocational Rehabilitation Act of 1973, Collin College provides accommodations as required by law to afford equal educational opportunities to all people. Norma Allen, the ADA/Title IX/504 Coordinator, is located at CHEC Room 349; 972.599.3159. Upon request, the college catalog is available on computer disk for students with print-oriented disabilities. For more information, contact ACCESS (Accommodations at Collin College for Equal Support Services) at 972.881.5898 (Voice). For persons who are deaf or hard of hearing or have speech impairments, please contact Texas Relay Services by dialing 711.800.735. 2989 (TTY) or 877.826.1789 (VCO).

ACCREDITATION STATUS

Collin County Community College District is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate degrees and certificates. Contact The Commission at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Collin County Community College District.

Note: The Commission is to be contacted only if there is evidence that appears to support the institution's significant non-compliance with a requirement or standard.

ACCREDITING BODIES

Accreditation Commission for Education in Nursing (ACEN) (formerly National League for Nursing Accrediting Commission (NLNAC)); American Culinary Federation; American Dental Association's Commission on Dental Accreditation; Commission on Accreditation for Health Informatics and Information Management Education (CAHIM); Commission on Accreditation for Respiratory Care (CoARC); Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Committee on Accreditation of Emergency Medical Services Professions (CoAEMSP); Commission on Accreditation of Allied Health Education Programs (CAAHEP); Commission on Accreditation of Allied Health Education Programs (CAAHEP) through the Accreditation Review Council on Education in Surgical Technology and Surgical Assisting (ARC/STSA)

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

Campus Locations

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

Allen Center (AL)
Allen High School
300 Rivercrest Blvd.
Allen, Texas 75002
972.377.1060

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

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

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

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

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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Board of Trustees
http://www.collin.edu/leadership/board_of_trustees.html

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

Administrators
http://www.collin.edu/leadership/provostsanddeans.html

Faculty
http://hb2504.collin.edu/
(*course syllabi, professors' curricula vitae*)

RELATED LINKS

Athletics
http://www.collin.edu/athletics

Center for Scholarly and Civic Engagement
http://www.collin.edu/academics/csce/index.html

Cisco Systems Networking Academy
http://www.collin.edu/academics/programs/cisco_systems.html

Continuing Education and Workforce Development
http://www.collin.edu/ce

Fitness Centers
http://www.collin.edu/studentresources/personal/fitnesscenters/

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

Learning Communities
http://www.collin.edu/learningcomm

Law Enforcement Academy
http://ftp.collin.edu/lawenforcement/index.htm

National Technical Honor Society
http://www.collin.edu/campuslife/national_technical_honor_society.html

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 2014 – 2015 ACADEMIC CALENDAR

FALL 2014

Aug. 14	**Last day to receive meningitis vaccine to register for Fall**
Aug. 15	**All College Day (All Campuses Closed)**
Aug. 25	Fall Classes Begin
Sept. 1	**Labor Day Holiday (Campuses Closed)**
Sept. 8	Fall Census Date
Sept. 19	**Plano Balloon Festival-Spring Creek Campus Closes at 3 p.m.**
Sept. 20-21	**Plano Balloon Festival-Spring Creek Campus Closed**
Oct. 17	Fall Last Day to Withdraw
Nov. 26-30	**Thanksgiving Holiday (Campuses Closed)**
Dec. 8-14	Fall Final Exam Week
Dec. 24-Jan. 4	**Winter Break (Campuses Closed)**

SPRING 2015

Jan. 8	**All College Planning Work Session (All Campuses Close at 11:30 a.m.)**
Jan. 9	**Last day to receive meningitis vaccine to register for spring**
Jan. 19	**MLK Holiday Campuses Closed** (Except for events at SCC)
Jan. 20	Spring Classes Begin
Feb. 2	Spring Census Date
March 9-13	**Spring Break (No Classes)**
March 14-15	**Spring Break (Campuses Closed)**
March 20	Spring Last Day to Withdraw
April 3-5	**Spring Holiday (Campuses Closed)**
May 8	**Last day to receive meningitis vaccine to register for Maymester**
May 11-17	Spring Final Exam Week
May 15	Commencement at 7 p.m.

MAYMESTER 2015

May 18	Maymester Classes Begin
May 19	Maymester Census Date
May 22	Maymester Last Day to Withdraw
May 25	**Memorial Day Holiday (Campuses Closed)**
May 29	**Last day to receive meningitis vaccine to register for Summer I and III.**
June 2	Maymester Final Exams

SUMMER 2015

June 5-6	Summer I and III Weekend College Begins
June 8	Summer I and III Classes Begin
June 11	Summer I Census Date
June 17	Summer III Census Date
June 23	Summer I Last Day to Withdraw
July 2	**Last day to receive meningitis vaccine to register for Summer II**
July 3-4	**Independence Day Holiday (Campuses Closed)**
July 9	Summer I Final Exams
July 9	Summer III Last Day to Withdraw
July 13	Summer II Classes Begin
July 16	Summer II Census Date
July 17-18	Summer II Weekend College Begins
July 28	Summer II Last Day to Withdraw
July 31	Calendar Day for Summer II Classes
July 31	Calendar Day for Summer III MW Classes
Aug. 7	Calendar Day for Summer II Classes
Aug. 7	Calendar Day for Summer III TR Classes
Aug. 10-11	Summer III Final Exams
Aug. 11	Summer II Final Exams
Aug. 15-16	Summer II and III Weekend College Finals

QUICK REFERENCE

Student Service	CPC	CHEC/CYC	PRC	SCC
Academic Advising	972.548.6782 D117		972.377.1779 F109	972.881.5782 G103
ACCESS Office	972.548.6816 D118		972.377.1785 F118	972.881.5898 D140
Admissions and Records Office	972.548.6710 D118	972.985.3721 CYC B101	972.377.1710 F109	972.881.5710 G103
Bookstore	972.548.6680 C120	972.985.3710 CYC B107	972.377.1680 F159	972.881.5680 F161
Campus Police	972.578.5555 D108A	972.578.5555 134 CYC 125	972.578.5555 LH179	972.578.5555 K006E
Career Services & Off-Campus Employment	972.548.6747 D117		972.377.1781 F159	972.881.5781 G103
Center for Scholarly and Civic Engagement				972.881.5900 F105
Child Development Lab School				972.881.5945 B176
Computer Lab	972.548.6877 C113		972.377.1706 H125	972.881.5966 J110
Counseling Services	972.548.6648 B122C, B122D		972.377.1781 F117 F119	972.881.5126 D134
Dean of Student Development	972.377.1595 E302		972..881.5902 F136	972.881.5604 D128
Financial Aid/Veterans Affairs	972.548.6760 D118		972.377.1760 F109	972.881.5760 G103
Fitness Center	972.548.6891 E121		972.377.1758 Alumni Hall	972.881.5848 A103
Food Service	First Floor	CYC A212	Alumni Hall	972.881.5949 F108
Honors Institute				972.516.5120
Information Center	972.548.6790 First Floor Atrium	972.985.3790 CYC B101	972.377.1790 Lawler Hall Atrium	972.881.5790 First Floor Atrium
International Students Office				972.516.5012 G150
Library	972.548.6860 LA		972.377.1560 L150	972.881.5860 L100
Math Lab	972.548.6896 C220		972.377.1639 F148	972.881.5921 D203
Maximizing Academic Progress Program (MAPP) Academic Probation/Suspension	972.548.6782 D117		972.377.1779 F109	972.881.5782 G103
Recruitment and Programs for New Students	972.377.1627 D117J	972.377.1750 CHEC 457	972.881.5638 F130	972.516.5047 G120
Service Learning Office				972.881.5900 F105
Student Development Center	972.548.6770 D117		972.377.1595 F109	972.881.5627 or 5604 G103
Student Life	972.548.6788 C119		972.377.1788 A185	972.881.5788 F129
Student Lounge			972.377.1788 Alumni Hall	

Student Service	CPC	CHEC/CYC	PRC	SCC
Testing Center	972.548.6849 A109		972.377.1522 F209	972.881.5922 J232
Transfer Programs Office		972.985.3734 CHEC 120		
Tutoring (ACCESS Office)				972.881.5128 D140
Wellness Center				972.881.5777 A217
Writing Center	972.548.6857 A104		972.377.1576 L214	972.881.5843 D203

Administrative Department	CPC	CHEC/CYC	PRC	SCC
ADA/Title IX/504 Coordinator		972.599.3159 CHEC 349		
Associate Faculty Office	972.548.6830 B331		972.377.1585, 1705, 1554, or 1506 F243, LH141, H119, L226, or U111	972.516.5090 or 972.881.5759 B103 or K237
Cashier's Office (Bursar)	972.548.6616 A111E	972.985.3724 CYC B101	972.377.1638 F140	972.881.5634 G143
The Collin College Foundation (Scholarships)		972.599.3145 CHEC 429		
Continuing Education and Workforce Development		972.985.3750 CYC A364		
Dean of Student Development Office	972.377.1595 E302		972..881.5902 F136	972.881.5604 D128
Instruction Office	972.548.6830 B331			
Plant Operations	972.548.6690 E126	972.985.3777 CYC Basement	972.377.1690 Plant Building	972.881.5690 K006 B
President's Office		972.758.3800 CHEC 400		
Public Relations		972.758.3895 CHEC 411		
TSI Information	972.548.6773 D118L			
Vice President/Provost's Office	972.548.6800 C302		972.377.1550 J230	972.881.5802 G227
Vice President of Administration		972.758.3831 CHEC 312		
Vice President of Student Development		972.599.3150 CHEC 457		
Weekend College				972.881.5801 G232

OTHER COLLEGE LOCATIONS

Allen Center		972.377.1060
Collin Higher Education Center		972.599.3100
Rockwall Center		972.777.5737

Academic Transfer Awards

Associate of Arts (AA) Degrees

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

Associate of Science (AS) Degrees

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

Associate of Arts in Teaching (AAT) Degrees

Associate of Arts in Teaching – Early Childhood through Grade 6
Associate of Arts in Teaching –Grades 4 through 8, Early Childhood through Grade 12 Special Education
Associate of Arts in Teaching –Grades 8 through 12, Early Childhood through Grade 12 Other Than Special Education

Academic Certificates

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

Workforce Awards

Animation and Game Art

Also see Digital Video
AAS – Animation
> *3-D Animation Track*
> *Game Art Track*

Certificate – Animation
> *3-D Animation Track*
> *Game Art Track*

MSAA – 3-D Animation

Biotechnology

Certificate – Biotechnology

Business Management

AAS – Business Management
Certificate – Business Management

Child Development

Also see Child Development / Early Childhood and Associate of Arts in Teaching (AAT)
AAS – Child Development
Certificate – Child Development
Certificate – Child Development Associate
MSAA – Child Development Administration of Programs for Children
MSAA – Child Development Associate Training

Child Development / Early Childhood

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

Cisco Systems Computer Networking Technology

AAS – Cisco Systems Computer Networking Technology
Certificate – Advanced Cisco Systems Computer Networking Technology (CCNP)
MSAA – Cisco Systems Computer Networking Technology (CCNA)

Computer-Aided Drafting and Design

AAS – Computer-Aided Drafting and Design
Certificate – Computer-Aided Drafting and Design
Certificate – Mechanical Computer-Aided Drafting and Design
Enhanced Skills Certificate – CADD
MSAA – AutoCAD

Computer Networking Technology

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

Computer Systems

AAS – Computer Systems
Computer Support Track
Database Development Track
Information System Track
C++ Software Development Track
Java Software Development Track
Certificate – Computer Systems
Computer Support Track
Database Development Track
Information System Track
Certificate – Software Design
C++ Track
Java Track
MSAA – Computer Applications
MSAA – Database Applications

Convergence Technology

AAS – Convergence Technology
Certificate – Convergence Technology

Culinary Arts

Also see Pastry Arts
AAS – Culinary Arts
Certificate – Culinary Arts

Dental Hygiene

AAS – Dental Hygienist

Digital Video

Also see Animation and Game Art
AAS – Digital Video
Certificate – Digital Video
MSAA – Digital Video

E-Business Development

AAS – E-Business Development
Media Track
Web Development Track
Android Mobile Development Track
iOS Mobile Development Track
Windows Mobile Development Track
C# .NET Development Track
Visual Basic .NET Development Track
Certificate – E-Business Development
Media Track
E-Commerce Track
Android Mobile Development Track
iOS Mobile Development Track
Windows Mobile Development Track
C# .NET Development Track
Visual Basic .NET Development Track
Certificate – Web Development
MSAA – Interactive Web Programming
MSAA – Studio
MSAA – Web Commerce

Electronic Engineering Technology

AAS – Electronic Engineering Technology
Certificate – Electronic Engineering Technology

Emergency Medical Services Professions

AAS – Emergency Medical Services Professions
Certificate – EMS Paramedic
MSAA – Emergency Medical Services Professions

Fire Academy

Also see Fire Science

AAS – Basic Firefighter Certification
Certificate – Basic Firefighter

Fire Science

Also see Fire Academy

AAS – Fire Officer Certification
Certificate – Fire Officer
MSAA – Fire Officer Candidate

Geospatial Information Science (GIS)

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

Graphic Design and Web

Also see Photography, Commercial

AAS – Graphic Design
 Print Track
 Web Track
Certificate – Graphic Design
 Print Track
 Web Track
MSAA – Graphic Design
MSAA – Web-Interactive Media

Green Interior and Architectural Design

AAS – Green Interior and Architectural Design
Certificate – Level II – Green Interior and Architectural Design
Certificate – Level I – Green Interior and Architectural Design
MSAA – Green Interior and Architectural Design

Health Information Management

Also see Health Information Management / Medical Coding and Billing

AAS – Health Information Management
ESC – Healthcare Case Management

Health Information Management/ Medical Coding and Billing

Also see Health Information Management

Certificate – Medical Coding and Billing

Hospitality and Food Service Management

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

Information Systems Cybersecurity

AAS – Information Systems Cybersecurity
Certificate – Information Systems Cybersecurity
Certificate – CISSP Information Systems Cybersecurity Professional

Interpreter Preparation Program/ Deaf

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

AAS – Interpreter Preparation Program / Deaf
Certificate – Interpreter Trainee

Marketing

AAS – Marketing
Certificate – Marketing

Music, Commercial

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

AAS – Commercial Music
Certificate – Audio Engineering
    Studio Track
    Live Sound Track
Certificate – Music Business

Nursing

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

AAS – Nursing: Nursing Innovation Grant (NIG) Pilot
Nursing: Nursing Innovation Grant (NIG) Pilot Bridge for LVN / Paramedic
MSAA – Health Professions
    Certified Nurse Assistant Track
    Phlebotomy Track
MSAA – Patient Care Technician

Office Systems Technology

AAS – Office Systems Technology
Certificate – Office Systems Technology
Certificate – Medical Office Support
MSAA – Accounting Support
MSAA – Office Systems Technology

Paralegal / Legal Assistant

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

AAS – Paralegal/Legal Assistant
Certificate – Paralegal General

Pastry Arts

Also see Culinary Arts

AAS – Pastry Arts
Certificate – Pastry Arts

Photography, Commercial

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

AAS – Commercial Photography
Certificate – Commercial Photography
MSAA – Studio Management
MSAA – Studio Production

Polysomnographic Technology

AAS – Polysomnographic Technology
Certificate – Polysomnographic Technology

Real Estate

AAS – Real Estate
Certificate – Real Estate Salesperson

Respiratory Care

AAS – Respiratory Care
MSAA – Electrocardiography

Semiconductor Manufacturing Technology

AAS – Semiconductor Manufacturing Technology

Surgical Technology

AAS – Surgical Technology
Certificate – Central Sterile Processing

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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 certificates designed to develop marketable skills and promote economic development.
- Continuing adult education programs for academic, professional, occupational, and cultural enhancement.
- Developmental education and literacy programs designed to improve the basic skills of students.
- A program of student development services and learning resources designed to assist individuals in achieving their educational and career goals.
- Workforce, economic, and community development initiatives designed to meet local and statewide needs.
- Other purposes as may be directed by the Collin College Board of Trustees and/or the laws of the state of Texas.

ADMISSIONS AND REGISTRATION
ADMISSIONS POLICIES
Collin College operates under an "open door" policy. Students who are 18 years of age or older are eligible for admission. Other students may be admitted under the special admission requirements that follow. The college reserves the right to guide the placement of students through assessment, which may include interviews and a review of past academic achievement.

Registration options are enhanced and delays may be avoided by completing all admission requirements in advance of registration. In all admissions policies and practices, Collin College does not discriminate on the basis of race, color, religion, sex, national origin, age, disability or veteran status in accordance with federal law.

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

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

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

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

STUDENTS NEW TO COLLIN

First-Time Freshmen
Students 18 years and older who have never attended a college/university must submit the following for admission:
1. A completed application to the Admissions and Records Office online at www.collin.edu.
2. An official, final high school transcript or GED.
3. Official TSI documentation.
4. Proof of meningitis vaccination, if needed.

Applicants Without a Diploma or GED
Students under age 18 without a high school diploma or equivalent applying for admission must:
1. Complete the Pre-Assessment Activity (PAA) and the TSI Assessment, if exemption has not otherwise been met.
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,TAKS, or STAAR 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.
7. Contact a special admissions coordinator/advisor.

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

Applicants over 18 years of age admitted without a GED or high school diploma will be strongly encouraged to complete the GED during the first semester of his/her enrollment at Collin College.

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

Home-Schooled Admissions
Home-schooled students under the age of 18 must meet home-schooled admission criteria. Interested students must be 16 on or before the census date for the term in which they intend to enroll. Students under 16 years of age may petition the special admission coordinators for college admission. To be admitted, all home-schooled students under the age of 18 must:

1. Complete an Application for Admission (online).
2. Provide Official Home School Transcript.
3. Complete the TSI Assessment with the Pre-Assessment Activity or provide proof of exemption. (All test scores must be submitted to Collin College directly from the College Board or ACT.)
4. Provide proof of meningitis vaccination, if needed.
5. Schedule an interview with Special Admissions Coordinator.
6. Complete Advising /Registration Form with Collin College advisor.

High School Enrollment/Dual Credit
The High School Concurrent Enrollment/Dual Credit program is designed for high school students who are academically advanced. Students 16 years of age or older at the high school junior level or above who meet Collin College's Special Admission criteria are encouraged to participate. Participating students must be 16 on or before the census date for the term in which they intend to enroll. The same criterion applies to home school or private high school students. Students under 16 years of age may petition the special admission coordinators for college admission. High school students interested in concurrent admission to Collin College must:

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

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

Students needing academic accommodations must apply and be approved with ACCESS. See ACCESS pages AC-35 and AC-36.

International Students

Students on temporary visas or holding permanent residence cards may be eligible for admission. To verify residency status, students are required to present their visa or permanent resident card with their application to the Admissions and Records Office.

International Student Admissions (F-1 Visa)

The following deadlines are required for 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:
   • TOEFL Internet-based Test (iBT) score of 71 or higher
   • TOEFL Paper-based Test (PBT) score of 525 or higher
   • TOEFL Computer-based Test (CBT) score of 197 or higher
   • IELTS (International English Language Testing System) score of 6.5 or higher
2. A letter of Guarantee dated within six months of the beginning of the semester and the supporting financial evidence statement. For sponsors residing inside the United States: An Affidavit of Support form dated within six months of the beginning of the semester and the supporting evidence statement
3. An official transcript (mark sheets, school records) from the last school attended
4. Copy of passport ID page showing official name, date of birth and citizenship
5. Proof of receiving the bacterial meningitis vaccine, if needed

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 Pre-Assessement Activity and the Texas Success Initiative (TSI) assessment prior to enrolling in credit classes.

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

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

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

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

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'sarea of study.
5. Only the highest grade and credits earned for a repeated course at a previous institution will be applied toward degree or program requirements.
6. Grades of "D" are accepted from other institutions; however, a cumulative GPA of 2.0 is required for graduation. Grades of "F" and "I" will not transfer.
7. Waivers for physical education requirements may be granted for medical reasons. A written statement from a physician and one additional hour of electives are required. Credit for PHED courses is awarded for military training upon receipt of a student's DD214 (Honorable Discharge).
8. While there is no limit on the number of hours that can be transferred into Collin College from other institutions, there is an 18 credit hour residency requirement to earn an associate degree from Collin College. Students obtaining certificates containing 18 hours or less must complete all coursework in residence at Collin College. Petitions to transfer credits into certificates containing 18 hours or less may be made to the academic dean through the degree plan coordinator.
9. Time limits and minimum grade requirements may be imposed for transfer work into select areas of study. Contact the academic chair or academic dean for details.
10. Collin College does not evaluate transcripts or award transfer credit earned at foreign institutions; however, students may be eligible for credit through examination at the college.

11. Fall 1985 through Summer 2008 transfer work was included in students' overall GPA. Beginning Fall 2008 transfer work is not included in GPA.

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

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.

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

1. An in-county student is an individual who is a resident of Texas and who resides in Collin County on or before the census date of the term.
2. An out-of-county student is a resident of Texas who resides outside of Collin County on the census date of the term
3. An out-of-state student is an individual who has not resided in Texas for 12 months preceding registration. Most students on temporary visas will also be classified as nonresidents for tuition purposes. Contact the Admissions and Records Office for visas eligible for in-state residency.

The responsibility for registering under the proper residency classification is that of the student, and any question concerning the student's right to classification as a resident of Collin County must be clarified prior to enrollment at Collin College. Students not documenting county or state residency prior to census date of the term will be charged the higher rate. Tuition refunds due to residency changes will only be made for college errors if documentation was not submitted before census, see the academic calendar for date. Changes of address, name, etc. must be reported promptly to the Admissions and Records Office. This enables students to receive registration and other information from various

college departments and programs. Changes of address affecting residency should be reported promptly to the Admissions and Records Office.

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

Documents to Support Residency

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

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

Ad Valorem Waivers

Students who have not lived in Texas for the 12 months preceding registration, but who own property in Collin County, may be eligible for an ad valorem waiver. A copy of the deed or most recent property tax statement is required for verification. If this waiver is based on a student's (under age 24) parents' property ownership, go to the Admissions and Records Office for the proper form to complete. 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 AC-28 or contact an academic advisor on any campus for more information.

REGISTRATION PROCEDURES
Collin College Registration Guide

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

Online Registration

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

Add/Drop

Students may add 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 class during the summer terms. After the first two days of a long term (or the first day during summer/express term), students must come in person to any campus to make any schedule change. Registration for any course will result in full tuition and fee assessment for the course hours. Any course dropped on or after the first day of each term or mini-semester will result in charges for the dropped course as determined by the state refund guidelines and approved tuition rates.

All students must initiate the process to be dropped from classes prior to the first class day or they will be required to make payment for tuition and fees assessed. Students receiving financial aid may 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 Career Skills Training Schedule.
3. Phone-in registration: (VISA, Mastercard or Discover only) Call 972.548.6855 or 972.985.3711. Times and dates are listed in the current Continuing Education Career Skills Training Schedule.
4. Mail-in registration: Send your registration information to: Registration, Collin College, Courtyard Center for Professional and Economic Development, 4800 Preston Park Blvd., Box 12, Plano, Texas 75093. See the current Continuing Education Career Skills Training Schedule. for registration deadlines.
5. Fax-in registration: (credit card only) Check the current Continuing Education Career Skills TrainingSchedule for fax availability. Fax your registration to 972.985.3723 or 972.548.1702.

STUDENT ID CARDS

All credit students at Collin College are required to have a Student ID card to use services provided by college offices and labs including the Admissions and Records Office, the Collin Bookstore, Career Services, the Computer Lab, the Fitness Center, Library, the Math Lab, Student Life and the Testing Center. Student ID cards are produced by Student Life. Student ID office hours are listed in the Collin College Student Handbook. Once the student has registered and paid for their courses, the ID card will be issued in accordance with the dates posted in the Important Dates section of the Registration Guide. Students must show a form of photo identification in order to have their student ID card issued. The ID card will be valid district-wide throughout the student's tenure at the college.

Student ID cards will be automatically reactivated each semester after the student enrolls in courses and pays the corresponding tuition and fees.

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

ASSESSMENT AND TESTING SERVICES

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

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

Performance on TSI will not be used as a condition for admission to Collin College. However, students can enroll only in English as a Second Language coursework without having taken TSI assessment.

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

1. An explanation of the importance of the TSI Assessment
2. Practice test questions and feedback
3. An explanation of your developmental education options, if the minimum passing standard is not met
4. Information on campus and community resources to assist the student.

A Certificate of Completion will be printed at the end of this Activity, which is required to take the TSI Assessment

Students may seek exemption from TSI based on:

- a composite ACT score of 23 or higher (with individual Mathematics and English scores of no less than 19)
- a composite SAT score of 1070 (with a minimum of 500 in Mathematics and Critical Reading)
- TAKS (11th grade or higher) with a minimum qualifying score of 2200 Math and ENLA 2200 with Writing sub-score of 3
- or high school end-of-course STAAR with a minimum qualifying score of level 2 English III and level 2 Algebra II

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

Partial Exemptions

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

Students with a 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 Writing.

Students with a STAAR Algebra II score of level 2 are exempt from TSI Math. Students with a STAAR English III score of level 2 are exempt from TSI Reading and Writing.

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

NOTE: For specific current information about the PAA or TSI Assessment, contact the Director of Testing at 972.548.6773. All students must be assessed or provide proof of prerequisites prior to enrolling in certain courses. Developmental classes and tutorial assistance are available for students who need or want this support. Transfer students must provide documentation of TSI status. Documentation may be in the form of official TSI score reports or official transcripts.

Waivers

Students can be waived from TSI requirements if they:
- Are pursuing a Level I workforce certificate of no more than 42 hours. A change of major must be completed by the student and submitted to the Admissions and Records Office.
- Are serving on active duty as a member of the armed forces of the United States, the Texas National Guard or as a member of a reserve component of the armed forces of the United States and have been serving for at least three years preceding enrollment (documentation required).

English as a Second Language (ESL)

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

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

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

Other Testing Services

The testing centers also offer testing in the following areas:

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

Collin College codes for these tests are:
- CLEP 2290
- ACT (Central Park Campus) 40460
- ACT (Spring Creek Campus) 42090

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

Non-Traditional College Credit (NTCC)

Various credit options enable persons who have acquired knowledge and skills in non-traditional ways to demonstrate academic achievement. For enrolled students, or students enrolled within the past year, credit may be given for college-level experience as demonstrated by acceptable test results regardless of the means by which the knowledge was acquired, except for college credit that has been previously granted. Students may also receive credit for some previous military training. Please note that a fee for test administration and transcript recording may be assessed. Without special permission from the Associate Vice President of Teaching and Learning, no more than 18 hours of non-traditional credit may be counted toward a degree. However, if the student has an International Baccalaureate (IB) diploma, a total of 24 hours of non-traditional credit may be awarded. The institution may grant fewer than 24 hours if the student received a score of less than 4 on an examination. Non-traditional credit will be added to the transcript (upon request) only after six hours of traditional, non-transfer credit is achieved at Collin College.

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

Tech Prep/Career Pathways

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

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

1. Completion of the high school Tech Prep class with a grade of B or better.
2. Earned an 80* or better on the end-of-course exam in high school (applies only to select programs) *Child development courses require an 85 or better.

3. Earn six* non-developmental education credits and submit the petition for Tech Prep credit within 24 months after high school graduation to the Admissions and Records office at the Central Park Campus. Students also need to submit an official final high school transcript along with the petition.

* *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.*

Upon completion of the above steps, the free college credits that a student is qualified for will be applied to the college transcript at the end of the college grading cycle. For more information, call 972.548.6725 or visit the Tech Prep website at http://www.collin.edu/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 (A) – COSC 1436
Economics (Macro) – ECON 2301
Economics (Micro) – ECON 2302
English Language and Composition –
ENGL 1301 (score of 3)
ENGL 1301 and 1302 (score of 4 or 5)
English Literature and Composition –
ENGL 1301 (score of 3)
ENGL 1301 and 1302 (score of 4 or 5)
Environmental Science I – ENVR 1401
European History – HIST 2311 and 2312
French Language – FREN 1411 and 1412
German Language – GERM 1411 and 1412

Government – GOVT 2305
Human Geography—GEOG 1302,
Music Appreciation – MUSI 1306
Music Theory – MUSI 1311
Physics (B) – PHYS 1401 and 1402
Physics (C) – PHYS 2425 and 2426
Psychology – PSYC 2301
Spanish Language – SPAN 1411 and 1412
Statistics – MATH 1342
U.S. History – HIST 1301 and 1302
World History – HIST 2311 - 2312

Armed Forces Credit
In addition to using credit earned at other institutions to achieve advanced placement at the college, students may also receive such standing by presenting evidence of having satisfactorily completed a program of military training for which equivalent college credit may be given in accordance with the American Council on Education Standards and Recommendations. Armed Forces credit is evaluated by the degree plan coordinator. Credit for military training will be awarded upon receipt of a student's DD214 (Honorable Discharge).

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

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

For each CLEP examination, a non-refundable administrative and examination fee will be charged.

For information on taking a CLEP subject exam, please contact the Director of Testing at 972-548-6773.

Credit by Exam (Departmental Exams)
Credit for some courses may be granted upon successful completion of a comprehensive examination over the content of the course. A nonrefundable fee is charged for each course examination. Students must be currently enrolled or enrolled within the past year and have earned at least six credit hours at Collin College to receive credit by examination. Credit by exam may be attempted only once for any given course. Students currently enrolled in the course they wish to test out of must test or withdraw prior to the census date of the enrolled semester. The student must score at or the 70th percentile to receive credit for the course.

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

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

A maximum of 50 percent of the courses required for the industry certification/license and taken as CE courses can be applied toward a credit certificate or degree. Non-traditional credit will be added to the transcript only after 6 hours of traditional, non-transfer credit is achieved at Collin College. No more than 18 hours of non-traditional credit may be counted toward a degree.

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

International Baccalaureate Diploma (IB)

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

Collin College will maintain in residence course work minimums and the non-traditional credit maximum for more than 18 hours will be allowed only for IB credit. For more information, contact the director of testing at 972.548.6773

FINANCIAL POLICIES AND PROCEDURES

COST PER CREDIT HOUR EXAMPLE

Per Hour	In-County	Out-of-County	Out-of-State
Tuition	$32	$71	$131
Bldg Use Fee	$6	$6	$6
Student Act Fee	$1	$1	$1
	$39	$78	$138

FEES

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

Other Fees

Audit fee*** $25 per course
Credit by Exam fee*** $30 per course
Lab fees† $0-24 per lab
Late Registration fee*** $10
Returned Check fee*** $25
Installment Plan Service charge***$25
Late Installment Payment fee***$25
Transcript Fee*** $5 each

*** Non-refundable
† Some Fine Arts, Music and Physical Education classes have higher fees.

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

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

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

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

Payment

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

TUITION AND FEE SCHEDULE

Credit Hours	In-County $39 cr hour	Out of County $78 cr hour	Out of State/Country $138 cr hour
1	$41	$80	$209.00 **
2	$80	$158	$278
3	$119	$236	$416
4	$158	$314	$554
5	$197	$392	$692
6	$236	$470	$830
7	$275	$548	$968
8	$314	$626	$1,106
9	$353	$704	$1,244
10	$392	$782	$1,382
11	$431	$860	$1,520
12	$470	$938	$1,658
13	$509	$,1016	$1,796
14	$548	$1,094	$1,934
15	$587	$1,172	$2,072
16	$626	$1,250	$2,210
17	$665	$1,328	$2,348
18	$704	$1,406	$2,486
19	$743	$1,484	$2,624
20	$782	$1,562	$2,762
21	$821	$1,640	$2,900

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

REFUNDS

Refund calculations are based on the state-mandated refund policy. Full (100 percent less non-refundable fees) refunds are calculated on withdrawals and drops occurring prior to each term's first class day. Each term's first class day is always the first official day of the semester, not the first day of an individual's class. Refunds are processed approximately two weeks after the first class day. The complete refund policy is listed in the Collin College Registration Guide.

SENIOR CITIZEN REDUCED TUITION

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

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

STUDENT FINANCIAL RESPONSIBILITY

Student tuition bills are posted online and are accessed through CougarWeb. Billing notices are sent to the student's college assigned email address, the official means of communication with Collin students. Payment deadlines and student account balances are available online. Meeting payment deadline requirements is the student's responsibility, regardless of whether an e-bill is received. Each term has an advertised early registration payment deadline (see term specific Registration Guide). As of the initial payment deadline, any balance on the student account is due the same day the charge is incurred. Funding must be in place in compliance with payment deadlines to ensure course enrollment status. It is the student's responsibility to review student account balances, comply with financial aid eligibility requirements and third party funding guidelines, and meet payment deadline requirements. Student accounts with an unpaid debt are subject to changes in course registration status, holds preventing registration, withholding grades, transcripts, and degrees. Delinquent accounts may be placed with an outside collection agency and/or reported to the national credit bureau system. Students are responsible for all late fees, collection charges, attorney fees, interest, and any costs and charges necessary for the collection of any amount not paid when due. All disputes about registration or payment will be governed in accordance with the laws of the State of Texas. The venue for any lawsuit regarding collection of a delinquent debt will be in Collin County, Texas.

Per Texas Education Code 54.007(2)(d):
A STUDENT WHO FAILS TO MAKE FULL PAYMENT OF TUITION AND MANDATORY FEES, INCLUDING ANY INCIDENTAL FEES, BY THE DUE DATE MAY BE PROHIBITED FROM REGISTERING FROM CLASSES UNTIL FULL PAYMENT IS MADE. A STUDENT WHO FAILS TO MAKE FULL PAYMENT PRIOR TO THE END OF THE SEMESTER OR TERM MAY BE DENIED CREDIT FOR THE WORK DONE THAT SEMESTER OR TERM.

FINANCIAL RESOURCES

FINANCIAL AID

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

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

For more information, please visit the Financial Aid Office webpage at:

https://www.collin.edu/gettingstarted/financialaid/

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

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

APPLYING FOR AID

Students can apply for aid online using the Free Application for Federal Student Aid (FAFSA) located at www.fafsa.ed.gov. Collin College's Title

IV School Code is **016792** and must be reported on the FAFSA application in order for aid to be processed by Collin College.

DEADLINES

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

Priority deadlines are as follows:

Fall Semester – April 1
Spring Semester – November 1
Summer Semesters – March 1

FINANCIAL AID PROGRAMS – FEDERAL ASSISTANCE

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

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

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

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

Federal Supplemental Educational Opportunities Grant (FSEOG) – FSEOG is limited by the availability of funds and is awarded to those students considered to have exceptional financial need. Priority is given to federal Pell Grant recipients.

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

Federal Direct Loan Program – This program permits students to borrow low-interest loans from the Department of Education provided the student is enrolled and attending at least half time and otherwise meets eligibility criteria. The federal government pays interest on the subsidized (need based) amount borrowed until the student graduates or ceases to be enrolled at least half time. Unsubsidized loans (non-need based) are also available to otherwise eligible students. Students are responsible for the interest accruing on these loans while attending school. The interest rate for subsidized and unsubsidized loans for the 2013-2014 academic year was 3.86 percent.

Direct Parent Loans to Undergraduate Students (PLUS) – PLUS loans are available to parents who want to borrow money to help defray the cost of their dependent children's education. Like Direct loans, PLUS loans are offered by the Department of Education. Parents may borrow up to the cost of attendance minus any other educational resources and financial aid awarded to students. These loans have a higher interest rate than Direct loans and the borrower is responsible for paying all the interest that accrues. The interest rate on PLUS loans for the 2013-2014 year was 6.41 percent

FINANCIAL AID PROGRAMS – STATE ASSISTANCE

Texas Public Education Grant (TPEG) – The TPEG program is a state financial aid program designed to assist students in attending state-supported colleges. Students must demonstrate

financial need and be making satisfactory academic progress toward their educational goals. The actual amount of the grant varies depending on the availability of funds to the college, the student's financial condition and enrollment, and other aid, the student may be receiving.

Texas Grant – Students graduating high school after December 1998 may be eligible for this grant if the following conditions are met:
- Are a Texas resident
- Do not have a felony drug conviction
- Graduated high school in the recommended or distinguished programs
- Graduated from a Texas high school within 16 months of application
- Are in their first 30 hours of college
- Registered with Selective Service, if required
- Have an Expected Family Contribution (EFC) as determined by the FAFSA of $4,000 or less for initial awards and have unmet need for renewal awards
- Are enrolled at least three-quarter time (nine hours)

Students who meet the qualifications are eligible for up to 75 hours at a community college. This grant covers the cost of tuition and fees and is renewable during the undergraduate career as long as the student meets the requirements. For the first year, students must meet the college's Satisfactory Academic Progress (SAP) requirements. (Please refer to the *Institutional Policy of Satisfactory Academic Progress* listed below for more information.) To continue receiving the Texas Grant, the student must complete 24 hours each academic year, maintain a 2.5 cumulative GPA, and complete at least 75 percent of their coursework.

Texas Equal Opportunity Grant (TEOG) – Community college students working on their first associate's degree may be eligible for this grant if they:
- Are a Texas resident
- Do not have a felony drug conviction
- Are within their first 30 hours of college
- Registered for Selective Service, if required
- Have an Expected Family Contribution (EFC) as determined by FAFSA of $2,000

or less for initial awards and unmet need for renewal awards
- Are enrolled at least half-time (6 hours)

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

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

SATISFACTORY ACADEMIC PROGRESS (SAP)

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

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

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

- a **qualitative component** consisting of grades or comparable factors that are measurable against a norm, (a GPA component)

- a **quantitative component** that consists of a maximum time frame in which a student must complete his or her educational program, subdivided into increments (aka the 150 percent rule), and

- a **measurement of progress**, meaning the student must be completing a certain percentage of classes to be considered making adequate progress.

Student Eligibility

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

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

What is your SAP Status?
An explanation of the different SAP statuses can be found on the college's website at http://www.collin.edu/shared/shared_finaid/pdf/Explanation_of_SAP.pdf .

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

INSTITUTIONAL POLICY OF SATISFACTORY ACADEMIC PROGRESS FOR FINANCIAL AID (Effective August 2011)
 This is an official statement of Collin College's policy related to the financial aid operational definition of student Satisfactory Academic Progress for 2011-2012 and subsequent academic years.

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

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

III. Completion Requirements
1. Enrollment status (hours attempted) is determined by the student's enrollment on census date (12th class day during the Fall and Spring semesters; 4th class day during the Summer semesters).
    a. Twelve or more hours is considered full-time.
    b. Nine to eleven hours is considered three-quarter time.
    c. Six to eight hours is considered half time.
    d. One to five hours is considered less than half time.
2. Students must complete (earn) 67 percent of attempted hours that count towards progress.
  a. Withdrawals, grades of "F," incomplete courses, repeated courses, courses taken during the summer sessions, non-credit remedial coursework, and transfer coursework are counted toward attempted hours.

  b. A grade of "A," "B," "C," and "D," transfer coursework, courses taken during the summer sessions, and repeated courses (when the repeated course is the better grade) are counted toward hours completed (earned).

3. Students who completely withdraw from a semester while on aid (either officially or unofficially) are no longer eligible for financial aid.

IV. Maximum Time Frame
The maximum number of hours a student may attempt is limited to 150 percent of the published length of the program. All hours, including those taken while not receiving Title IV aid, those taken under a different major, hours attempted during summer sessions, remedial hours, ESL hours, and hours transferred in from previous/other institutions, etc. shall be counted toward total hours attempted and earned*

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

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

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

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

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

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

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

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

Additional Information: Return of Title IV Funds
Title IV aid is earned in a prorated manner on a per diem basis up to and including the 60 percent point in the term. After the 60 percent point all aid is considered earned. The percentage earned is calculated by dividing the number of days completed by the number of days in the repayment period. It is the unearned percentage of aid that determines the amount that must be returned to the Title IV program(s) in the following order: Unsubsidized Direct Loan, Subsidized Direct Loan, Direct Parent

PLUS Loan, Pell Grant, and SEOG. The student is not responsible for returning funds to any program to which the students owes $50.00 or less. The grant funds returned by the student are applied to the following sources in the order indicated, up to the total amount disbursed from that grant program minus any grant funds the school is responsible for returning to that program. Title IV Grant Program sources include: Pell and SEOG. The Department of Education considers a student who earns all "F"s to have unofficially withdrawn unless an instructor can prove otherwise. The college, as well as the student may be required to return to the federal government the unearned portion of the Title IV funds. The institution will require students to repay charges resulting from the institution's portion of the return of unearned Title IV aid. This may cause the student to owe both the college and the federal government. Students withdrawing prior to disbursement may be eligible for a post-withdrawal disbursement. Students who are considering withdrawing should contact the Financial Aid Office for a thorough explanation of how this policy will affect them.

FINANICIAL AID PROGRAMS – OTHER

Tuition Exemptions
State tuition waivers and exemptions provide qualifying students with exemptions from certain tuition and fee charges in public colleges. Contact either the Financial Aid Office or the Admissions and Records Office for additional information regarding a specific waiver or exemption. A few of the state exemptions and waivers are listed below.

Financial Aid Exemptions
Deaf/blind students • adopted students and students who were in foster care • children of deceased or disabled fireman and peace officers • children of prisoners of war or persons missing in action • firemen enrolled in fire science courses • police officers enrolled in law enforcement or criminal justice courses • children of professional nursing staff • Hazlewood Act • highest ranking high school graduate • orphans of national guard members

Admissions Waivers
Ad-valorem tax • concurrent enrollment • contract training for out of district • dual agreement with Dallas County • senior citizen

VETERANS EDUCATIONAL BENEFITS

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

1. Gain admission to Collin College through the Admissions and Records Office.

2. Submit a degree plan request and all required VA forms to the Financial Aid/Veterans Affairs Office.

3. Ensure all official transcripts from prior institutions are submitted to the degree plan coordinator (Admissions and Records Office) for transfer evaluation. *

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

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

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

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

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

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

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

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

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

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

1. Maintaining a 2.0 cumulative GPA. Students failing to make satisfactory academic progress will be reported to the Veterans Regional Office as being on academic suspension at the end of the second consecutive semester when the cumulative GPA remains below 2.0. Developmental courses will be included to determine the cumulative GPA.
2. A grade of "D" or better received at Collin College or any other college is a passing grade and may not be repeated for benefits. If a non-punitive grade of "I" is assigned to a course and is not

converted to a punitive grade, this will be reported to the Veterans Affairs Regional Office within 30 days, and benefits will be reduced accordingly. Students receiving a grade of "F" may repeat the course with benefits **one time** at Collin College.

3. Withdrawal from a class, whether self-initiated or otherwise, may result in the student being obligated to repay any overpayment of benefits unless the VA approves written extenuating circumstances submitted by the student.

4. Regular class attendance is required to provide necessary documentation of attendance.

COLLIN COLLEGE SCHOLARSHIP PROGRAMS

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

Students are encouraged to visit the Foundation website at http://www.collin.edu/foundation. Please check the Foundation website for priority deadlines for submitting applications. Scholarship applications are accepted online only. Additional scholarship information is available in the Foundation Office at the Collin Higher Education Center, Suite 429; the Financial Aid Office at Central Park Campus, Room A111; Preston Ridge Campus, Room F141; and Spring Creek Campus, Room G119.

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

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

ACADEMIC POLICIES

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

Good Academic Standing
Students are considered in good academic standing if:

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

Academic Progress
Academic Progress occurs when
- a student has earned a term GPA of at least a 2.0.

Maximizing Academic Progress Program (MAPP)
The Maximizing Academic Progress Program (MAPP) assists students whose cumulative GPA has fallen below 2.0.   Students in this status are required to:
- meet with an Academic Advisor to develop an individualized plan for success. An *Unsatisfactory Progress Hold* will be placed on students' records.
- enroll in classes before the probation deadline for the term (see Registration Guide "Important Dates" for exact deadline). This includes regular classes (i.e., 16-week) and all express and flex entry classes.

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

- **Academic Warning**
- **Academic Probation**
- **Academic Suspension**

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

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

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

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

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

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

Readmission after a Period of Academic Suspension
After one year of *Academic Suspension*, students can reapply to Collin College under an *Academic Probation* status and must continue to maintain Academic Progress each semester. Students must meet with an Academic Advisor to obtain a MAPP contract, Continual Action Plan, and Progress Report

before the probation deadline (see Registration Guide "Important Dates" for exact deadline).

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

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

Adding/Dropping Courses

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 class during the summer terms. After the first two days of a long term (or first day during a summer/express term), students must come, in person, to any campus to make any schedule change.

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

Students may withdraw from a course with a grade of "W" through the end of the 8th class week during a regular (16-week) term, through Tuesday of the third week of classes in a short (five-week) summer term and through Thursday of the fifth week of classes in a long (10-week) summer term. Contact the Admissions and Records Office for withdrawal deadlines for other terms.

International students should contact the International Student Office, and students receiving financial aid or veteran's assistance should see the appropriate college official before dropping or withdrawing. See "Withdrawal from the College" on page AC-33 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), computer systems, technology and engineering classes may not be audited. (Continuing Education offers foreign language classes. See the current Continuing Education Schedule of Classes.)

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

Those registering for credit during this time may not later change their status to audit (non-credit). However, audit students may change to credit status prior to the term's census date. Students admitted under special admissions are not eligible to audit.

CLASS ATTENDANCE

Regular classroom attendance is expected of all students. Professors determine class attendance requirements; therefore, students should ascertain each professor's attendance policy on the first day of the class. Students who receive Department of Veterans Affairs educational benefits must conform to attendance and academic standards as established by the college. It is the veteran's responsibility to understand this policy.

Enrollment Verification for Students (Self-Service)

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

- Print a certificate of enrollment that can be forwarded to a health insurer, housing provider, credit issuer, employment agency or other student service providers.

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

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

RELIGIOUS HOLY DAYS

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

GRADING SYSTEM

Grade Points Per Semester Hour

A Excellent	4
B Above Average	3
C Average	2
D Below Average	1
F Failure	0
W Withdrawn	0
(Not included in GPA or Earned Hours)	
WS	0
Withdrawal Affected	
(Not included in GPA or Cumulative Hours Counts in State six W/D limit.)	
WZ	0
Withdrawn by Department	
(Not included in GPA or Earned Hours)	
I Incomplete	0
AD	
A - Developmental	0
BD	
B – Developmental	0
CD	
C – Developmental	0
DD	
D – Developmental	0
FD	
F – Developmental	0
AT Excellent	0 (Transfer)
BT Above Average	0 (Transfer)
CT Average	0 (Transfer)
DT Below Average	0 (Transfer)
AU Audit	0
(Not included in GPA or Earned Hours)	
CR Credit	0
(Included in Earned Hours but not GPA Hours. Used for Advanced Placement, College Level Exam Program, Credit by Exam, Articulated Credit, and Tech Prep)	
P Pass	0
(Not included in GPA or Earned Hours)	
T Non Course Base	0
TASP remediation	
XF	0
Administrative Assignment of Failure	
(Not included in GPA or Earned Hours)	
XW	0
Administrative Withdrawal.	
(Not included in GPA or Earned Hours)	
Z	No grade reported. Instructor did not assign a grade.
ZW	0
Administrative withdraw due to a fraudulent act of scholastic dishonesty.	
(Not included in GPA or Earned Hours)	

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

INCOMPLETE GRADES AND CONTRACTS

The "I" grade is assigned only for extenuating circumstances. Incomplete contracts must be agreed to and signed by the student, professor, chair and appropriate academic dean before the end of the term in order for a grade of "I" to be assigned. The contract must define the exact requirements (not to exceed 20 percent of the coursework) the student is to fulfill in order to receive a performance grade. If remaining work is greater than 20 percent of the coursework, the approval of the Vice President/Provost is required. Requirements of incomplete contracts must be completed as specified in the contract, but no later than the end of the next long semester. The contract will state that if the work is not completed as specified, the grade will be changed to a performance grade based on the quality and amount of work completed. If the instructor does not initiate a grade change by the end of the next semester, the grade will be changed by the Admissions & Records Office to an "F" or other performance grade indicated on the original contract.

PASS/FAIL GRADE OPTION

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

REPEATING COURSES

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

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

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

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

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

GRADUATION

The college offers Associate of Arts, Associate of Arts in Teaching, Associate of Science and Associate of Applied Science degrees and certificate programs. Students who plan to graduate from Collin College should request a degree plan prior to the completion of 30 credit hours. Students must be currently admitted to Collin College to request a degree plan. Students may graduate under any approved degree plan from the preceding five years as long as they were enrolled during that year; however, students may benefit from graduating under the requirements of the current degree plan. Degrees and certificates that have been deactivated by the Texas Higher Education Coordinating Board (THECB) must be completed within three years of the date the program ended.

A student who completes specific course requirements for a degree or certificate with a minimum cumulative grade point average of 2.0 is a candidate for graduation. Any student who entered Collin College prior to Fall 2008 and had transfer coursework transcripted will have those transfer course grade points included in their Collin College grade point average.

TSI requirements must be complete in order to be considered a candidate for graduation.

Associate of Arts, Associate of Arts in Teaching, Associate of Science, Associate of Arts or Science in a Field of Study or Associate of Applied Science degree honors will be awarded to students with the following cumulative grade point average at Collin College:

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

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

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

Associate Degrees
Students may earn the following degrees:

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

See pages CI -1 for specific degrees. To graduate, students must complete a minimum of 18 credit hours at Collin and satisfy all other degree requirements. Non-traditional and developmental course credit does not meet this residency requirement. Candidates for an associate degree should submit an application for graduation at the beginning of the semester of degree completion.

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

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

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

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

High Academic Achievement
All students who complete 12 or more quality credit hours during a regular (16-week) term with a current 3.5 GPA or above qualify for the Deans' List. All students who complete 12 or more quality credit hours during a regular (16-week) term with a current 4.0 GPA qualify for the President's List.

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

Disclosure of Education Records
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 a qualified individual or organization that files a written request with the Registrar without the consent of the student. Directory information is defined as:

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

A student may request that directory information be withheld from the public by completing and filing a written request with the Admissions and Records Office. If no request is filed, directory information will be released upon inquiry. Filed requests are valid until revoked by the student in writing. Directory information is the only part of a student's record that may be released without the student's prior written permission, except with regard to the law that provides for disclosure without consent.

STUDENT CLASSIFICATIONS

Freshman: A student who has successfully completed fewer than 30 quality hours.
Sophomore: A student who has successfully completed 30 or more quality hours, but has not earned an associate's degree.
Full-time: A student enrolled for 12 credit hours or more in a regular (16-week) semester, six credit hours or more in a five-week summer session, or nine credit hours or more in a 10 week summer session.
Part-time: A student enrolled for 11 credit hours or less in a regular (16-week) semester, five credit hours or less in a five week summer session, or eight credit hours or less in a 10-week summer session. Classification varies for courses meeting on alternative or accelerated schedules.

STUDENT LOAD

A full-time student load is a minimum of 12 credit hours per 16- week semester. Students taking 11 credit hours or less per 16- week semester are classified as part time students. Full-time status during the summer sessions or accelerated sessions may vary. For clarification, see Student Classifications or contact the Registrar. Students may, with special permission from the Registrar, enroll for more than 18 credit hours during a regular session and seven hours in a summer session. Permission will not be granted unless the student has a 3.0 cumulative grade point average and plans to carry no more than 21 hours during a regular (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 help students transition from Collin College to their chosen four year institution – they also foster a more confident and successful student.Transfer resources for students are located on the Transfer U website at http://transferu.collin.edu

Common Course Numbering

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

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

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

Guarantee for Transfer Credit

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

This guarantee is designed for Collin College students who have made firm decisions about their

major and the transfer college or university to which they plan to transfer, and who have followed a written transfer guide for that transfer institution.

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

Resolution of Transfer Disputes

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

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

Procedures for Resolution of Transfer Disputes

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

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

The Commissioner of Higher Education or the commissioner's designee shall make the final

determination about the dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.

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

WITHDRAWAL FROM THE COLLEGE
Withdrawal Policy
Texas Education Code 51.907 Course Drop Limit Provisions
Students who enroll as an entering freshman or a first-time college student in undergraduate courses at any Texas public community college, technical institute, health sciences institution, or any public university offering undergraduate courses must comply with the legislation of TEC51.907.

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

Students may withdraw with a grade of "W" through the end of the 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, 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 of developmental education 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 in establishing a degree plan
- Assistance in selecting a field of study
- Facts about classes and programs
- Assistance with registration and adjustment to college
- Procedures for dropping a class, appealing grades, registration, etc.
- Transfer information for those planning to attend a college or university
- Advising for the Maximizing Academic Progress Program (MAPP)

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

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

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

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

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

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

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

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

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

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

Air Force ROTC

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

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

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

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

COLLIN COLLEGE POLICE DEPARTMENT – 972.578.5555

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

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

The college complies with the provisions of the Campus Security Act of 1990, Public Law 101-542. In compliance with the Campus Sex Crimes Prevention Act (Section 1601 of Public Law 106-386) and the Jacob Wetterling Crimes Against Children and Sexually Violent Offender Registration Act, all persons required to register as part of the State of Texas' Sex Offender Registration Program are required to provide notice of their presence on campus.

For more information, contact the Collin College Police at 972.578.5555 or visit http://www.collin.edu/campuspolice/ .

CAREER SERVICES

The Career Services department offers a variety of services to enhance career development and features key steps to assist with career decisions and building skills for the job search process. Check our website by going to https://www.collin.edu/studentresources/career

Visit the Career Center nearest you or call for information at:

Central Park Campus:
Room D117, 972.548.6747

Preston Ridge Campus:
Room F109, 972.377.1781

Spring Creek Campus:
Room G103, 972.881.5781

COUNSELING SERVICES

Personal Counseling

The college's counseling program supports and assists students who have personal issues that impact their college experience. The college is aware of the interaction between personal development, emotional wellness and success in academic pursuits. Counseling Services offers assistance in the areas of therapeutic intervention, prevention and support. Staffed by licensed professionals and supervised interns.

Counseling Services provides individual personal and career counseling, sponsors personal growth and health education seminars and encourages awareness of issues of concern to both traditional and non-traditional students. Confidential services include:

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

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

EMERGENCY PROCEDURES

Safety and security is a concern for all members of the college community including students, college employees and visitors. Possession of firearms or other lethal weapons on campus or at college sponsored events is illegal, except for by commissioned police officers as prescribed by law.

See the Student Code of Conduct in the current Collin College Student Handbook for detailed information.

In compliance with the Drug-Free Schools and Communities Act Amendment of 1989 (Public Law 101-226) and Texas House Resolution 2253 and Senate Resolution 645 (passed in 1987), the college forbids the unlawful delivery, manufacture, possession, sale, purchase, use or distribution of illegal controlled substances (as defined in the Texas Controlled Substance Act) such as alcoholic beverages, steroids, inhalants, herbal/ "natural" 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.

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

Bacterial Meningitis
This information is being provided to all new college students in the state of Texas. Bacterial Meningitis is an infection of the brain and spinal cord that causes inflammation of the membranes that surround the brain. Several different types of bacteria can cause meningitis. The leading cause of bacterial meningitis in the United States is Neisseria meningitidis, also called meningococcal meningitis (CDC, Meningococcal Disease, 2013).

Bacterial meningitis strikes about 1,500 Americans each year, and about 15 percent are adolescents and young adults (National Meningitis Association, 2013).

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

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

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

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

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

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

What are the possible consequences of the disease?
While most people recover fully, 11 percent of people who have blood or brain infections caused by Nisseria meningitidis will die. About 20 percent of people who survive meningococcal disease will have permanent effects such as hearing loss, brain damage

or the loss of a limb (National Meningitis Association, 2013).

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

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

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

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

How can I find out more information?
Contact your own health care provider. Contact your local or regional Collin County Health Care Office at 972.548.5532. Contact websites: www.cdc.gov/ncidod/dbmd/diseaseinfo or www.co.collin.tx.us/healthcare_services/.

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

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

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

For detailed information, see FDAC (LOCAL) at http://pol.tasb.org/policy/code/304?filter=fdac or the Dean of Student Development at any campus.

STRATEGIES OF BEHAVIOR INTERVENTION COMMITTEE
Collin College's Strategies of Behavior Intervention (SOBI) Committee provides a process to refer, report, assess and assist students who may display various levels of distressed, disturbed, and/or unregulated behavior. The Committee responds to distressed and threatening behavior by providing assistance and/or redirection while preserving a constructive learning environment. SOBI actions are not a substitute for disciplinary procedures. Reports of Student Code of Conduct violations will be referred directly to the Dean of Student Development Office.

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

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.

Involvement in Institutional Governance

Students are encouraged to become involved with institutional governance by expressing their thoughts and feelings about college policies, procedures and activities. The President, vice presidents and all college employees are interested in student ideas, opinions and suggestions.

EDUCATIONAL SERVICES

BOOKSTORE

For information on store hours, call:
972.548.6680 (Central Park Campus),
972.985.3710 (Courtyard Center for Professional and Economic Development),
972.377.1680 (Preston Ridge Campus) or
972.881.5680 (Spring Creek Campus) or
visit the bookstore website at
http://bookstore.collin.edu/

Bookstore Refund Policy

- A valid receipt is required for all refunds or exchanges.
- All items (except course materials and hardware/software) unopened and in original condition returned within 15 days of purchase may be exchanged or refunded to the original form of tender.
- All items purchased with a check may have a 10-day waiting period.

Course Materials (Textbooks):

- A full refund will be given for textbooks (excluding Final Sale items) returned prior to the refund deadline. Materials purchased after the return deadline must be returned within 2 business days of purchase. Materials purchased during the last week of classes or final exams are not returnable. Textbooks with open access codes may not be refunded.
- Final sale items include the following: digital textbooks, study guides, test prep books, bar charts, professional reference, study aids, and clearance items. All these items are not refundable.

Hardware and Software:

Unopened (unless defective) computer hardware and software may be refunded or exchanged within seven (7) days of purchase.

TEXTBOOK BUYBACK POLICY

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

- Books must be in clean, saleable condition.
- Books must be required for use by the college during the next semester.
- Books must be current editions.

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

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

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

DEVELOPMENTAL EDUCATION (DE)

Developmental Education courses are designed to provide students with basic skills needed to achieve success in college-level courses and to complete TSI (Texas Success Initiative) requirements. Although students receive grades for DE courses, those DE courses do not apply toward a degree or certificate, the DE credit does not transfer to other institutions, and the DE grades are not calculated as part of the GPA shown on transcripts (but might be considered when applying for scholarships, financial aid, veteran benefits, etc.).

DE courses include English as a Second Language, College Success, Developmental Mathematics and Integrated Reading/Writing courses. The instructional formats of DE courses vary and include computer-based, lecture, online, express, weekend, self-paced, and non-course-based formats. If a student's scores on the basic skills assessment indicate that a student would be better prepared by taking a DE course prior to enrolling in a college-level course in a related field, the student must enroll in the DE course and complete the sequence before enrolling in college-level courses in that field of study. Collin requires that students demonstrating a need for remediation in reading, writing, or mathematics complete the appropriate sequence of DE courses in consecutive semesters; this excludes summer semesters.

For students who do not place at college-level courses in all three Texas Success Initiative (TSI) areas (reading, writing, and mathematics), a departmental DE advising session is required that includes mandatory course registration in COSU 0300, College Success.

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 D-26. COSU 0301, Test-Taking and Study Skills for Non-Native English Speakers, is also available and is a course in test-taking techniques and study skills for English as a Second Language (ESL) students, designed to help non-native English speaking students. For more information, see the course description section starting on page D-26.

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

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

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

American Sign Language and Interpreting Laboratories
The American Sign Language (ASL) Laboratory is designed to simulate, as close as possible, a deaf culture environment on a college campus. The college employs native or near-native ASL language models who work with students to develop culturally appropriate behavior, second language acquisition and interpreting skills with continuous language exposure. The ASL Laboratory is located at the Spring Creek Campus in Room BB108. The Interpreting Laboratory is at the Spring Creek Campus in Room BB221. Hours of operation are posted outside the lab each semester.

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

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

Writing Centers are located at the Central Park, Preston Ridge and Spring Creek campuses. An appointment schedule is conveniently posted near the door of each center, and walk-ins are welcome at posted times.

For further information, call the Writing Center (Central Park Campus, 972.548.6857; Preston Ridge Campus, 972.377.1576 or Spring Creek Campus, 972.881.5843) or visit the Writing Center homepage at http://www.collin.edu/studentresources/writingcenter/index.html .

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

THE LIBRARY SYSTEM

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

Facilities

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

On-Site Services and Materials

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

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

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

Services and Collections for Off-Campus Students

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

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

Electronic Collections

More than 100 different electronic collections are available to Collin College students wherever they have access to CougarWeb.
Streaming video of Shakespeare plays from the BBC, the Smithsonian's collection of music from around the world, the New York Times archived from 1850, and thousands of current full text medical and technology books, animations, and videos are just a small sample of what is available. Over 935,000 of these electronic objects were downloaded by Collin College students last year.

Special Services

Adaptive equipment for the visually impaired is available for student use at each library through each campus's Access Office. Scanning software can read papers, books, or web pages aloud to users. Speech recognition software capable of taking dictation is available as is hardware for image magnification.

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

STUDY SKILLS SEMINARS

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

TESTING SERVICES

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

TUTORING

The ACCESS Office provides free tutoring services for all students at the college. For information about tutoring, contact the Coordinator of Student Support Services at Spring Creek Campus, Room D140, 972.881.5128.

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

ACADEMIC AND WORKFORCE PROGRAMS

UNDERSTANDING COURSE TYPES AND CREDIT HOURS

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

COURSES TYPES

Developmental Education Courses (DE)

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

Workforce Courses (W)

Technical or workforce courses are designated by a (W) at the end of their course description. Workforce courses provide an opportunity for students to obtain skills and knowledge needed for career exploration, licensure, and specific job qualifications. Workforce courses do not always transfer or apply to academic degree programs at four-year colleges and universities. Some programs have transfer or articulation agreements in place to facilitate the transfer of workforce credits. Check with an academic advisor or transfer institution for more information.

Academic Transfer Courses

Academic courses apply toward associate degrees and transfer to be applied to baccalaureate degrees at colleges and universities. These courses are designated by an (A) at the end of their course description. There are advanced study opportunities for some sections of academic courses designated as "Honors" and "Advanced Study" on a student's transcript. See **Advanced Study Opportunities** for a description of eligibility for these courses.

COURSE CREDIT HOURS

In the Texas Common Course Numbering System each course is identified by a four-character "rubric" (i.e. prefix or department abbreviation) and a four-digit number:
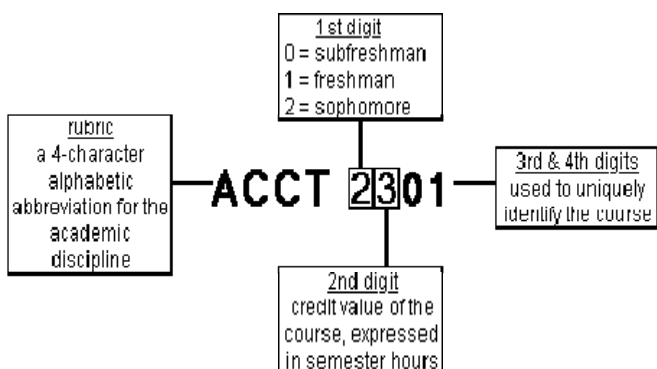
The **rubric** is always four upper-case alphabetic characters. The first digit of the **course number** denotes the academic level of the course; the second digit denotes the credit value of the course in semester hours; and the third and fourth digits establish course sequencing and/or distinguish the course from others of the same level, credit value, and rubric.

Course numbers beginning with zero (0)

Course numbers beginning with zero include developmental education, English as Second Language (ESL) courses, and study skills courses. These courses prepare students to be successful in college-level work. They are not college-level courses and therefore do not apply to college degrees or other awards, nor do they transfer.

Course numbers beginning with one (1) or higher

Any course with a number that starts with a one (1) or higher is considered a college-level course. Completion of a college-level course with a D or higher will earn college credit.

Earned Course Credit Hours

Credit hours are earned upon successful completion of college credit courses. Each degree, certificate or award requires the completion of a specific number of credit hours. The second digit in a course number indicates the number of credit hours earned upon successful completion of the course.

ADVANCED STUDY OPPORTUNITIES

ADVANCED STUDY IN MATHEMATICS AND NATURAL SCIENCES

The Center for Advanced Study in Mathematics and Natural Sciences (**CASMNS**) provides speakers, research opportunities for selected students, and advanced study opportunities in biology, chemistry, geology, mathematics, and physics. Upon successful completion of a CASMNS course, the student will receive an "Advanced Study" notation on their official Collin transcript.

Qualified students enrolled in selected sections of these courses may be eligible for CASMNS credit activities:

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

Students desiring CASMNS opportunities should speak with a CASMNS faculty member during CASMNS orientation to schedule an interview and if appropriate, the student will be assigned a supporting instructor..
Note: See the course descriptions for complete information on these courses.

HONORS COURSEWORK

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

ACADEMIC TRANSFER ASSOCIATE DEGREES AND CERTIFICATES

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

The AA, AAT, and AS degrees are designed for students planning to transfer course credits to a baccalaureate degree program at a college or university. Students should visit with an academic advisor to select courses that apply to their AA, AAT, or AS degree program at Collin College in addition to the major for their chosen transfer college or university. The selection of science, math and elective credit courses is often based on the requirements of the specific transfer college or university

CHOOSING AN AWARD OR DEGREE PLAN

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

CHOOSING A PLAN YEAR

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

GENERAL EDUCATION CORE (SEE TABLE ON PAGE CI-6)

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

Core Curriculum Completion Certificate

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

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

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

Becoming Core Complete for Students Who Transfer to Collin College with 3, 6 or 7 credit hours of Life and Physical Science Credits

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

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

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

To meet the 6-credit hour requirement in the Component Area Option, all students, who transfer to Collin with 3, 6 or 7 credit hours of Life and Physical Sciences Core coursework, will need to take or transfer in one Core Speech course, and PSYC 1300 in order to be Core complete in both the Life and Physical Sciences Core Component and the Component Area Option.

COLLIN AA/AS/AAT GENERAL EDUCATION CORE		
Discipline	**Courses**	**Notes**
Communication Component		**(6 Credit Hours)**
English (both required)	ENGL 1301 and 1302	
Language, Philosophy & Culture Component		**(3 Credit Hours)**
English	ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343	Satisfy the AA sophomore literature requirement
French	FREN 2303, 2304	
History	HIST 2311, 2312, 2321, 2322	
Humanities	HUMA 1301	
Philosophy	PHIL 1301, 1304, 2303, 2306, 2307, 2321	
Mathematics Component		**(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
Life and Physical Sciences Component		**(8 Credit Hours [2])**
Biology	BIOL 1406, 1407, 1414, 1415, 2401, 2402, 2406, 2416, 2421	A two-course sequence recommended
Chemistry	CHEM 1411, 1412, 2423, 2425	
Environmental Sciences	ENVR 1401, 1402	
Geology	GEOL 1403, 1404	
Physics	PHYS 1401, 1402, 2425, 2426	
Biology	BIOL 1408, 1409, 2404, 2420	Only satisfy the AA or AAT requirement
Chemistry	CHEM 1405	
Geology	GEOL 1401, 1402, 1445, 1447	
Physics	PHYS 1403, 1404, 1405, 1410, 1415, 1417	

Discipline	**Courses**	**Notes**
Social and Behavioral Sciences Component		**(3 Credit Hours)**
Anthropology	ANTH 2302, 2346, 2351	
Economics	ECON 2301, 2302	
Psychology	PSYC 2301	
Sociology	SOCI 1301	
Government / Political Science Component		**(6 Credit Hours)**
Government (both required)	GOVT 2305 and 2306	
American History Component		**(6 credit hours)**
History (select two)	HIST 1301, 1302 or 2301	
Creative Arts Component		**(3 Credit Hours)**
Dance	DANC 2303	
Music	MUSI 1306, 1307, 1310	
Theatre	DRAM 1310, 2361, 2362, 2366, 2367	
Visual Arts	ARTS 1301, 1303, 1304, 1313	
Component Area Options		**(4 Credit Hours)**
Speech (select one)	SPCH 1311, 1315, 1321	
Psychology (Select one)	PSYC 1100, 1300	Please note you may only take one of the following courses: EDUC 1200 [3], PSYC 1100, PSYC 1300

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

2. *Students who transfer to Collin with fewer than 8 credit hours of Life and Physical Science credits will need to check with an Academic Advisor for more information.*

3. *EDUC-1200 does not meet the General Education Core requirement.*

ASSOCIATE OF ARTS DEGREE REQUIREMENTS

The following requirements must be met for an AA:

1. Earn a minimum of 60 college-level credit hours.
2. Complete the General Education Core of 42 credit hours.
3. Earn a minimum cumulative grade point average (GPA) of 2.0
4. Earn a minimum of 18 credit hours at Collin College.
5. Complete a minimum of 18 additional credit hours of degree requirements and general studies electives.
6. Complete the degree requirement for the AA degree:
   - At least one sophomore-level literature course (3 credit hours). This requirement may simultaneously meet the Language, Philosophy & Culture Core requirement.

ASSOCIATE OF SCIENCE DEGREE REQUIREMENTS

The following requirements must be met for an AS:

1. Earn a minimum of 60 college-level credit hours.
2. Complete the General Education Core of 42 credit hours.
3. Earn a minimum cumulative grade point average (GPA) of 2.0
4. Earn a minimum of 18 credit hours at Collin College.
5. Complete a minimum of 18 additional credit hours of degree requirements and general studies electives.
6. Complete the degree requirement for the AS degree:
   - Complete at least six credit hours of mathematics from the following list: MATH 1314, 1316, 1342, 1414, 2305, 2312, 2318, 2320, 2413, 2414, 2415, 2417, 2419. Three credit hours of this mathematics requirement will also meet the Mathematics Core requirement.

- Complete at least 8 credit hours of Life and Physical Sciences from the following list:
  - BIOL1406, 1407, 1414, 1415, 2401, 2402, 2406, 2416, 2421
  - CHEM 1411, 1412, 2423, 2425;
  - ENVR 1401, 1402
  - GEOL 1403, 1404
  - PHYS 1401, 1402, 2425, 2426

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

ASSOCIATE OF ARTS IN TEACHING DEGREE REQUIREMENTS

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

1. Earn a minimum of 60 college-level credit hours.
2. Complete the General Education Core of 42 credit hours.
3. Earn a minimum cumulative grade point average (GPA) of 2.0. Students should be aware that most four-year colleges require a minimum cumulative GPA of 2.5 for admission to their teacher certification programs.
4. Earn a minimum of 18 credit hours at Collin College.
5. Complete all the courses listed for one of three AAT diplomas:
   - AAT-Early Childhood-Grade 6
   - AAT-Grades 4-8, Early Childhood-Grade 12 Special Education
   - AAT-Grades 8-12, Early Childhood-Grade 12 other than Special Education

AA and AS Fields of Study

AA and AS degrees may have state-recognized Fields of Study (FOS) Transfer Curricula, which are available in eight (8) fields. The certificate of completion for a specific FOS is awarded to guarantee transfer of the courses contained in the FOS curriculum freely among Texas public colleges. The FOS courses are equivalent to the first two years of program coursework in a related bachelor's degree.

Fields of Study are available in the following disciplines:
• Business
• Communication
• Computer Science
• Criminal Justice
• Engineering
• Engineering Technology
• Music
• Nursing

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

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

Accounting

Department Chair:
Christine DeLaTorre, PhD
　　　　　　PRC-J214　　972.548.6637
Faculty Contact:
Paula Miller　　SCC-K229　　972.881.5179
Academic Advisors:
Yajaira Diaz　　PRC-F132　　972.377.1513
Matthew Gintonio
　　　　　　SCC-G148　　972.377. 1771

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

American Sign Language (Deaf Education)

Department Chair:
Ana Giron　　SCC-G215　　972.881.5724
Academic Advisor:
Ana Giron　　SCC-G215　　972.881.5724
Communication and Humanities Division Office
　　　　　　SCC-B189　　972.881.5810

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

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

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

RECOMENDED ELECTIVES

SGNL	1401	Beginning American Sign Language I
SGNL	1402	Beginning American Sign Language II
SGNL	2301	Intermediate American Sign Language I
SGNL	2302	Intermediate American Sign Language II
SLNG	1311	Fingerspelling and Numbers [1,*]
SLNG	1347	Deaf Culture
EDUC	1301	Introduction to the Teaching Profession [2]
EDUC	2301	Introduction to Special Populations [2]

1 Recommended for students pursuing degrees in Deaf Studies

2 Recommended for students pursuing degrees in Deaf Education

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

Anthropology

Department Chair:
Keith Volanto, Ph. D.
SCC-BB216   972.578.5531
Faculty Contact:
Gerald Sullivan   SCC-B230   972.881.5800
Academic Advisor:
Keyona McClellan
SCC-G146   972.516.5069

Anthropology takes as its subject the unity and diversity of our single human species in its total history. Its intellectual origins are in both the natural sciences, and the humanities.

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

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

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

RECOMMENDED ELECTIVES

ANTH	2301	Physical Anthropology
ANTH	2302	Introduction to Archeology
ANTH	2346	General Anthropology
ANTH	2351	Cultural Anthropology
BIOL	2404	Human Anatomy and Physiology Basic
BIOL	2416	Genetics
ENGL	2332	World Literature I
GEOG	1302	Cultural Geography

ANTHROPOLOGY RECOMMENDED ELECTIVES (continued)

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Art

Also see academic- Photography courses

Department Chair:
Carter Scaggs   SCC-A249   972.881.5867
Academic Advisors:
John Ciccia   CPC-D117G   972.578.5563
Samantha Dean   SCC-G122   972.881.5190

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

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

RECOMMENDED ELECTIVES
ARTS	1301	Art Appreciation
ARTS	1303	Art History I (Prehistoric to the 14th century)
ARTS	1304	Art History II (14th century to the present)
ARTS	1311	Design I (2-dimensional)
ARTS	1312	Design II (3-dimensional)
ARTS	1316	Drawing I
ARTS	1317	Drawing II
ARTS	2311	Advanced 2-D Design
ARTS	2312	Advanced 3-D Design
ARTS	2316	Painting I
ARTS	2317	Painting II
ARTS	2323	Figure Drawing I
ARTS	2324	Figure Drawing II
ARTS	2326	Sculpture I
ARTS	2327	Sculpture II
ARTS	2333	Printmaking I
ARTS	2334	Printmaking II
ARTS	2341	Jewelry / Art Metals I
ARTS	2342	Jewelry / Art Metals II
ARTS	2346	Ceramics I
ARTS	2347	Ceramics II
ARTS	2348	Digital Photography I
ARTS	2349	Digital Photography II
ARTS	2366	Watercolor I
ARTS	2367	Watercolor II
ARTS	2389	Academic Co-op Arts/Photography

Business Field of Study

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

Department Chairs:
Christine DeLaTorre, PhD
             PRC-J214   972.548.6637
William (Russ) Neal
             PRC-J243   972.377.1652
Faculty Contacts:
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             SCC-L263   972.881.5840
Dean Wallace   SCC-H207   972.881.5706
Academic Advisors:
Yajaira Diaz   PRC-F132   972.377.1513
Matthew Gintonio
             SCC-G148   972.377.1771

Students interested in careers in business or who are planning to major in accounting, business administration, finance, international business, management, or marketing for a baccalaureate

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

degree should follow the Business Field of Study curriculum. Students completing the Business Field of Study curriculum will receive a certificate, and the course credits will transfer to any Texas public college or university that offers bachelor's degrees in various areas of business.

Certificate – Business Field of Study

21 credit hours

REQUIRED GENERAL EDUCATION CORE COURSES   **9 credit hours**

ECON	2301	Principles of Macroeconomics
MATH	1325	Calculus for Business and Social Sciences [1]
SPCH	1321	Business and Professional Communication (preferred) - **OR-** SPCH-1315 Public Speaking

OTHER REQUIRED COURSES   **12 credit hours**

ACCT	2301	Principles of Financial Accounting
ACCT	2302	Principles of Managerial Accounting
BCIS	1305	Business Computer Applications
ECON	2302	Principles of Microeconomics

The Required General Education Core courses listed above satisfy the Component Area Option-Speech requirement; the Social and Behavioral Sciences component; and the Mathematics component.

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

ADDITIONAL GENERAL EDUCATION CORE REQUIREMENTS   **33 credit hours**

Communication   **6 credit hours**
Complete both of the following courses:
    ENGL 1301 and 1302

Language, Philosophy & Culture   **3 credit hours**
Select one of the following sophomore English courses:
    (Note: Only the courses that will meet the AA degree requirements are listed below. See the General Education Core Table for more options.)
    ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343

Life and Physical Sciences   **8 credit hours**
Select two courses from the following areas:
    (A two-course sequence is recommended.)
    Biology
    BIOL 1406, 1407, 1408, 1409, 1411, 1414, 1415, 2401, 2402, 2404, 2406, 2416, 2420, 2421
    Chemistry
    CHEM 1405, 1411, 1412, 2423, 2425
    Environmental Science
    ENVR 1401, 1402
    Geology
    GEOL 1401, 1402, 1403, 1404, 1405, 1445, 1447
    Physics
    PHYS 1401, 1402, 1403, 1404, 1405, 1410, 1415, 1417, 2425, 2426

Government / Political Science   **6 credit hours**
Complete both of the following courses:
    GOVT 2305 and 2306

American History   **6 credit hours**
Select two of the following courses:
    HIST 1301, 1302, 2301

Creative Arts   **3 credit hours**
Select one of the following courses:

Dance	DANC 2303
Music	MUSI 1306, 1307, 1310
Theatre	DRAM 1310, 2361, 2362, 2366, 2367
Visual Arts	ARTS 1301, 1303, 1304, 1313

Component Area Option (CAO)   **1 credit hour**
Select one of the following courses:
    PSYC 1100, 1300

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

RECOMMENDED ELECTIVES
to complete AA - 6 credit hours

BUSI 1301 Business Principles [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 Field of Study

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

Department Chairs:
Elaine Zweig, Ph.D.
SCC-D111 972.881.5967
Amy Greene CPC-B229 972.548.6609
Kim P. Nyman PRC-LH171 972.377.1578
Academic Advisor:
Caryn Hawkins PRC-F133 972.377.1655

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

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

Certificate – Communication Field of Study
Advertising/Public Relations (Sub-Area)
12 credit hours

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

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

Certificate – Communication Field of Study
General Communication (Sub-Area)
12 credit hours

REQUIRED COURSES
Competency Area 1   6 credit hours
SPCH 1311 Introduction to Speech Communication [1]
SPCH 1318 Interpersonal Communication
Competency Area 2   6 credit hours
SPCH 1315 Public Speaking [1]
SPCH 1321 Business and Professional Communication [1]
SPCH 2335 Argumentation and Debate

1 One of these courses will meet the Component Area Option - Speech Component of the General Education Core

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

RECOMMENDED ELECTIVES
(If not used above)   to complete AA – 6 credit hours
COMM 1307   Introduction to Mass
                      Communication
COMM 2300   Media Literacy
COMM 2331   Radio / Television Announcing
COMM 2332   Radio / Television News

Certificate – Communication Field of Study
Journalism / Mass Communication (Sub-Area)

12 credit hours

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

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

Certificate – Communication Field of Study
Radio and Television Broadcasting / Broadcast Journalism (Sub-Area)

12 credit hours

REQUIRED COURSES
Competency Area 1   6-9 credit hours
COMM 1307   Introduction to Mass
                      Communication
COMM 1335   Survey of Radio / Television
COMM 2300   Media Literacy
COMM 2366   Introduction to Cinema
Competency Area 2   3-6 credit hours
COMM 2331   Radio / Television Announcing
COMM 2332   Radio / Television News
COMM 2339   Writing for Radio, Television
                      and Film

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

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

GENERAL EDUCATION
CORE   39 -42 credit hours
Below are component areas of the General Education Core not included in the Communication FOS.
Communication   6 credit hours
Both of the following English courses are required:
        ENGL 1301 and 1302

Language, Philosophy & Culture   **3 credit hours**

Select one of the following sophomore English courses:

(Note: Only the courses that will meet the AA degree requirements are listed below. See the General Education Core Table for more 0ptions.)

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

Mathematics   **3 credit hours**

Select one of the following Mathematics courses:

MATH 1314, 1316, 1324, 1325, 1332[1], 1342, 1350, 1351, 1414, 2305, 2312, 2318, 2320, 2413, 2414, 2415, 2417, 2419

Life and Physical Sciences   **8 credit hours**

Select two courses from the following areas:

(A two-course sequence is recommended.)

Biology

BIOL 1406, 1407, 1408, 1409, 1411, 1414, 1415, 2401, 2402, 2404, 2406, 2416, 2420, 2421

Chemistry

CHEM 1405, 1411, 1412, 2423, 2425

Environmental Science

ENVR 1401, 1402

Geology

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

Physics

PHYS 1401, 1402, 1403, 1404, 1405, 1410, 1415, 1417, 2425, 2426

Social and Behavioral Sciences   **3 credit hours**

Select one course from the following areas:

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

Government / Political Science   **6 credit hours**

Both of the following courses are required:

GOVT 2305 and 2306

American History   **6 credit hours**

Select two of the following courses:

HIST 1301, 1302 or 2301

Creative Arts   **3 credit hours**

Select one of the following courses:

Dance	DANC 2303
Music	MUSI 1306, 1307, 1310
Theatre	DRAM 1310, 2361, 2362, 2366, 2367
Visual Arts	ARTS 1301, 1303, 1304, 1313

Component Area Options (CAO)   **4 credit hours**

Speech [2]   3 credit hours

Select one of the following Speech courses:

SPCH 1311, 1315, 1321

Additional CAO Requirement: 1 credit hour

Select one of the following:

PSYC 1100, 1300

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

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

Criminal Justice Field of Study

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

Department Chair:

Stephanie Abramoske-James, Ph. D.

        PRC-J154   972.377.1698

Academic Advisor:

Keyona McClellan

        SCC-G146   972.516.5069

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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

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

Certificate – Criminal Justice Field of Study

15 credit hours

REQUIRED COURSES

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

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

RECOMMENDED ELECTIVES

To complete AA -   3 credit hours

CRIJ	1307	Crime in America
CRIJ	1313	Juvenile Justice System
CRIJ	2314	Criminal Investigation
CRIJ	2323	Legal Aspects of Law Enforcement

Dance

Department Chair:
Tiffanee Arnold   SCC-AA145   972.881.5830
Academic Advisors:
John Ciccia   CPC-D117G   972.578.5563
Samantha Dean   SCC-G122   972.881.5190

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

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

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

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

RECOMMENDED ELECTIVES

DANC	1101	Dance Improvisation
DANC	1110	Tap Technique I
DANC	1111	Tap Technique II
DANC	1128	Ballroom I
DANC	1129	Ballroom 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	1305	World Dance I
DANC	2141	Ballet Technique III
DANC	2142	Ballet Technique IV
DANC	2145	Modern Dance Technique III
DANC	2146	Modern Dance Technique IV
DANC	2147	Jazz Dance Technique III
DANC	2148	Jazz Dance Technique IV
DANC	2151	Dance Performance III
DANC	2152	Dance Performance IV
DANC	2210	Projects in Dance Performance and Repertory I
DANC	2211	Projects in Dance Performance and Repertory II
DANC	2212	Dance Practicum III
DANC	2213	Dance Practicum IV
DANC	2301	Topics in Dance Technique
DANC	2303	Dance Appreciation
DANC	2325	Pilates / Anatomy for Dancers
DANC	2389	Academic Co-op Dance

Economics

Department Chair:
William (Russ) Neal

	PRC-J243	972.377.1652

Academic Advisor:

Yajaira Diaz	PRC-F132	972.377.1513
Matthew Gintonio		
	SCC-G148	972.377.1771

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

Education

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

English

Department Chairs:

Natasha Robinson	SCC-D123	972.881.5123
Delores Zumwalt	SCC-L237	972.881.5954
Ray Slavens	CPC-B221	972.548.6751
Cheryl Wiltse	PRC-U114	972.377.1546

Academic Advisor:

Caryn Hawkins	PRC-F133	972.377.1655

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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

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

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

RECOMMENDED ELECTIVES

ENGL	2307	Creative Writing I
ENGL	2308	Creative Writing II
ENGL	2311	Technical and Business Writing
ENGL	2322	British Literature I
ENGL	2323	British Literature II
ENGL	2327	American Literature I
ENGL	2328	American Literature II
ENGL	2332	World Literature I
ENGL	2333	World Literature II
ENGL	2342	Introduction to Literature I - Short Story and Novel
ENGL	2343	Introduction to Literature II - Poetry and Drama
ENGL	2351	Mexican-American Literature
	X4XX	Foreign Language Sequence I
	X4XX	Foreign Language Sequence II

French

Department Chairs:

Ana Giron	SCC-G215	972.881.5724
Ray Slavens	CPC-B221	972.548.6751
Cheryl Wiltse	PRC-U114	972.377.1546

Academic Advisor:

Caryn Hawkins	PRC-F133	972.377.1655

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

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

RECOMMENDED ELECTIVES

FREN	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 FREN-2311 must be taken simultaneously
2 Corequisite of FREN-2312 must be taken simultaneously

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

German

Department Chairs:
Ana Giron   SCC-G215   972.881.5724
Ray Slavens   CPC-B221   972.548.6751
Cheryl Wiltse   PRC-U114   972.377.1546
Academic Advisor:
Caryn Hawkins   PRC-F133   972.377.1655

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

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

RECOMMENDED ELECTIVES
GERM 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

Department Chairs:
Millie Black, Ph.D.
                   SCC-A243A   972.881.5586
Meredith Martin PRC-F167   972.377.1025
Tyler Young   CPC-C201C   214.491.6208
Academic Advisor:
Keyona McClellan
                   SCC-G146   972.516.5069

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

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

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

History

Department Chairs:
Keith Volanto, Ph. D.
          SCC-BB216   972.578.5531
Meredith Martin PRC-F167   972.377.1025
Tyler Young   CPC-C201C   214.491.6208
Academic Advisor:
Keyona McClellan
          SCC-G146   972.516.5069

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

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

RECOMMENDED ELECTIVES

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

Music Field of Study

An Associate of Arts with a Music Field of Study requires 66 credit hours
Music also has a workforce program.

Department Chair:
Christopher Morgan, Ph.D.
          SCC-B183   972.516.5010
Academic Advisors:
John Ciccia   CPC-D117G 972.578.5563
Samantha Dean SCC-G122   972.881.5190

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

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

Certificate – Music Field of Study
35 credit hours

Ensemble: **4 credit hours**
MUEN X1XX   Ensemble (4 semesters) [1]

Applied Study: **8 credit hours**
MUAP X2XX   Applied Music (4 semesters) [2]

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Theory / Aural Skills: 16 credit hours
MUSI 1116 Aural Skills I
MUSI 1117 Aural Skills II
MUSI 1311 Music Theory I
MUSI 1312 Music Theory II
MUSI 2116 Aural Skills III
MUSI 2117 Aural Skills IV
MUSI 2311 Music Theory III
MUSI 2312 Music Theory IV

Music Literature: 3 credit hours
MUSI 1307 Introduction to Music Literature [3]

Keyboard (Piano) Competency: 4 credit hours
MUSI 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 General Education Core requirements:

ADDITIONAL GENERAL EDUCATION CORE REQUIREMENTS
Communication: 6 credit hours
ENGL 1301 Composition I
ENGL 1302 Composition II
Mathematics 3 credit hours
MATH 1314 College Algebra [5]
Life and Physical Sciences: 4 credit hours
PHYS 1410 Physics of Music and Sound [6]
Social and Behavioral Sciences: 3 credit hours
PSYC 2301 General Psychology [7]

Government / Political Science 6 credit hours
Both of the following courses are required:
GOVT 2305 Federal Government (Federal constitution and topics)
GOVT 2306 Texas Government (Texas constitution and topics)
American History **6 credit hours**
HIST 1301 United States History I
HIST 1302 United States History II
Component Area Options (CAO) **3 credit hours**
  Speech 3 credit hours
    SPCH 1311 Introduction to Speech Communication [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 Creative Arts.
4. All Music Field of Study students must see the Department Chair. With permission of the Department Chair, student may take four elective music (MUAP, MUEN or MUSI) credits
5. Recommended – Other Mathematics Options are: MATH 1316, 1324, 1325, 1332*, 1342, 1350, 1351, 1414, 2305, 2312, 2318, 2320, 2413, 2414, 2415, 2417, 2419
6. Recommended - Other Life and Physical Sciences Options are:
BIOL 1406, 1407, 1408, 1409, 1411, 1414, 1415, 2401, 2402, 2404, 2406, 2416, 2420, 2421; CHEM 1405, 1411, 1412, 2423, 2425; ENVR 1401, 1402; GEOL 1401, 1402, 1403, 1404, 1405, 1445, 1447; PHYS 1401, 1402, 1403, 1404, 1405, 1415, 1417, 2425, 2426
7. May substitute SOCI-1301
8. May substitute SPCH-1315

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Nursing Field of Study

An Associate of Arts with a Nursing Field of Study requires 66 credit hours
Nursing also has a workforce program

Dean, Academic Affairs - Nursing:
Donna Hatch, MSN, RN
| | CPC-E302 | 972.548.6884 |
Academic Advisors:
Tori Hoffman   CPC-D117E   972.548.6779
Lisa Gibbs   CPC-D117F   972.548.6778

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

Upon completion of the Field of Study curriculum, a certificate will be awarded to acknowledge completion and readiness to transition from an associate level to a baccalaureate (BA / BS) level, at any Texas public institution. Neither the Associate of Arts nor Certificate in Nursing Field of Study qualifies the student to take the NCLEX-RN examination for licensure.

Certificate – Nursing Field of Study

38 credit hours

REQUIRED GENERAL EDUCATION CORE COURSES   **14 credit hours**

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

OTHER REQUIRED COURSES   **24 credit hours**

BIOL	1322	General Nutrition
BIOL	2420	Microbiology for Non-Science Majors
CHEM	1405	Introduction to Chemistry I [1]
PSYC	2314	Life-Span Growth and Development
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 Field of Study Certificate, complete the following General Education Core requirements:

ADDITIONAL GENERAL EDUCATION CORE REQUIREMENTS   **28 credit hours**
Communication   **6 credit hours**
Complete both of the following courses:
    ENGL 1301 and 1302
Language, Philosophy & Culture   **3 credit hours**
Select one of these sophomore English courses:
  (Note: Only the courses that will meet the AA degree requirements are listed below. See the General Education Core Table for more options.)
  ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343

**Government / Political
Science   6 credit hours**
Complete both of the following courses:
    GOVT 2305 and 2306
American History   6 credit hours
Select two of the following courses:
    HIST 1301, 1302 or 2301
Creative Arts   3 credit hours
Select one of the following courses:
  Dance   DANC-2303
  Music   MUSI 1306, 1307, 1310
  Theatre   DRAM 1310, 2361, 2362, 2366,
               2367
  Visual Arts   ARTS 1301, 1303, 1304, 1313
**Component Area
Options (CAO)   4 credit hours**
  Speech: 3 credit hours
  Select one of the following Speech courses:
       SPCH 1311, 1315, or 1321
  **Additional CAO
  Requirement: 1 credit hour**
  Select one of the following:
       PSYC 1100, 1300

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

RECOMMENDED ELECTIVES

PHIL	1301	Introduction to Philosophy
PHIL	1304	Introduction to World Religions
PHIL	2303	Introduction to Formal Logic
PHIL	2306	Introduction to Ethics
PHIL	2307	Introduction to Social and Political Philosophy
PHIL	2321	Philosophy of Religion
ANTH	2351	Cultural Anthropology
ENGL	2322	British Literature I
ENGL	2323	British Literature II
ENGL	2332	World Literature I
ENGL	2333	World Literature II
GOVT	2304	Introduction to Political Science
HIST	2311	Western Civilization I
HIST	2312	Western Civilization II
	X4XX	Foreign Language Sequence I
	X4XX	Foreign Language Sequence II

Philosophy

Academic Contacts:

Carl Hasler	SCC-L212	972.881.5753
Amy Greene	CPC-B229	972.548.6609
Kim P. Nyman	PRC-LH171	972.377.1578

Academic Advisor:

Caryn Hawkins	PRC-F133	972.377.1655

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

Photography

Photography also has a workforce program

Department Chair:

Laura Flores	SCC-K241	972.578.5527

Academic Advisors:

John Ciccia	CPC-D117G	972.578.5563
Samantha Dean	SCC-G122	972.881.5190

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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

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

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

PHOTOGRAPHY RECOMMENDED ELECTIVES (continued)

ARTS	1313	Foundations of Art
ARTS	2336	Papermaking / Bookbinding I
ARTS	2337	Papermaking / Bookbinding II
ARTS	2348	Digital Photography I
ARTS	2349	Digital Photography II
ARTS	2356	Photography I / Darkroom
ARTS	2357	Photography II / Darkroom
ARTS	2389	Academic Co-op Arts / Photography

Psychology

Department Chairs:
Kristi Clark-Miller, Ph. D.
	SCC-A261	972.881.5535
Meredith Martin	PRC-F167	972.377.1025
Tyler Young	CPC-C201C	214.491.6208

Academic Advisor:
Keyona McClellan
	SCC-G146	972.516.5069

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

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

RECOMMENDED ELECTIVES

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

Sociology

Department Chairs:

Kristi Clark-Miller, Ph. D.

	SCC-A261	972.881.5535
Meredith Martin	PRC-F167	972.377.1025
Tyler Young	CPC-C201C	214.491.6208

Academic Advisor:

Keyona McClellan

	SCC-G146	972.516.5069

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

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

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

RECOMMENDED ELECTIVES

SOCI	1301	Introduction to Sociology
SOCI	1306	Social Problems
SOCI	2301	Marriage and the Family
SOCI	2306	Human Sexuality
SOCI	2319	Minority Studies
ANTH	2351	Cultural Anthropology
PSYC	2301	General Psychology
PSYC	2314	Life-Span Growth and Development
PSYC	2316	Psychology of Personality
PSYC	2319	Social Psychology

Spanish

Department Chairs:

Ana Giron	SCC-G215	972.881.5724
Ray Slavens	CPC-B221	972.548.6751
Cheryl Wiltse	PRC-U114	972.377.1546

Academic Advisor:

Caryn Hawkins	PRC-F133	972.377.1655

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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

RECOMMENDED ELECTIVES

SPAN	1411	Beginning Spanish I
SPAN	1412	Beginning Spanish II
SPAN	2311	Intermediate Spanish I
SPAN	2312	Intermediate Spanish II
SPAN	2313	Spanish for Native / Heritage Speakers I
SPAN	2315	Spanish for Native / Heritage Speakers II

Theatre

Department Chair:
Shannon Kearns-Simmons
SCC-BB115   972.881.5621

Academic Advisors:
John Ciccia   CPC-D117G   972.578.5563
Samantha Dean   SCC-G122   972.881.5190

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

Theatre coursework at Collin College has been nationally recognized and Collin students have been awarded the national champion of collegiate drama. Additionally, numerous Collin College alumni have worked on Broadway. Theatre faculty and students have diverse experience in professional stage and motion picture work. The state-of-the-art theatre facility is comprised of three separate performance spaces including the 350-seat John Anthony Theatre, the 120-seat Black Box Theatre and the intimate ALT Lab Theatre. The multi-million dollar complex also houses two dressing rooms, a theatre box office, a costume vault and construction shop, a scene and paint shop, in addition to numerous acting and directing classroom spaces.

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

RECOMMENDED ELECTIVES

DRAM	1120	Theatre Practicum I
DRAM	1121	Theatre Practicum II
DRAM	1161	Musical Theatre Workshop I
DRAM	1162	Musical Theatre Workshop II
DRAM	1310	Introduction to Theater
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	2331	Stagecraft II
DRAM	2336	Voice and Diction
DRAM	2351	Acting III: Improvisation
DRAM	2352	Acting IV: Acting for Film and Television
DRAM	2361	History of Theater I
DRAM	2362	History of Theater II
DRAM	2363	History of Musical Theatre
DRAM	2366	Introduction to Cinema
DRAM	2367	Development of the Motion Picture II
DRAM	2372	Script Analysis
DRAM	2375	Fundamentals of Stage Lighting
DRAM	2376	Stage Combat and Circus Skills
DRAM	2389	Academic Co-op - Drama

ASSOCIATE OF ARTS IN TEACHING

60 credit hours

Department Chair:
Elaine Zweig, Ph.D.
               SCC-D111   972.881.5967
Academic Advisor:
Nadia Khedairy   SCC-G147   469.365.1816

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

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

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

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

AAT Degree Requirements

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

1. Earn a minimum of 60 college-level credit hours.
2. Complete the General Education Core of 42 credit hours.
3. Earn a minimum cumulative grade point average (GPA) of 2.0. Students should be aware that most four-year colleges require a minimum cumulative GPA of 2.5 for admission to their teacher certification programs.
4. Earn a minimum of 18 credit hours at Collin College.
5. Complete all the courses listed for one of three AAT diplomas:
   - AAT-Early Childhood-Grade 6
   - AAT-Grades 4-8, Early Childhood-Grade 12 Special Education
   - AAT-Grades 8-12, Early Childhood-Grade 12 other than Special Education

AAT in Early Childhood through Grade 6

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

REQUIRED COURSES   16 credit hours

EDUC	1301	Introduction to the Teaching Profession
EDUC	2301	Introduction to Special Populations
MATH	1350	Fundamentals of Mathematics I
MATH	1351	Fundamentals of Mathematics II
XXXX	x4xx	Additional Lab Science Course [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: 2 credit hour

EDUC	1200	Learning Framework [1]

1. *Please be aware a student may only take one of the following: EDUC-1200, PSYC-1100 or PSYC-1300. Students following the 2014 General Education Core should take PSYC 1300, others should take EDUC-1200/*

AAT in Grades 4 through 8, Early Childhood through Grade12 Special Education

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

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

REQUIRED COURSES   16 credit hours

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

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

RECOMMENDED ELECTIVES
To complete an AAT: **2 credit hours**
EDUC 1200   Learning Framework [1]

1. *Please be aware a student may only take one of the following: EDUC-1200, PSYC-1100 or PSYC-1300. Students following the 2014 General Education Core should take PSYC 1300, others should take EDUC-1200/*

AAT in Grades 8 through12, Early Childhood through Grade12 Other than Special Education

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

REQUIRED COURSES **18 credit hours**
Education Courses 6 credit hours
EDUC 1301 Introduction to the Teaching Profession
EDUC 2301 Introduction to Special Populations
Additional Required Courses 12 credit hours
Additional Twelve (12) credit hours of courses in academic disciplines or content area teaching fields [1]

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

FIELDS OF STUDY (FOS) AND ELECTIVES FOR THE ASSOCIATE OF SCIENCE DEGREE

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

Biology

Department Chair
David McCulloch

| | SCC-I224 | 972.881.5991 |
| Gwen Miller | CPC-A308 | 972.548.6834 |

Amira Shaham-Albalancy

| | PRC-F170 | 972.377.1563 |

Academic Advisor
Matthew Gintonio

| | SCC-G148 | 972.377.1771 |

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

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

RECOMMENDED ELECTIVES

BIOL	1322	General Nutrition
BIOL	1411	General Botany
BIOL	2389	Academic Co-op Biology
BIOL	2401	Anatomy and Physiology I
BIOL	2402	Anatomy and Physiology II
BIOL	2406	Environmental Biology
BIOL	2416	Genetics
BIOL	2421	Microbiology for Science Majors
CHEM	1411	General Chemistry I
CHEM	1412	General Chemistry II
CHEM	2423	Organic Chemistry I
CHEM	2425	Organic Chemistry II
HITT	1305	Medical Terminology I
MATH	1342	Elementary Statistical Methods
PHYS	1401	College Physics I
PHYS	1402	College Physics II
PHYS	2425	University Physics I
PHYS	2426	University Physics II

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Chemistry

Department Chair:

Fred Jury   SCC-I103   972.881.5883

Gwen Miller   CPC-A308   972.548.6834

Dawn Richardson

                   PRC-LH215   972.377.1633

Academic Advisor:

Matthew Gintonio

                   SCC-G148   972.377.1771

Department Website:

http://www.collin.edu/chemistry

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

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

RECOMMENDED ELECTIVES

CHEM 2389   Academic Co-op Chemistry

CHEM 2401   Analytical Chemistry

CHEM 2423   Organic Chemistry I

CHEM 2425   Organic Chemistry II

MATH 2320   Differential Equations

MATH 2415   Calculus III

PHYS 2425   University Physics I

PHYS 2426   University Physics II

Computer Science Field of Study

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

Department Chair:

Glen Grimes   SCC-J127   972.578.5520

Academic Advisor:

Tiffany Goertz   PRC-F131   972.881-5165

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

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

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

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

Certificate – Computer Science Field of Study

30 credit hours

REQUIRED GENERAL EDUCATION
CORE COURSES   **12 credit hours**
MATH 2413   Calculus I[1]
PHYS 2425   University Physics I[1]
PHYS 2426   University Physics II[1]

OTHER REQUIRED
COURSES   **18 credit hours**
COSC 1436   Programming Fundamentals I (C++)[2]
COSC 2325   Computer Organization[3]
MATH 2414   Calculus II[1]

(Select from one of the following tracks.)
C++ Track Content Courses
COSC 1437   Programming Fundamentals II (C++)[2]
COSC 2336   Programming Fundamentals III (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 General Education Core requirements:

ADDITIONAL GENERAL EDUCATION
CORE REQUIREMENTS   **30 credit hours**
Communication   **6 credit hours**
Complete both of the following courses:
    ENGL 1301 and 1302
Language, Philosophy &
Culture   **3 credit hours**
Select one of the following courses:
    English   ENGL 2322, 2323, 2327, 2328,
                 2332, 2333, 2342, 2343
    French   FREN 2303 or 2304
    History   HIST 2311, 2312, 2321, 2322
    Humanities   HUMA 1301
    Philosophy   PHIL 1301, 1304, 2303, 2306,
                 2307, 2321
Social and Behavioral Sciences   3 credit hours
Select one of the following courses:
    Anthropology ANTH 2302, 2346, 2351
    Economics   ECON 2301, 2302
    Psychology   PSYC 2301
    Sociology   SOCI 1301
Government / Political Science   6 credit hours
Complete both of the following courses:
    GOVT 2305 and 2306
American History   **6 credit hours**
Select two of the following courses:
    HIST 1301, 1302, 2301
Creative Arts   **3 credit hours**
Select one of the following:
    Dance   DANC 2303
    Music   MUSI 1306, 1307, 1310
    Theatre   DRAM 1310, 2361, 2362,
                 2366, 2367
    Visual Arts ARTS 1301, 1303, 1304, 1313
Component Area
Option (CAO)   **4 credit hours**
  Speech   **3 credit hours**
  Select one of the following courses:
      SPCH 1311, 1315, 1321
  Additional CAO
  Requirement: **1 credit hour**
  Select one of the following courses:
      PSYC 1100, 1300

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.*

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

2. *COSC-1436 and COSC-1337/1437 are preparatory and sequential in nature; however, not all courses are required for the Computer Science major at all universities but may apply to general degree requirements.*
  a) *COSC 1436 is not part of the Computer Science major requirements at The University of Texas at Austin, the University of Texas at Arlington, The University of Texas at Dallas, and Texas A&M University.*
  b) *COSC 1337 and COSC 1437 are not part of the Computer Science major requirements at the University of Texas at Austin. Preparatory courses such as COSC 1436 and COSC 1337/1437 will assist students who need additional background but do not apply toward the computer science major requirements.*
3. *COSC 2325/2425 is not part of the Computer Science major requirements at the University of Texas at Austin, University of Texas at Dallas, or Texas A&M University but may be applied to general degree requirements.*

Engineering Field of Study

An Associate of Science with an Engineering Field of Study requires 66 credit hours

Program Director:
Dave Galley   PRC-H213   972.377.1676
Academic Advisors:
Catherine Smith   PRC-F134   972.377.1780
Samantha Dean   SCC-G122   972.881.5190

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

In addition to the Engineering Field of Study, a specific set of four University of Texas at Dallas (UTD) Engineering courses are offered in support of our Collin-UTD Bachelor of Science in Engineering Articulation Agreement. Five areas of Engineering are covered by these courses: Electrical Engineering, Computer Engineering, Telecommunications Engineering, Software Engineering and Mechanical Engineering. (Please contact the Program Director for the most recent Collin College-University of Texas at Dallas Engineering Articulation Agreement.)

Certificate – Engineering Field of Study
36 credit hours

REQUIRED GENERAL EDUCATION CORE
COURSES   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 General Education Core requirements:

ADDITIONAL GENERAL
EDUCATION CORE
REQUIREMENTS   30 credit hours
Communication   6 credit hours
Complete both of the following courses:
   ENGL 1301 and 1302

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Language, Philosophy & Culture   **3 credit hours**
Select one of the following courses:

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

Social and Behavioral Sciences   3 credit hours
Select one of the following courses:

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

Government / Political Science   6 credit hours
Complete both of the following courses:
   GOVT 2305 and 2306

American History   **6 credit hours**
Select two of the following courses:
   HIST 1301, 1302, 2301

Creative Arts   **3 credit hours**
Select one of the following courses:

Dance	DANC 2303
Music	MUSI 1306, 1307, 1310
Theatre	DRAM 1310, 2361, 2362, 2366, 2367
Visual Arts	ARTS 1301, 1303, 1304, 1313

Component Area
Option (CAO)   **4 credit hours**
  Speech   **3 credit hours**
  Select one of the following courses:
      SPCH 1311, 1315, 1321
  Additional CAO
  Requirement: **1 credit hour**
  Select one of the following courses:
      PSYC 1100, 1300

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

ENGR	1201	Introduction to Engineering
ENGR	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.

Environmental Science

Department Chairs:

Tyler Young	CPC-C201	214.491.6208
Amira Shaham-Albalancy		
	PRC-F170	972.377.1563
Daphne Babcock	SCC-I226	972.578.5518

Academic Advisor:
Matthew Gintonio

	SCC-G148	972.377.1771

Department Website:
http://www.collin.edu/geology

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

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

RECOMMENDED ELECTIVES

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

RECOMMENDED ELECTIVES

GEOL	1305	Environmental Science
GEOL	1403	Physical Geology
GEOL	1404	Historical Geology
GEOL	1445	Oceanography
GEOL	1447	Introduction to Meteorology
GEOL	2389	Academic Co-op Geology
BIOL	2406	Environmental Biology
CHEM	1411	General Chemistry I
CHEM	1412	General Chemistry II
ENGL	2311	Technical and Business Writing
ENVR	1401	Environmental Science I
MATH	1342	Elementary Statistical Methods
MATH	2413	Calculus I
MATH	2414	Calculus II
PHYS	2425	University Physics I
PHYS	2426	University Physics II

Geology

Department Chairs:

Tyler Young	CPC-C201	214.491.6208
Amira Shaham-Albalancy		
	PRC-F170	972.377.1563
Daphne Babcock	SCC-I226	972.578.5518

Academic Advisor:

Matthew Gintonio		
	SCC-G148	972.377.1771

Department Website:
http://www.collin.edu/geology

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

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

Industrial Engineering

Engineering Program Director:

Dave Galley	PRC-H213	972.377.1676

Academic Advisors:

Catherine Smith	PRC-F134	972.377.1780
Samantha Dean	SCC-G122	972.881.5190

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

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

RECOMMENDED ELECTIVES

CHEM	1411	General Chemistry I [1]
COSC	1436	Programming Fundamentals I (C++) [1]
DFTG	1309	Basic Computer-Aided Drafting [2]
DFTG	2319	Intermediate Computer-Aided Drafting [2]
ENGR	1201	Introduction to Engineering [2]
ENGR	2301	Engineering Mechanics I [1]
ENGR	2302	Engineering Mechanics II [1]
ENGR	2305	Electrical Circuits I [1]
MATH	2414	Calculus II [1]

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

Mathematics

Department Chairs:

Raja Khoury	SCC-J217	972.881.5909
Gwen Miller	CPC-A308	972.548.6834
Dawn Richardson		
	PRC-LH215	972.377.1633

Academic Advisor:

Matthew Gintonio		
	SCC-G148	972.377.1771

Department Website:
http://www.collin.edu/math

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

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

MATHEMATICS RECOMMENDED ELECTIVES

MATH	1314 [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 Formal Logic

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Physical Education

Department Chair:
Craig Leverette   SCC-A218   972.881.5920
Academic Advisor:
Torrey West   SCC-G139   972.377.1618

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

Athletic Training

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

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

RECOMMENDED ELECTIVES:
BIOL   1322   General Nutrition
PHED   1142   Varsity Conditioning I
PHED   1144   Varsity Sports I
PHED   1304   Personal Health
PHED   1306   Safety and First Aid
PHED   1338   Concepts of Physical Fitness and Wellness
PHED   2142   Varsity Conditioning II

PHED   2144   Varsity Sports II
PHED   2156   Taping and Bandaging
PHED   2356   Care and Prevention of Athletic Injuries

General Physical Education

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

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

Sports Management

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

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

RECOMMENDED ELECTIVES

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

Physics

Department Chairs:

Fred Jury	SCC-I103	972.881.5883
Gwen Miller	CPC-A308	972.548.6834
Dawn Richardson		
	PRC-LH215	972.377.1633

Academic Advisor:

Matthew Gintonio

	SCC-G148	972.377.1771

Department Website:
http://iws.collin.edu/mbrooks/physics/

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

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

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

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

PHYSICS RECOMMENDED ELECTIVES

PHYS	1403	Stars and Galaxies
CHEM	1411	General Chemistry I
CHEM	1412	General Chemistry II
ENGL	2311	Technical and Business Writing
MATH	2312	Pre-Calculus Math
MATH	2318	Linear Algebra
MATH	2320	Differential Equations
MATH	2415	Calculus III

General Physics Level

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

University Physics Level

Students seeking advanced degrees in science and engineering fields should select advanced levels of physics and mathematics courses (such as the courses listed below) for the AS degree.

PHYS	2425	University Physics I
PHYS	2426	University Physics II
MATH	2413	Calculus I
MATH	2414	Calculus II

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

PRE-PROFESSIONAL STUDIES FOR TRANSFER STUDENTS

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

Pre-Architecture

Warner Richeson PRC-H114   972.377.1689

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

RECOMMENDED CORE COURSES

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

RECOMMENDED ELECTIVES

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

Pre-Health Studies

Pre-Chiropractic, Pre-Clinical Lab Sciences, Pre-Dental
Pre-Medicine
Pre-Pharmacy
Pre-Physician's Assistant
Pre-Veterinary Medicine
Mary Weis   SCC-K244   972.881.5725

Collin offers the courses that are most commonly recommended for the first two years of Pre-Chiropractic, Pre- Dental, Pre-Medicine, Pre-Pharmacy, and Pre-Veterinary Medicine programs at most colleges and universities. These courses provide a basic foundation in medical science and help establish basic clinical reasoning and clinical skills.

Most English, mathematics and science courses have prerequisite requirements. See the Course Descriptions section in the back of this document to determine the order in which to take these courses. To help students make correct choices from the courses listed below, students should visit with a Collin academic advisor.

RECOMMENDED COURSES

Biology   8-16 credit hours
  BIOL-1406 and BIOL-1407
  Two (2) sophomore-level Biology courses
Chemistry   8-16 credit hours
CHEM-1411, CHEM-1412, CHEM-2423, and/or
  CHEM-2425
English6 credit hours
  ENGL-1301 and ENGL-1302
Mathematics   3-14 credit hours
  MATH-1316, MATH-1342, MATH-2413,
  and/or MATH-2414
Physics   0-8 credit hours
  PHYS-1401, PHYS-1402, PHYS-2425, and/or
  PHYS-2426
Social/Behavioral Science   15 credit hours
  ANTH-2351, PSYC-2301, or SOCI-1301
  GOVT-2305 and GOVT-2306
  HIST-1301 and HIST-1302

Pre-Law

Department Chair:
Cynthia Farris Gruver
          PRC-L232   972.881.5747

Future law school students should take courses that emphasize written and oral skills, research into problems facing society, logical reasoning, and business practices. For this occupation, students should consider courses in the following disciplines:
• Accounting
• Humanities
• Business
• Philosophy
• Economics
• Psychology
• English
• Sociology
• History
• Speech

Course selections should always be discussed with a Collin academic advisor to ensure that students take the correct courses for their particular pre-law baccalaureate program.
An applicant for admission to a school of law must have received, or have completed, all requirements for a baccalaureate degree from a college or university of approved standing prior to beginning work in a school of law. Pre-law students are encouraged to take the Law School Admission Test (LSAT) during the semester prior to completing the baccalaureate degree.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

WORKFORCE EDUCATION PROGRAMS

ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

The Associate of Applied Science degree (AAS) is awarded upon completion of a prescribed program of study designed to prepare students to enter and compete in the job market. Eighteen credit hours must be earned in residency at Collin College. AAS curricula enable the graduate to enter an occupation with marketable skills, an acceptable level of technical competency, and the ability to communicate effectively. In addition, an AAS degree helps prepare students for life-long learning.

AAS Degree Plan Requirements

AAS degrees require a minimum of 60 credit hours with at least half of the coursework in a common technical specialty area and a minimum of 15 credit hours of general education selected by the faculty to complement the technical courses in the area of study. Some programs limit the general education options that may be used to meet the requirements for the specific AAS degree. If options are listed in the degree plan, refer to the AAS General Education Options Table to view the course choices available.

AAS GENERAL EDUCATION OPTIONS

See specific degree for required courses or options.

Natural Sciences / Mathematics Component

Mathematics	MATH 1314, 1316, 1324, 1325, 1332, 1342, 1350, 1351, 1414, 2305, 2312, 2318, 2320, 2413, 2414, 2415, 2417, 2419
Biology	BIOL 1406, 1407, 1408, 1409,1411, 1414, 1415, 2401, 2402, 2404, 2406, 2416, 2420, 2421
Chemistry	CHEM 1405, 1411, 1412, 2401, 2423, 2425
Environmental Science	ENVR 1401, 1402
Geology	GEOL 1401, 1402, 1403, 1404, 1445, 1447
Physics	PHYS 1401, 1402, 1403, 1404, 1405, 1410, 1415, 1417, 2425, 2426

Humanities / Fine Arts Component

Dance	DANC 2303
English	ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, 2343, 2351
French	FREN 2303, 2304
History	HIST 2311, 2312, 2321, 2322
Humanities	HUMA 1301
Music	MUSI 1306, 1307, 1310
Philosophy	PHIL 1301, 1304, 2303, 2306, 2307, 2321
Theatre	DRAM 1310, 2361, 2362, 2366, 2367
Visual Arts	ARTS 1301, 1303, 1304, 1313

Social / Behavioral Sciences Component

Anthropology	ANTH 2302, 2346, 2351
Economics	ECON 1301, 2301, 2302
Government	GOVT 2305, 2306
History	HIST 1301, 1302, 2301
Psychology	PSYC 2301
Sociology	SOCI 1301

See specific degree plan for any Speech and/or Physical Education / Dance requirements.

Speech Options

Speech	SPCH 1311, 1315, 1321

Physical Education / Dance Options

Dance	DANC 1101, 1110, 1111, 1141, 1142, 1145, 1146, 1147, 1148, 1151, 1152, 1222, 1223, 2141, 2142, 2145, 2146, 2147, 2148, 2151, 2152, 2301, 2325
Physical Education	PHED 1100, 1102, 1104, 1106, 1111, 1112, 1114, 1115, 1116, 1117, 1118, 1120, 1121, 1123, 1125, 1126, 1127, 1129, 1130, 1131, 1136, 1137, 1140, 1147, 1148, 1338

WORKFORCE AWARDS

Collin College also offers Enhanced Skills Certificates (ESC), Level One and Level Two Certificates (CERT), and Marketable Skills Achievement Awards (MSAA) in an Applied Science field. A Level One Certificate consists of 15-42 credit hours that can be completed in one calendar year or less. Level Two Certificate programs consist of 43-59 credit hours.

Students in all Level Two Certificates must meet the requirements of the Texas Success Initiative. A Marketable Skills Achievement Award (MSAA) is a sequence of credit courses totaling 9-14 credit hours. An Enhanced Skills Certificate (ESC) requires the completion of an AAS or higher degree prior to completing 6-15 additional credit hours in a specific marketable skills area. The Quick Reference section has a concise listing of all awards and programs.

CERTIFICATE PROGRAMS

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

MARKETABLE SKILLS ACHIEVEMENT AWARDS

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

- Animation and Game Art, contact Laura Flores at 972.578.5527
- Child Development, contact Elaine Zweig at 972.881.5967
- Cisco Systems Computer Networking Technology (CCNA), contact Dave Galley at 972.377.1676
- Computer-Aided Drafting and Design, contact Dave Galley at 972.377.1676
- Computer Systems, contact Glen Grimes at 972.578.5520
- Convergence Technology, contact Dave Galley at 972.377.1676
- Digital Video, contact Laura Flores at 972.578.5527
- E-Business Development, contact Elizabeth Pannell at 972.377.1605
- Emergency Medical Services Professions, contact Pat McAuliff at 972.548.6836
- Fire Science, contact Pat McAuliff at 972.548.6836
- Graphic Design and Web, contact Laura Flores at 972.578.5527
- Green Interior and Architectural Design, contact Ali Kholdi at 972.377.1716
- Nursing, contact Donna Hatch at 972.548.6772
- Office Systems Technology, contact Linda Thompson at 972.548.6815
- Photography, Commercial, contact Laura Flores at 972.578.5527
- Respiratory Care, contact Araceli Solis at 972.548.6870

Animation and Game Art

Also see Digital Video

Department Chair:
Laura Flores   SCC-K241   972.578.5527
Academic Advisors:
John Ciccia   CPC-D117G   972.578.5563
Samantha Dean   SCC-G122   972.881.5190

Program Options:
AAS – Animation
        3-D Animation Track
        Game Art Track
Certificate – Animation
        3-D Animation Track
        Game Art Track
MSAA – 3-D Animation

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

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

AAS – Animation
3-D Animation Track
72 credit hours

FIRST YEAR
First Semester
ARTC 1305   Basic Graphic Design
ARTC 1325   Introduction to Computer
                        Graphics
ARTV 1211   Storyboard
ARTV 1345   3-D Modeling and Rendering I -
                        Maya
ENGL 1301   Composition I
FLMC 1301   History of Animation
                        Techniques

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

Third Semester
PHED / DANC   Any 1 credit hour activity
                        course
                        (See PHED/DANC Options)
FLMC 1331   Video Graphics and Visual
                        Effects I

SECOND YEAR
First Semester

ARTS 1301 Art Appreciation
(See Humanities / Fine Arts
Options)
ARTV 1351 Digital Video
ARTV 2345 3-D Modeling and Rendering II
- Maya
MATH 1332 Math for Liberal Arts I
(See Mathematics / Natural
Sciences Options)
SPCH 1311 Introduction to Speech
Communication
(See Speech Options)

OPTION 1 [1]

Second Semester

ARTV 2335 Portfolio Development for
Animation (Capstone)
FLMC 2305 Film-Style 3-D Animation
Production
PSYC 2301 General Psychology
(See Social/Behavioral Sciences
Options)
OPTION 2 [2]
ELECTIVE *

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

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

AAS – Animation
Game Art Track

72 credit hours

FIRST YEAR
First Semester

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

Second Semester

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

Third Semester

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

SECOND YEAR
First Semester

ARTS 1301 Art Appreciation
(See Humanities / Fine Arts
Options)
ARTV 2345 3-D Modeling and Rendering II
- Maya
GAME 1304 Level Design
MATH 1332 Math for Liberal Arts I
(See Mathematics / Natural
Sciences Options)
SPCH 1311 Introduction to Speech
Communication
(See Speech Options)

OPTION 1 [1]

Second Semester

ARTV   2335   Portfolio Development for
                    Animation (Capstone)

GAME 2359   Game and Simulation Group
                    Project

PSYC   2301   General Psychology
                    (See Social/Behavioral Sciences
                    Options)

OPTION 2 [2]
ELECTIVE *

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

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

Certificate – Animation
3-D Animation Track

41 credit hours

FIRST YEAR
First Semester

ARTC   1325   Introduction to Computer
                    Graphics

ARTV   1211   Storyboard

ARTV   1345   3-D Modeling and Rendering I -
                    Maya

Second Semester

ARTC   1302   Digital Imaging I

ARTV   1303   Basic Animation

ARTV   1341   3-D Animation I

GAME 1303   Introduction to Game Design
                    and Development

Third Semester

FLMC   1331   Video Graphics and Visual
                    Effects I

SECOND YEAR
First Semester

ARTV   1351   Digital Video

ARTV   2345   3-D Modeling and Rendering II
                    - Maya

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

Certificate – Animation
Game Art Track

41 credit hours

FIRST YEAR
First Semester

ARTC   1325   Introduction to Computer
                    Graphics

ARTV   1211   Storyboard

ARTV   1345   3-D Modeling and Rendering I -
                    Maya

Second Semester

ARTC   1302   Digital Imaging I

ARTV   1303   Basic Animation

ARTV   1341   3-D Animation I

GAME 1303   Introduction to Game Design
                    and Development

Third Semester

FLMC   1331   Video Graphics and Visual
                    Effects I

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

SECOND YEAR
First Semester
ARTV   2345   3-D Modeling and Rendering II
                - Maya
GAME   1304   Level Design
OPTION 1 [1]

Second Semester
ARTV   2335   Portfolio Development for
                Animation (Capstone)
GAME   2359   Game and Simulation Group
                Project
 OPTION 2 [2]

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

MSAA – 3-D Animation

14 credit hours

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

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

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

Biotechnology

Department Chair:
Daphne Babcock
                SCC-I226   972.578.5518
Faculty Contact:
Bridgette Kirkpatrick
                SCC-I208   972.578.5513
Academic Advisor:
Matthew Gintonio
                SCC-G148   972.377.1771

Program Option:
Certificate – Biotechnology

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

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

Certificate – Biotechnology

27 credit hours

First Semester
BIOL   1406   Biology for Science Majors I
BIOL   1414   Introduction to Biotechnology
BIOL   1415   Introduction to Biotechnology II
CHEM   1411   General Chemistry I

Second Semester
BIOL   2416   Genetics [1]
BITC   2386   Internship - Biology Technician
                / Biotechnology Laboratory
                Technician (Capstone) [2]
BITC   2431   Cell Culture Techniques

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

Business Management

Department Chair:
Christine DeLaTorre, Ph.D.
　　　　　　PRC-J214　　972.548.6637
Academic Advisor:
Yajaira Diaz　　PRC-F132　　972.377.1513

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, organizational psychology, as well as, business strategy development, implementation and evaluation skills. This degree is also excellent for people who wish to major in another field but need business and management skills.

Through transfer agreements, students may earn their Associate of Applied Science (AAS) degree in Business Management from Collin and transfer to numerous universities in Texas where Collin courses may be applied toward Bachelor of Applied Arts and Sciences (BAAS) and Bachelor of Applied Technology (BAT) degrees.

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

AAS – Business Management

60 credit hours

FIRST YEAR
First Semester

BMGT	1307	Team Building
BMGT	1327	Principles of Management
BMGT	1341	Business Ethics
BMGT	2347	Critical Thinking and Problem Solving
MATH	1342	Elementary Statistical Methods [1]

Second Semester

BMGT	1305	Communications in Management
BMGT	1344	Negotiations and Conflict Management
BMGT	2309	Leadership
HRPO	2307	Organizational Behavior
MRKG	1311	Principles of Marketing

SECOND YEAR
First Semester

BMGT	2309	Small Business Management / Entrepreneurship
ENGL	1301	Composition I
HRPO	2301	Human Resources Management
IBUS	2341	Intercultural Management
SPCH	1321	Business and Professional Communication (See Speech Options)

Second Semester

ACNT	1303	Introduction to Accounting I [2]
BMGT	2311	Change Management
BMGT	2341	Strategic Management [3] (Capstone)
ECON	1301	Introduction to Economics [4]
HUMA	1301	Introduction to Humanities I (See Humanities / Fine Arts Options)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

1. May substitute MATH-1314, MATH-1316,
   MATH-1324, MATH-1325, MATH-1332,
   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 ACCT-2301
3. May substitute BMGT-2382 with written approval of
   the Department Chair
4. May substitute ECON-2301, ECON-2302 or
   PSYC-2301

Certificate – Business Management

18 credit hours

First Semester

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

Second Semester

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

Child Development

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

Department Chair:
Elaine Zweig, Ph.D.
SCC-D111   972.881.5967
Academic Advisor:
Nadia Khedairy   SCC-G147   469.365.1816

Program Options:
AAS - Child Development
Certificate - Child Development
Certificate - Child Development Associate
MSAA - Child Development Administration of
         Programs for Children
MSAA - Child Development Associate
Training

Collin's Child Development program has received accreditation from the National Association for the Education of Young Children (NAEYC). It is the only program in Texas to have NAEYC accreditation and to also hold Exemplary Status with the Texas Higher Education Coordinating Board. The Child Development degree and certificate programs are designed to prepare individuals for entry-level positions working with young children and their families. The coursework can also be applicable as in-service training for teachers, administrators, nannies, and family day home providers. A developmental approach is emphasized which promotes optimal physical, social, emotional, and cognitive growth of children. Students learn management skills that allow them to provide quality programs in safe, nurturing environments.

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

Students planning to transfer to a college or university should check with the Collin academic advisor prior to beginning this program. Students who wish to obtain a bachelor's degree in Child Development should know that Texas Woman's University (TWU) accepts Collin College's AAS in Child Development and need to check with an advisor at TWU.

Note 1: TECA is the prefix for transfer courses.

Note 2: All CDEC and TECA courses, except TECA-1354, require the student to complete a weekly one-hour lab component.

Program Requirements
To participate in the Child Development Lab School and receive credit for the lab component of courses, the following requirements must be met:
1. Enroll in a Collin child development course.
2. Within the first week of the first child development course, students must complete a mandatory child development-early childhood-education orientation and provide paperwork necessary to begin class, including, but not limited to, a copy of acceptable tuberculosis test results. Continuing students must submit acceptable tuberculosis results every year.
3. Complete and sign a student record form as a contract to ensure the following:
   - Verification that the student has read and agrees to abide by the Texas Minimum Standards for child care centers
   - Verification that the student has read and agrees to follow the laboratory student guidelines
   - Information provided to a criminal history check by the Texas Department of Protective and Regulatory Services
   - Provide a notarized affidavit that confidentiality and professional discretion will be observed at all times
   - Personal release for videotaping for instructional purposes

College records should always contain current personal information. It is the student's responsibility to keep this information current.

AAS – Child Development
60 credit hours

FIRST YEAR
First Semester

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

Second Semester

CDEC	1370	Introduction to Teaching ESL
EDUC	1200	Learning Frameworks
PSYC	2301	General Psychology (See Social / Behavioral Science Options)
SPCH	1311	Introduction to Speech Communication (See Speech Options)
TECA	1303	Families, School, and Community

SECOND YEAR
First Semester

CDEC	1313	Curriculum Resources for Early Childhood Programs
CDEC	1359	Children with Special Needs
CDEC	2304	Child Abuse and Neglect
CDEC	2371	Using Technology in the Classroom
TECA	1318	Wellness of the Young Child
ELECTIVE *		

Second Semester

CDEC	1358	Creative Arts for Early Childhood
CDEC	2166	Practicum - Child Care Provider / Assistant (Capstone)
HUMA	1301	Introduction to Humanities I (See Humanities / Fine Arts Options)
MATH	1314	College Algebra (See Mathematics / Natural Sciences Options)
ELECTIVE *		

*   *Electives (6 credit hours): CDEC-1317, CDEC-1321, CDEC-2307, CDEC-2322, CDEC-2324, CDEC-2326, CDEC-2328, CDEC-2336, CDEC-2340 or CDEC-2385*

Certificate – Child Development

28 credit hours

FIRST YEAR

First Semester

CDEC	1313	Curriculum Resources for Early Childhood Programs
CDEC	1323	Observation and Assessment
TECA	1311	Educating Young Children
TECA	1318	Wellness of the Young Child
TECA	1354	Child Growth and Development

Second Semester

CDEC	1319	Child Guidance
CDEC	1359	Children with Special Needs
CDEC	1370	Introduction to Teaching ESL
CDEC	2166	Practicum - Child Care Provider / Assistant (Capstone)
TECA	1303	Families, School, and Community

Certificate – Child Development Associate

16 credit hours

First Semester

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

MSAA – Child Development Administration of Programs for Children

9 credit hours

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

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

MSAA – Child Development Associate Training

9 credit hours

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

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

Child Development / Early Childhood

Also see, Child Development and Associate of Arts in Teaching (AAT)

Department Chair:
Elaine Zweig, Ph.D.
          SCC-D111   972.881.5967
Academic Advisor:
Nadia Khedairy SCC-G147   469.365.1816

Program Options:
Certificate - Early Childhood Educator
Certificate - Infant and Toddler Educator

Collin's Child Development-Early Childhood program has received accreditation from the National Association for the Education of Young Children (NAEYC). It is the only program in Texas to have NAEYC accreditation and to also hold Exemplary Status with the Texas Higher Education Coordinating Board. The Child Development A.A.S. degree and child development and child development-early childhood certificate programs are designed to prepare individuals for entry-level and administrative positions working with young children and their families. The coursework can also be applicable as in-service training for teachers, administrators, nannies, family day home providers and information for parents. A developmental approach is emphasized which promotes optimal physical, social, emotional, and cognitive growth of children. Students learn management skills that allow them to provide quality programs in safe, nurturing environments.

Students planning to transfer to a college or university should check with the Collin academic advisor prior to beginning this program and may need to look into the A.A.T. degree.

Note 1: TECA is the prefix for transfer courses.

Note 2: All CDEC and TECA courses, except TECA-1354, require the student to complete a weekly one-hour lab component.

Program Requirements
To participate in the Child Development Lab School and receive credit for the lab component of courses, the following requirements must be met:
1. Enroll in a Collin child development course.
2. Within the first week of the first child development course, students must complete a mandatory child development-early childhood-education orientation, and provide paperwork necessary to begin class, including, but not limited to, a copy of acceptable tuberculosis test results. Continuing students must submit acceptable tuberculosis results every year.
3. Complete and sign a student record form as a contract to ensure the following:
   - Verification that the student has read and agrees to abide by the Texas Minimum Standards for child care centers
   - Verification that the student has read and agrees to follow the laboratory student guidelines

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

- Information provided to a criminal history check by the Texas Department of Protective and Regulatory Services
- Provide a notarized affidavit that confidentiality and professional discretion will be observed at all times
- Personal release for videotaping for instructional purposes

Our records should always contain current personal information. It is the student's responsibility to keep this information current.

Certificate – Early Childhood Educator

(This certificate covers Special Education from Infancy through the School-Age child)
28 credit hours

First Semester

CDEC	1319	Child Guidance
CDEC	1323	Observation and Assessment
CDEC	1359	Children with Special Needs
TECA	1311	Educating Young Children
TECA	1354	Child Growth and Development

Second Semester

CDEC	2166	Practicum - Child Care Provider / Assistant (Capstone)
CDEC	2304	Child Abuse and Neglect
CDEC	2340	Instructional Techniques for Children with Special Needs
TECA	1303	Families, School, and Community
TECA	1318	Wellness of the Young Child

Certificate – Infant and Toddler Educator

25 credit hours

First Semester

CDEC	1321	The Infant and Toddler
CDEC	1323	Observation and Assessment
CDEC	2304	Child Abuse and Neglect
TECA	1303	Families, School, and Community
TECA	1311	Educating Young Children

Second Semester

CDEC	1359	Children with Special Needs
CDEC	2166	Practicum - Child Care Provider / Assistant (Capstone)
TECA	1318	Wellness of the Young Child
TECA	1354	Child Growth and Development

Cisco Systems Computer Networking Technology

Program Director:
Dave Galley   PRC-H213   972.377.1676
Academic Advisor:
Catherine Smith PRC-F134   972.377.1780

Program Options:
AAS – Cisco Systems Computer Networking Technology
Certificate – Advanced Cisco Systems Computer Networking Technology (CCNP)
MSAA – Cisco Systems Computer Networking Technology (CCNA)

The **Cisco Systems** Computer Networking Technology program prepares graduates who will be able to design and install secure network systems based on customer requirements, monitor and maintain network traffic and security, and maintain network hardware and software on **Cisco Networks professionally**. Courses and hands-on

labs in this program will assist the graduate in preparing to take a variety of Cisco, Microsoft, and CompTIA certification examinations. **This program specifically prepares students to take the Cisco Certified Network Associate (CCNA) certification exam and the Cisco Certified Network Professional (CCNP) certification exam.**

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

AAS – Cisco Systems Computer Networking Technology

60 credit hours

FIRST YEAR
First Semester

ITCC	1371	CCNA 1 Cisco - Introduction to Networks
ITCC	1374	CCNA 2 - Routing and Switching Essentials
ITMT	2301	Windows Server 2008 Network Infrastructure Configuration
ITNW	1358	Network +
MATH	1314	College Algebra [1]

Second Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ENGL	1301	Composition I
ITCC	2371	CCNA 3 - Scaling Networks
ITCC	2372	CCNA 4 - Connecting Networks
ITMT	2351	Windows Server 2008: Server Administrator

Summer

ECON	1301	Introduction to Economics (See other Social / Behavioral Sciences Options)
ITCC	2354	CCNP Routing - Implementing IP Routing

SECOND YEAR
First Semester

HUMA	1301	Introduction to Humanities I (See other Humanities / Fine Arts Options)
ITCC	2355	CCNP Switch - Implementing IP Switching
ITCC	2370	Cisco CCNA Security
ITSY	2300	Operating System Security

Second Semester

ITCC	2356	CCNP TSHOOT - Maintaining and Troubleshooting IP Networks
ITNW	2374	Advanced Computer Networking Case Study (Capstone)
SPCH	1311	Introduction to Speech Communication (See other Speech Options)

ELECTIVE*

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

* *Elective (3-5 credit hours): ITNW-2373 (Recommended), ITSY-2301, ITSY-2341, ITSY-2342, ITSY-2343, or ITSY-2572*

Note: Many ITCC, ITMT, ITNW (except ITNW- 2374), and ITSY courses are offered in eight-week sessions

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Certificate – Advanced Cisco Systems Computer Networking Technology (CCNP)

24 credit hours

FIRST YEAR
First Semester
ITCC	1371	CCNA 1 Cisco - Introduction to Networks
ITCC	1374	CCNA 2 - Routing and Switching Essentials

Second Semester
ITCC	2371	CCNA 3 - Scaling Networks
ITCC	2372	CCNA 4 - Connecting Networks

SECOND YEAR
First Semester
ITCC	2354	CCNP Routing - Implementing IP Routing
ITCC	2355	CCNP Switch - Implementing IP Switching

Second Semester
ITCC	2356	CCNP TSHOOT - Maintaining and Troubleshooting IP Networks (Capstone)

ELECTIVE *

*   Elective (3 credit hours):ITCC-2370, ITNW-2373 or ITNW-2374*

Note: Many ITCC, ITMT, ITNW (except ITNW-2374), and ITSY courses are offered in eight-week sessions

MSAA – Cisco Systems Computer Networking Technology (CCNA)

12 credit hours

ITCC	1371	CCNA 1 Cisco - Introduction to Networks
ITCC	1374	CCNA 2 - Routing and Switching Essentials
ITCC	2371	CCNA 3 - Scaling Networks
ITCC	2372	CCNA 4 - Connecting Networks

Note 1: Many ITCC, ITMT, ITNW (except ITNW-2374), and ITSY courses are offered in eight-week sessions

Note 2: Some of the courses in this award program may require prerequisites. Please check the course descriptions.

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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

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

AAS – Computer-Aided Drafting and Design

62 credit hours

FIRST YEAR
First Semester

DFTG	1305	Technical Drafting
DFTG	1309	Basic Computer-Aided Drafting
ENGL	1301	Composition I
MATH	1314	College Algebra [1]
SPCH	1311	Introduction to Speech Communication (See other Speech Options)

Second Semester

CETT	1303	DC Circuits
DFTG	2319	Intermediate Computer-Aided Drafting
DFTG	2328	Architectural Drafting - Commercial
MATH	1316	Plane Trigonometry

Summer

| DFTG | 1333 | Mechanical Drafting |

SECOND YEAR
First Semester

DFTG	2332	Advanced Computer-Aided Drafting
ECON	1301	Introduction to Economics (See other Social / Behavioral Sciences Options)
HUMA	1301	Introduction to Humanities I (See other Humanities / Fine Arts Options)
PHYS	1401	College Physics I
ELECTIVE*		

Second Semester

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

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

* *Electives (6 credit hours): ARCE-1352, ARCE-2352, BUSI-1301, DFTG-1317, DFTG-1345, DFTG-1371, DFTG-2300, DFTG-2312, DFTG-2321, DFTG-2335, DFTG-2381, or ENGL-2311*

Certificate – Computer-Aided Drafting and Design

30 credit hours

FIRST YEAR

DFTG 1305 Technical Drafting
DFTG 1309 Basic Computer-Aided Drafting

Second Semester

DFTG 2319 Intermediate Computer-Aided Drafting

SECOND YEAR
First Semester

DFTG 2332 Advanced Computer-Aided Drafting

ELECTIVE*
ELECTIVE*

Second Semester

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

ELECTIVE *
ELECTIVE *

* Electives (12 credit hours): ARCE-1352, ARCE-2352, DFTG-1317, DFTG-1333, DFTG-1345, DFTG-2300, DFTG-2321, DFTG-2335, DFTG-2350, or DFTG-2381

Certificate – Mechanical Computer-Aided Drafting and Design

30 credit hours

FIRST YEAR
First Semester

DFTG 1305 Technical Drafting
DFTG 1309 Basic Computer-Aided Drafting

Second Semester

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

Summer

DFTG 1333 Mechanical Drafting

SECOND YEAR
First Semester

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

ELECTIVE *

Second Semester

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

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

Enhanced Skills Certificate – CADD

9 credit hours

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

First Semester
DFTG   1345   Parametric Modeling and
                        Design
DFTG   1333   Mechanical Drafting
ELECTIVE*

*   *Elective (3 credit hours): Any ARCE, DFTG, ENGR, or ENTC course not listed above*

MSAA – AutoCAD

12 credit hours

This program prepares students to design and draft in 2 dimensions and 3 dimensions. Also, students will be taught how to customize AutoCAD to enhance productivity.

Prerequisite: Basic computer skills. Having working knowledge of geometry will be a plus for students.

FIRST YEAR
First Semester
DFTG   1309   Basic Computer-Aided Drafting

Second Semester
DFTG   2319   Intermediate Computer-Aided
                        Drafting

SECOND YEAR
First Semester
DFTG   2332   Advanced Computer-Aided
                        Drafting

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

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

Computer Networking Technology

Program Director:
Dave Galley   PRC-H213   972.377.1676
Academic Advisor:
Catherine Smith   PRC-F134   972.377.1780

Program Options:
AAS – Computer Networking Technology
**Certificate – Computer Networking
            Technology Software (MCITP
            Server Administrator)**
**Certificate – Computer Networking
            Technology Advanced Software
            (MCITP Enterprise
            Administrator)**

The Computer Networking Technology program prepares graduates who will be able to design and install secure network systems based on customer requirements, monitor and maintain network traffic and security, and maintain network hardware and software. Courses and hands-on labs in this program will assist the graduate in preparing to take a variety of Cisco, Microsoft, and CompTIA certification examinations.

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

AAS – Computer Networking Technology

60 credit hours

FIRST YEAR
First Semester

ENGL	1301	Composition I
ITMT	1370	Configuring and Supporting Microsoft Windows 7
ITMT	2301	Windows Server 2008 Network Infrastructure Configuration
ITNW	1358	Network +
MATH	1314	College Algebra [1]

Second Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ITCC	1371	CCNA 1 Cisco - Introduction to Networks
ITMT	2351	Windows Server 2008: Server Administrator
ITSC	1316	Linux Installation and Configuration

Summer

ECON	1301	Introduction to Economics (See other Social / Behavioral Science Options)
ITCC	1374	CCNA 2 - Routing and Switching Essentials

SECOND YEAR
First Semester

ITSY	2300	Operating System Security
SPCH	1311	Introduction to Speech Communication (See other Speech Options)
ELECTIVE *		
ELECTIVE *		

Second Semester

HUMA	1301	Introduction to Humanities I (See other Humanities / Fine Arts Options)
ITMT	2302	Windows Server 2008 Active Directory Configuration (Capstone)
ITMT	2322	Windows Server 2008 Applications Infrastructure Configuration
ITMT	2356	Windows Server 2008: Enterprise Administrator
ELECTIVE *		

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

* *Electives (9 credit hours): Any ITCC, ITMT, ITNW, or ITSY course not listed above with consent of Program Director*

Note: Many ITCC, ITMT, ITNW (except ITNW-2374), and ITSY courses are offered in eight-week express sessions.

Certificate – Computer Networking Technology Software (MCITP Server Administrator)

15 credit hours

FIRST YEAR
First Semester

ITMT	1370	Configuring and Supporting Microsoft Windows 7
ITMT	2301	Windows Server 2008 Network Infrastructure Configuration
ITNW	1358	Network +

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Second Semester

| ITMT | 2302 | Windows Server 2008 Active Directory Configuration (Capstone) |
| ITMT | 2351 | Windows Server 2008: Server Administrator |

Note: Many ITCC, ITMT, ITNW (except ITNW-2374), and ITSY courses are offered in eight-week express sessions.

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

21 credit hours

First Semester

ITMT	1370	Configuring and Supporting Microsoft Windows 7
ITMT	2301	Windows Server 2008 Network Infrastructure Configuration
ITNW	1358	Network+

Second Semester

ITMT	2302	Windows Server 2008 Active Directory Configuration
ITMT	2322	Windows Server 2008 Applications Infrastructure Configuration (Capstone)
ITMT	2356	Windows Server 2008: Enterprise Administrator
ELECTIVE *		

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

Note: Many ITCC, ITMT, ITNW (except ITNW-2374), and ITSY courses are offered in eight-week express sessions.

Computer Systems

Department Chair:
Glen Grimes   SCC-J127   972.578.5520
Academic Advisor
Tiffany Goertz   PRC-F131   972.881.5165

Program Options:
AAS – Computer Systems
  Computer Support Track
  Database Development Track
  Information System Track
  C++ Software Development Track
  Java Software Development Track
Certificate – Computer Systems
  Computer Support Track
  Database Development Track
  Information System Track
Certificate – Software Design
  C++ Track
  Java Track
MSAA – Computer Applications
MSAA – Database Applications

Computer Systems is an exciting field that presents many opportunities for a student who is proficient in both applications and software development. The rapid spread of computers and information technology has generated a need for highly trained workers to design and develop new information systems that use these technologies to meet the needs of the business organization. The skills acquired in this program will enable the student to solve problems that are encountered when working in this ever-changing and growing field. These skills include planning and developing new computer systems while applying the resources of existing systems to additional operations.

Many career opportunities are available in the software development area. The computer programming specializations in this AAS degree along with the certifications enable students to update their skill sets to keep up with the latest technical competencies in computer programming

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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
60 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
CPMT	1305	IT Essentials I: PC Hardware and Software
ENGL	2311	Technical and Business Writing
ITNW	1358	Network+
ITSC	1305	Introduction to PC Operating Systems
ITSW	1304	Introduction to Spreadsheets – Excel

SECOND YEAR
First Semester
ECON	1301	Introduction to Economics [3]
HUMA	1301	Introduction to Humanities I (See other Humanities / Fine Arts Options)
IMED	1301	Introduction to Digital Media
ITSY	1300	Fundamentals of Information Security (Security+)
SPCH	1311	Introduction to Speech Communication (See other Speech Options)

Second Semester
BMGT	1307	Team Building [4]
ITSC	2339	Personal Computer Help Desk Support (Capstone) [5]
ITSE	1301	Web Design Tools – Graphics [6]
ITSE	2313	Web Authoring – Dreamweaver [7]
GENERAL ELECTIVE *		

1. *May substitute ITSE-1332*
2. *May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419*
3. *May substitute ECON-2301, ECON-230 or, PSYC-2301*
4. *May substitute BMGT-1344*
5. *May substitute ITSC-2380*
6. *May substitute GRPH-1359 or IMED-1345*
7. *May substitute GISC-1411*

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

AAS – Computer Systems Database Development Track

60 credit hours

FIRST YEAR
First Semester

ENGL	1301	Composition I
ITSE	1311	Beginning Web Programming
ITSE	1332	Introduction to Visual Basic .NET Programming
ITSW	1307	Introduction to Database – Access
MATH	1314	College Algebra [1]

Second Semester

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

SECOND YEAR
First Semester

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

Second Semester

BMGT	1307	Team Building [3]
IMED	1341	Interface Design [4]
IMED	2309	Internet Commerce
INEW	2330	Comprehensive Software Project: Planning and Design (Capstone) [5]
ITSE	1393	Special Topics in Computer Systems Analysis

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

AAS – Computer Systems Information System Track

61 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	1411	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 Humanities I (See other Humanities / Fine Arts Options)
ITSE	1332	Introduction to Visual Basic .NET Programming [5]
SPCH	1311	Introduction to Speech Communication (See other Speech Options)

Second Semester

BCIS	2390	Systems Analysis and Design (Capstone) [6]
BMGT	1344	Negotiations and Conflict Management [7]
ITSC	1305	Introduction to PC Operating Systems [8]
ITSE	2309	Database Programming – SQL [9]
ITSY	1300	Fundamentals of Information Security (Security +)

1. *May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419*
2. *May substitute COSC-1436*
3. *May substitute BMGT-1341 or BUSI-1301*
4. *May substitute ECON-2301, ECON-2302 or PSYC-2301*
5. *May substitute ITSE-1330, COSC-1337, or ITSE-1347*
6. *May substitute INEW-2330 or ITSC-2380*
7. *May substitute BMGT-1327*
8. *May substitute CPMT-1305*
9. *May substitute ITSE-1356*

AAS – Computer Systems C++ Software Development Track

62 credit hours

FIRST YEAR
First Semester

COSC	1436	Programming Fundamentals I (C++)
ENGL	1301	Composition I
ITSE	1311	Beginning Web Programming
ITSW	1307	Introduction to Database – Access
MATH	1314	College Algebra [1]

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Second Semester

BMGT	1307	Team Building [2]
COSC	1437	Programming Fundamentals II (C++)
COSC	2325	Computer Organization
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 Humanities I (See other Humanities / Fine Arts Options)
ITSE	1330	Introduction to C# Programming [4]
SPCH	1311	Introduction to Speech Communication (See other Speech Options)

Second Semester

INEW	2330	Comprehensive Software Project: Planning and Design (Capstone) [5]
INEW	2340	Object-Oriented Design
TECHNICAL ELECTIVE *		
TECHNICAL ELECTIVE *		
TECHNICAL ELECTIVE *		

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

2. May substitute BMGT-1327, BMGT-1341, BMGT-1344, BUSG-2309, or BUSI-1301

3. May substitute ECON-2301, ECON-2302 or PSYC-2301

4. May substitute ITSE-1371 or ITSE-1372

5. May substitute ITSC-2380

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

AAS – Computer Systems Java Software Development Track

62 credit hours

FIRST YEAR

First Semester

COSC	1436	Programming Fundamentals I (C++) [1]
ENGL	1301	Composition I
ITSE	1311	Beginning Web Programming
ITSW	1307	Introduction to Database – Access
MATH	1314	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)
ECON	1301	Introduction to Economics [4]
HUMA	1301	Introduction to Humanities I (See other Humanities / Fine Arts Options)
ITSE	1330	Introduction to C# Programming [5]
SPCH	1311	Introduction to Speech Communication (See other Speech Options)

Second Semester

INEW	2330	Comprehensive Software Project: Planning and Design (Capstone) [6]
INEW	2338	Advanced Java Programming
INEW	2340	Object-Oriented Design
TECHNICAL ELECTIVE *		
TECHNICAL ELECTIVE *		

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

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

Certificate – Computer Systems Computer Support Track

21 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

Second Semester

CPMT	1305	IT Essentials I: PC Hardware and Software [3]
ITSC	2339	Personal Computer Help Desk Support (Capstone) [4]
ITSY	1300	Fundamentals of Information Security (Security+)

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

Certificate – Computer Systems Database Development Track

21 credit hours

Summer Semester

ITSE	1332	Introduction to Visual Basic .NET Programming

First Semester

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

Second Semester

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

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

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 (Capstone) [3]

BMGT 1307 Team Building [4]

ITSC 1305 Introduction to PC Operating Systems [5]

1. May substitute COSC-1315 or ITSE-1332
2. May substitute COSC-1436 or ITSE-1332. May substitute COSC-1337, COSC-1437, ITSE-1330, or ITSE-1347 with consent of Department Chair.
3. May substitute ITSC-2380
4. May substitute BMGT-1327, BMGT-1341, BMGT-1344, BUSG-2309, or BUSI-1301
5. May substitute CPMT-1305 or ITSY-1300

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

TECHNICAL ELECTIVE *

Second Semester

COSC 2336 Programming Fundamentals III (C++)

INEW 2340 Object-Oriented Design

Summer Semester

INEW 2330 Comprehensive Software Project: Planning and Design (Capstone) [1]

TECHNICAL ELECTIVE *

TECHNICAL ELECTIVE *

1. May substitute ITSC-2380

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

Certificate – Software Design Java Track

28 credit hours

Summer Semester

COSC 1315 Fundamentals of Programming [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 (Capstone) [2]

TECHNICAL ELECTIVE *

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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

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

MSAA – Computer Applications

9 credit hours

BCIS	1305	Business 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   PRC-H213   972.377.1676
Faculty Advisor:
Pete Brierley   PRC-H230E   972.377.1686
Academic Advisor:
Catherine Smith   PRC-F134   972.377.1780
Convergence Technology Center Website:
www.convergencetechnologycenter.org

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.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

With curriculum designed by industry area experts and taught by experienced professionals, the Convergence Technology program at Collin gives students extensive hands-on training and prepares students for the workforce and for professional certification exams including CCNA, MCSA, A+, Network +, Security +, Linux +, HTI+, and others.

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

AAS – Convergence Technology

60 credit hours

FIRST YEAR
First Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ITCC	1371	CCNA 1 Cisco - Introduction to Networks
ITCC	1374	CCNA 2 - Routing and Switching Essentials
ITNW	1370	Cloud+ Computing Fundamentals
MATH	1314	College Algebra [1]

Second Semester

ENGL	1301	Composition I
ITMT	1370	Configuring and Supporting Microsoft Windows 7
ITMT	2351	Windows Server 2008: Server Administrator
ELECTIVE*		
ELECTIVE*		

SECOND YEAR
First Semester

ECON	1301	Introduction to Economics (See other Social / Behavioral Sciences Options)
EECT	2337	Wireless Telephony Systems
ITMT	2301	Windows Server 2008 Network Infrastructure Configuration
ITSY	2300	Operating System Security
SPCH	1321	Business and Professional Communication (See other Speech Options)

Second Semester

HUMA	1301	Introduction to Humanities I (Other Humanities / Fine Arts Options)
ITNW	2373	Information Storage Management (EMC)
ITNW	2374	Advanced Computer Networking Case Study (Capstone) [2]
ITNW	2375	VMWare vSphere: Installation, Configuration and Management
ITSC	1316	Linux Installation and Configuration

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): EECT 1371 (recommended), ITCC 2371 (recommended in combination with ITCC 2372), ITCC 2372, ITMT 2302 (recommended), EECT 1348, ITSY 1300 (recommended), or any ITSY course, or one of the following Cooperative Education courses: EECT 2380 (with consent of Program Director), or ITNW 2380 (with consent of Program Director)*

Note: *Many CPMT, EECT, ITCC, ITMT, ITNW (except ITNW-2374), and ITSY courses are offered in eight-week express sessions.*

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Certificate – Convergence Technology

30 credit hours

FIRST YEAR
First Semester

ITCC	1371	CCNA 1 Cisco - Introduction to Networks
ITCC	1374	CCNA 2 - Routing and Switching Essentials
ITMT	1370	Configuring and Supporting Microsoft Windows 7
ITMT	2301	Windows Server 2008 Network Infrastructure Configuration
ITNW	1370	Cloud+ Computing Fundamentals

Second Semester

EECT	2337	Wireless Telephony Systems (Capstone)
ITNW	2373	Information Storage Management (EMC)
ITNW	2375	VMWare vSphere: Installation, Configuration and Management
ELECTIVE *		
ELECTIVE*		

*   *Electives (6 credit hours): EECT 1371 (recommended), ITCC 2371 (recommended in combination with ITCC 2372), ITCC 2372, ITMT 2302 (recommended), EECT 1348, ITSY 1300 (recommended), or any ITSY course, or one of the following Cooperative Education courses: EECT 2380 (with consent of Program Director), or ITNW 2380 (with consent of Program Director)*

Note: Many CPMT, EECT, ITCC, ITMT, ITNW (except ITNW-2374), and ITSY courses are offered in eight-week express sessions.

Culinary Arts

Also see, Pastry Arts

Department Chair:
Karen Musa   PRC-L229   972.377.1672
Academic Advisor:
Yajaira Diaz   PRC-F132   972.377.1513

Program Options:
AAS – Culinary Arts
Certificate – Culinary Arts

Students completing the Culinary Arts program at Collin College will be qualified for a variety of hands-on food preparation positions and career advancement in the food service industry. The food service industry is the largest private sector employer in the United States. The curriculum at Collin College emphasizes a broad selection of hands-on food preparation courses, building on culinary foundation skills that will allow the student to be effective in a commercial kitchen environment. Collin College's culinary career education offers classes in the daytime and in the evening. The curriculum is designed by industry experts and taught by experienced food service management professionals. The degree program offers an Associate of Applied Science in Culinary Arts. A Certificate in Culinary Arts is also available.

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

ACCREDITATION
The Culinary Arts Program is fully accredited by the American Culinary Federation Education Foundation. They may be contacted at:
180 Center Place Way
St. Augistine, FL 32095
800.624.9458
www.acfchefs.org

ADMISSION REQUIREMENTS

Students are required to attend mandatory Culinary Arts Orientation. Please contact program chair for dates and times.

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

AAS – Culinary Arts

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

FIRST YEAR
First Semester

CHEF	1301	Basic Food Preparation
CHEF	1305	Sanitation and Safety [1, 2]
CHEF	2331	Advanced Food Preparation
ENGL	1301	Composition I
HAMG	1321	Introduction to Hospitality Industry

Second Semester

CHEF	1341	American Regional Cuisine
CHEF	1345	International Cuisine
HUMA	1301	Introduction to Humanities I (See Humanities / Fine Arts Options)
IFWA	1310	Nutrition and Menu Planning
RSTO	1325	Purchasing for Hospitality Operations

Third Semester

| HAMG | 1319 | Computers in Hospitality |
| MATH | 1332 | Math for Liberal Arts I [3] |

SECOND YEAR
First Semester

CHEF	1310	Garde Manger
ECON	1301	Introduction to Economics (See Social / Behavioral Sciences Options)
HAMG	1324	Hospitality Human Resources Management
PSTR	1301	Fundamentals of Baking

Second Semester

CHEF	1314	A La Carte Cooking (Capstone)
CHEF	2380	Cooperative Education – Culinary Arts / Chef Training
RSTO	1304	Dining Room Service
SPCH	1321	Business and Professional Communication (See Speech Options)

1   Certification in ServSafe
2. Certification in Food Protection Management
3. May substitute MATH-1314 (recommended for transfer students), MATH-1316, MATH-1324, MATH-1325,   MATH-1342, MATH-1350, MATH-1351, MATH 1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH-2419

Certificate – Culinary Arts

24 credit hours

FIRST YEAR
First Semester

CHEF	1301	Basic Food Preparation
CHEF	1305	Sanitation and Safety [1, 2]
IFWA	1310	Nutrition and Menu Planning
PSTR	1301	Fundamentals of Baking

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Second Semester

CHEF	1310	Garde Manger (Capstone)
CHEF	1341	American Regional Cuisine
CHEF	1345	International Cuisine
CHEF	2331	Advanced Food Preparation

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

Dental Hygiene

Program Director:

Susan Moss	CPC-A120	972.548.6535

Academic Advisor:

Lisa Gibbs	CPC-D117F	972.548.6778

Program Options:
AAS - Dental Hygienist

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

Dental Hygiene is a two-year program that begins during the fall semester each year. Classes are scheduled at the Central Park Campus in McKinney. Enrollment is limited, and admission to the program is competitive. Courses listed in the curriculum must be taken in sequence to assure progression in content from simple to complex. Clinical students are required to submit a physical, dental and visual acuity report on an annual basis.

Dental Hygiene students must meet eligibility requirements for licensure as established by the State Board of Dental Examiners (www.tsbde.state.tx.us) 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 Commission on Dental Accreditation (CODA) and has been granted the accreditation status of approval without reporting requirements. The council is a specialized accrediting body recognized by the Department of Education.

SPECIAL ADMISSION REQUIREMENTS
Admission to this program is selective. Admission to the college does not guarantee admission to the Dental Hygiene Program. Registration is by permission only. Information and applications may be obtained from the Dental Hygiene Program Director or dental hygiene website at http://www.collin.edu/dentalhygiene/ .
- Provide proof of high school graduation or GED
- Earn a GPA of 2.5 or greater on all courses applicable to the Dental Hygiene program
- Submit official copies of all college transcripts
- Complete pre-entrance course requirements with a minimum GPA of 2.5

- Complete the PSB exam with a satisfactory result
- Completion of immunizations required by the Texas Department of State Health Services (TDSHS) *.
- Submit a handwritten, one- to two-page essay that discusses why dental hygiene has been selected as a profession
- Submit two reference forms: one from an employer and one from an educator

It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Director. In such cases the applicant must sign a declination form. All immunizations must be complete before the first clinical visit.

Health Insurance – *All Dental Hygiene students are required to show proof of health insurance prior to starting clinical rotations each semester.*

AAS – Dental Hygienist
72 credit hours

PRE-ENTRANCE REQUIREMENTS

BIOL	2401	Anatomy and Physiology I [1]
BIOL	2402	Anatomy and Physiology II [1]
CHEM	1405	Introduction to Chemistry I

FIRST YEAR
First Semester

BIOL	2420	Microbiology for Non-Science Majors
DHYG	1301	Orofacial Anatomy, Histology and Embryology
DHYG	1304	Dental Radiology
DHYG	1331	Preclinical Dental Hygiene
ENGL	1301	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
PSYC	2301	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 Humanities I (See Humanities / Fine Arts Options)
SOCI	1301	Introduction to Sociology

1. No course substitutions
Note: The communication competency is met throughout the degree.

Digital Video

Also see Animation and Game Art

Department Chair:
Laura Flores   SCC-K241   972.578.5527
Academic Advisors:
John Ciccia   CPC-D117G   972.578.5563
Samantha Dean   SCC-G122   972.881.5190

Program Options:
AAS – Digital Video
Certificate – Digital Video
MSAA – Digital Video

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

Digital Video focuses on developing the concept, design and production skills necessary for creating digital video content in any delivery format. Students will learn scriptwriting, storyboarding, video production with cameras, audio and lighting as well as nonlinear editing using industry-standard tools and techniques.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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	Introduction to Cinema
ENGL	1301	Composition I

Second Semester

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

Third Semester

ARTS	1316	Drawing I
MATH	1332	Math for Liberal Arts I (See Mathematics / Natural Sciences Options)
RTVB	1329	Scriptwriting

SECOND YEAR
First Semester

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

Second Semester

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

ELECTIVE *

1. *May substitute ARTS-2356 or PHTC-1311*

* *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	Introduction to Cinema

Second Semester

ARTC	1302	Digital Imaging I
ARTV	1351	Digital Video
FLMC	1331	Video Graphics and Visual Effects I
RTVB	1329	Scriptwriting

SECOND YEAR
First Semester
ARTV 1303   Basic Animation
ARTV 2341   Advanced Digital Video
FLMC 1304   Lighting for Film or Video
MUSC 2351   Audio for Video

Second Semester
ARTV 2335   Portfolio Development for
              Animation (Capstone)

1. May substitute ARTS-2356 or PHTC-1311

MSAA – Digital Video

14 credit hours

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

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

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

E-Business Development

Department Chair:
Glen Grimes   SCC-J127   972.578.5520
Faculty Contact:
Elizabeth Pannell
                PRC-H111   972.377.1605
Academic Advisor:
Tiffany Goertz   PRC-F131   972.881.5165

Program Options:
AAS – E-Business Development
 Media Track
 Web Development Track
 Android Mobile Development Track
 iOS Mobile Development Track
 Windows Mobile Development Track
 C# .NET Development Track
 Visual Basic .NET Development Track
Certificate – E-Business Development
 Media Track
 E-Commerce Track
 Android Mobile Development Track
 iOS Mobile Development Track
 Windows Mobile Development Track
 C# .NET Development Track
 Visual Basic .NET Development Track
Certificate – Web Development
MSAA – Interactive Web Programming
MSAA – Studio
MSAA – Web Commerce

With the global impact of web and mobile
technologies, interactive web and mobile
technology professionals are in demand. The E-
Business Development Program prepares students
for this role, teaching them to create websites and
applications for the distribution of information,
web-based tutorials, business presence, and e-
commerce.

This degree program offers tracks in e-business
media, web development, mobile development
and .NET development. Areas of study include
web-based multimedia, web authoring, Internet
commerce, web-based applications, mobile-based

applications and business .NET applications. The degree can provide a broad business background and professional skills needed to succeed in a career in e-business.

Two certificates are also offered, which can be applied toward the AAS degree. The certificates provide the knowledge to update current job requirements. After successfully completing a certificate, students may continue to work toward an AAS degree in E-Business Development.

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

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

AAS – E-Business Development Media Track

60 credit hours

FIRST YEAR
First Semester

BCIS	1305	Business Computer Applications[1]
ENGL	1301	Composition I
ITSE	1311	Beginning Web Programming
ITSW	1307	Introduction to Database – Access
MATH	1314	College Algebra [2]

Second Semester

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

Summer Semester

| ECON | 1301 | Introduction to Economics [3] |
| HUMA | 1301 | Introduction to Humanities I (See other Humanities / Fine Arts Options) |

SECOND YEAR
First Semester

GRPH	1359	Vector Graphics for Production
IMED	2309	Internet Commerce
ITSE	1301	Web Design Tools – Graphics
SPCH	1311	Introduction to Speech Communication (See other Speech Options)
TECHNICAL ELECTIVE *		

Second Semester

BUSG	2309	Small Business Management/Entrepreneurship [4]
IMED	2311	Portfolio Development (Capstone) [5]
ITSE	2313	Web Authoring – Dreamweaver

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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

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

AAS – E-Business Development Web Development Track

60 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	1356	Extensible Markup Language (XML)
ITSE	2302	Intermediate Web Programming
GRAPHIC OPTION [3]		
GRAPHIC OPTION [3]		

Summer Semester

| ECON | 1301 | Introduction to Economics [4] |
| HUMA | 1301 | Introduction to Humanities I (See other Humanities / Fine Arts Options) |

SECOND YEAR

First Semester

IMED	2309	Internet Commerce
ITNW	1358	Network +
SPCH	1311	Introduction to Speech Communication (See other Speech Options)
BUSINESS OPTION [5]		
WEB PROGRAMMING OPTION [6]		

Second Semester

INEW	2330	Comprehensive Software Project: Planning and Design (Capstone) [7]
ITSY	1300	Fundamentals of Information Security (Security +)
WEB PROGRAMMING OPTION [6]		

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

AAS – E-Business Development Android Mobile Development Track

60 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

COSC	1337	Programming Fundamentals II (Java)
IMED	1341	Interface Design
ITSE	2302	Intermediate Web Programming
ITSE	2309	Database Programming – SQL [3]
TECHNICAL ELECTIVE *		

Summer Semester

ECON	1301	Introduction to Economics [4]
HUMA	1301	Introduction to Humanities I (See other Humanities / Fine Arts Options)

SECOND YEAR
First Semester

IMED	2309	Internet Commerce
ITSE	1373	Android Mobile Programming I
ITSE	1374	Mobile Web [5]
SPCH	1311	Introduction to Speech Communication (See other Speech Options)
TECHNICAL ELECTIVE *		

Second Semester

INEW	2330	Comprehensive Software Project: Planning and Design (Capstone) [6]
ITSE	2373	Android Mobile Programming II
TECHNICAL ELECTIVE *		

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

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

AAS – E-Business Development iOS Mobile Development Track

60 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 iOS Mobile Development
ITSE	2302	Intermediate Web Programming
ITSE	2309	Database Programming – SQL [3]
TECHNICAL ELECTIVE*		

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Summer Semester

ECON	1301	Introduction to Economics [4]
HUMA	1301	Introduction to Humanities I
		(See other Humanities / Fine Arts Options)

SECOND YEAR
First Semester

IMED	2309	Internet Commerce
ITSE	1371	iPhone (iOS) Programming I – Objective C
ITSE	1374	Mobile Web [5]
SPCH	1311	Introduction to Speech Communication
		(See other Speech Options)

TECHNICAL ELECTIVE *

Second Semester

INEW	2330	Comprehensive Software Project: Planning and Design (Capstone) [6]
ITSE	2371	iPhone (iOS) Programming II

GENERAL ELECTIVE **

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

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

AAS – E-Business Development Windows Mobile Development Track

60 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	1330	Introduction to C# Programming
ITSE	2302	Intermediate Web Programming
ITSE	2309	Database Programming – SQL

TECHNICAL ELECTIVE *

Summer Semester

ECON	1301	Introduction to Economics [3]
HUMA	1301	Introduction to Humanities I
		(See other Humanities / Fine Arts Options)

SECOND YEAR
First Semester

IMED	2309	Internet Commerce
ITSE	1372	Windows Mobile Programming I
ITSE	1374	Mobile Web [4]
SPCH	1311	Introduction to Speech Communication
		(See other Speech Options)

TECHNICAL ELECTIVE *

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Second Semester

| INEW | 2330 | Comprehensive Software Project: Planning and Design (Capstone) [5] |
| ITSE | 2372 | Windows Mobile Programming II |

TECHNICAL ELECTIVE *

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

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

AAS – E-Business Development C# .NET Development Track

60 credit hours

FIRST YEAR
First Semester

ENGL	1301	Composition I
ITSE	1311	Beginning Web Programming
ITSE	1332	Introduction to Visual Basic .NET Programming [1]
ITSW	1307	Introduction to Database – Access
MATH	1314	College Algebra [2]

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 Humanities I (See Humanities / Fine Arts Options) |

SECOND YEAR
First Semester

IMED	2309	Internet Commerce
ITSE	2309	Database Programming – SQL
ITSE	2353	Advanced C# Programming with ASP.NET
SPCH	1311	Introduction to Speech Communication (See other Speech Options)

TECHNICAL ELECTIVE *

Second Semester

| INEW | 2330 | Comprehensive Software Project: Planning and Design (Capstone) [4] |
| ITSE | 2338 | C# Database Development with ADO.NET and LINQ |

TECHNICAL ELECTIVE*

1. *May substitute COSC-1315 or COSC-1436*
2. *May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417, or MATH-2419*
3. *May substitute ECON-2301, ECON-2302 or PSYC-2301*
4. *May substitute ITSC-2380*

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

AAS – E-Business Development
Visual Basic .NET Development Track

60 credit hours

FIRST YEAR
First Semester

ENGL	1301	Composition I
ITSE	1311	Beginning Web Programming
ITSE	1332	Introduction to Visual Basic .NET Programming
ITSW	1307	Introduction to Database – Access
MATH	1314	College Algebra [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

| ECON | 1301 | Introduction to Economics [2] |
| HUMA | 1301 | Introduction to Humanities I (See other Humanities / Fine Arts Options) |

SECOND YEAR
First Semester

IMED	2309	Internet Commerce
ITSE	2304	Visual Basic .NET Database Development with ADO.NET
ITSE	2309	Database Programming – SQL
SPCH	1311	Introduction to Speech Communication (See other Speech Options)
TECHNICAL ELECTIVE *		

Second Semester

INEW	2330	Comprehensive Software Project: Planning and Design (Capstone) [3]
ITSE	2334	Advanced Visual Basic .NET Programming with ASP.NET
TECHNICAL ELECTIVE *		

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

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

Certificate – E-Business Development
Media Track

21 credit hours

Summer Semester

| IMED | 1301 | Introduction to Digital Media |
| ITSE | 1311 | Beginning Web Programming |

First Semester

IMED	1341	Interface Design
IMED	1345	Interactive Digital Media I
ITSE	1301	Web Design Tools – Graphics

Second Semester

| GRPH | 1359 | Vector Graphics for Production |
| ITSE | 2313 | Web Authoring – Dreamweaver (Capstone) [1] |

1. May substitute IMED-2311, INEW-2330, or ITSC-2380

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Certificate – E-Business Development
E-Commerce Track

21 credit hours

Summer Semester

IMED	1301	Introduction to Digital Media
ITSE	1311	Beginning Web Programming

First Semester

IMED	1341	Interface Design
IMED	2309	Internet Commerce
ITSE	1301	Web Design Tools – Graphics [1]

Second Semester

BUSG	2309	Small Business Management/Entrepreneurship
ITSE	2313	Web Authoring – Dreamweaver (Capstone) [2]

1. *May substitute GRPH-1359 or IMED-1345*
2. *May substitute IMED-2311, INEW-2330, or ITSC-2380*

Certificate – E-Business Development
Android Mobile Development Track

21 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	1373	Android Mobile Programming I

Summer Semester

ITSE	2373	Android Mobile Programming II (Capstone) [2]

1. *May substitute COSC-1436*
2. *May substitute INEW-2330 or ITSC-2380*

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

Certificate – E-Business Development
iOS Mobile Development Track

21 credit hours

Summer Semester

COSC	1315	Fundamentals of Programming [1]
ITSE	1311	Beginning Web Programming

First Semester

ITSE	1370	Introduction to iOS Mobile Development
ITSE	1371	iPhone (iOS) Programming I – Objective C
ITSE	2309	Database Programming – SQL [2]

Second Semester

ITSE	2371	iPhone (iOS) Programming II (Capstone) [3]
TECHNICAL ELECTIVE *		

1. *May substitute COSC-1436*
2. *May substitute ITSE-1356*
3. *May substitute INEW-2330 or ITSC-2380*

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Certificate – E-Business Development
Windows Mobile Development Track

21 credit hours

Summer Semester

COSC	1315	Fundamentals of Programming [1]
ITSE	1311	Beginning Web Programming

First Semester

ITSE	1332	Introduction to Visual Basic .NET Programming
ITSE	2309	Database Programming – SQL
TECHNICAL ELECTIVE *		

Second Semester

ITSE	1372	Windows Mobile Programming I

Summer Semester

ITSE	2372	Windows Mobile Programming II (Capstone) [2]

1. *May substitute COSC-1436*
2. *May substitute INEW-2330 or ITSC-2380*

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

Certificate – E-Business Development
C# .NET Development Track

21 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 ADO.NET and LINQ
ITSE	2353	Advanced C# Programming with ASP.NET (Capstone) [2]

1. *May substitute COSC-1315 or COSC-1436*
2. *May substitute INEW-2330 or ITSC-2380*

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

Certificate – E-Business Development
Visual Basic .NET Development Track

21 credit hours

Summer Semester

ITSE	1311	Beginning Web Programming
ITSE	1332	Introduction to Visual Basic .NET Programming

First Semester

ITSE	1347	Programming with Visual Basic .NET
ITSE	2309	Database Programming – SQL
TECHNICAL ELECTIVE *		

Second Semester

ITSE	2304	Visual Basic .NET Database Development with ADO.NET
ITSE	2334	Advanced Visual Basic .NET Programming with ASP.NET (Capstone) [1]

** 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, ITSE-1356, ITSE-1359, ITSE-1374, ITSE-
    2309, ITSE-2313*

** Technical Elective: IMED-2309, ITNW-1358, ITSE-
1392, ITSY-1300*

MSAA – Interactive Web Programming
9 credit hours

IMED   1301   Introduction to Digital Media
ITSE   1311   Beginning Web Programming
ITSE   2302   Intermediate Web Programming

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

MSAA – Studio
9 credit hours

IMED   1345   Interactive Digital Media I
ITSE   1301   Web Design Tools – Graphics
ITSE   2313   Web Authoring – Dreamweaver

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

MSAA – Web Commerce
9 credit hours

IMED   2309   Internet Commerce
ITSE   1301   Web Design Tools – Graphics [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 Technology

Program Director:
Dave Galley   PRC-H213   972.377.1676
Academic Advisor:
Catherine Smith PRC-F134   972.377.1780
Samantha Dean SCC-G122   972.881.5190

Program Options:
AAS – Electronic Engineering Technology
Certificate – Electronic Engineering Technology

Students in the Electronic Engineering Technology Program will receive training in several diversified areas of electronics. This program emphasizes the application of mathematical theorems and applied physics toward the design and analysis of electronic circuits. Students will be exposed to a combination of classroom theory and hands-on laboratory design and analysis experiments.

Program curriculum and laboratory equipment have been formally evaluated and endorsed by an advisory committee consisting of members of the electronics industry.
Through articulation agreements, students can transfer their completed program toward a bachelor's degree into several colleges and universities. Students planning to transfer to a college or university should check with the Collin academic advisor prior to beginning this program to verify course transferability.

AAS – Electronic Engineering Technology
61 credit hours

FIRST YEAR
First Semester

CETT	1325	Digital Fundamentals
ENGL	1301	Composition I
ENGR	1201	Introduction to Engineering
MATH	1314	College Algebra [1]
RBTC	1305	Robotic Fundamentals

Second Semester

CETT	1303	DC Circuits
CETT	1345	Microprocessor
DFTG	1309	Basic Computer-Aided Drafting
MATH	1316	Plane Trigonometry
ELECTRONIC ELECTIVE *		

Summer

ECON	1301	Introduction to Economics (See other Social / Behavioral Sciences Options)
SPCH	1311	Introduction to Speech Communication (See other Speech Options)

SECOND YEAR
First Semester

CETT	1305	AC Circuits
HUMA	1301	Introduction to Humanities I (See other Humanities / Fine Arts Options)
PHYS	1401	College Physics I
SMFT	1371	Fundamentals of Solar Cell Engineering

Second Semester

CETT	1357	Linear Integrated Circuits
EECT	1348	Digital Signal Processing (DSP)
HART	2372	Alternative Energy Perspectives, Energy Sources, Energy Storage, and Energy Distribution (Capstone)
PHYS	1402	College Physics II [2] **–OR-** Electronic Elective*

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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

2. For students planning to transfer to a four-year college or university. Workforce students will substitute an electronic elective*

* Electronic Elective (2-3 credit hours): BIOM-2280, BIOM-1355, CETT-1329, INTC-1307, or SMFT-1375 will satisfy this requirement. Courses not listed above may be substituted with consent of Program Director.

Certificate – Electronic Engineering Technology

26 credit hours

FIRST YEAR
First Semester

CETT	1325	Digital Fundamentals
MATH	1314	College Algebra

Second Semester

CETT	1303	DC Circuits
CETT	1345	Microprocessor
ENGR	1201	Introduction to Engineering

SECOND YEAR
First Semester

CETT	1305	AC Circuits
SMFT	1371	Fundamentals of Solar Cell Engineering

Second Semester

CETT	1357	Linear Integrated Circuits
EECT	1348	Digital Signal Processing (DSP) (Capstone)

Emergency Medical Services Professions

Primary Contact – Program Coordinator:
James Shiplet   CPC-B216A   972.548.6848
Program Director:
Pat McAuliff   CPC-A206   972.548.6836
Academic Advisor:
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 Office.

- Provide proof of high school graduation or GED
- 18 years of age
- Completion of program application
- Complete Compass Reading Diagnostic (Minimum score 75); Compass Pre-Algebra Test (Minimum score 72)
- Certified as American Heart Association CPR for Health Care Provider or Red Cross CPR for the Professional Rescuer
- Personal interview
- Drug test

- Criminal history check
- Completion of immunizations required by the Texas Department of State Health Services (TDSHS). *
- Applicant must be in academic good standing with a 2.0 or higher GPA

* *It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Director. In such cases, the applicant must sign a declination form. All immunizations must be complete before the first clinical visit.*

Health Insurance *– All Emergency Medical Services students are required to show proof of health insurance prior to starting clinical rotations each semester.*

AAS – Emergency Medical Services Professions or Certificate – EMS Paramedic (Paramedic Students) Additional Admission Requirements:

- Texas Department of State Health Services or National Registry EMT – Basic Certification
- PSB examination for Allied Health Professionals (offered at specific times throughout the year)
- Completion of local college assessments in reading, writing and mathematics (must place at or above college-level in all assessments)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

AAS – Emergency Medical Services Professions

66 - 67 credit hours

PREREQUISITES

EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) - Basic [1]
EMSP	1371	Introduction to Emergency Medical Technician (EMT) [1]
EMSP	1501	Emergency Medical Technician [1]
ENGL	1301	Composition I
MATH	1314	College Algebra [2]

FIRST YEAR
First Semester

BIOL	2401	Anatomy and Physiology I
EMSP	1356	Patient Assessment and Airway Management
EMSP	1438	Introduction to Advanced Practice
PHED	1100	Beginning Weight Training [3]
SPCH	1315	Public Speaking [4]

Second Semester

BIOL	2402	Anatomy and Physiology II
EMSP	1161	Clinical - Emergency Medical Technician (EMT Paramedic) - Advanced I
EMSP	2444	Cardiology
EMSP	2534	Medical Emergencies

Summer

EMSP	1162	Clinical - Emergency Medical Technician (EMT Paramedic) - Advanced II
EMSP	1355	Trauma Management

SECOND YEAR
First Semester

EMSP	2160	Clinical - Emergency Medical (EMT Paramedic) - Advanced III
EMSP	2330	Special Populations
EMSP	2338	EMS Operations
PHIL	2306	Introduction to Ethics (See Humanities / Fine Arts Options)
PSYC	2301	General Psychology (See Social / Behavioral Sciences Options)

Second Semester

EMSP	2143	Assessment Based Management (Capstone)
EMSP	2248	Emergency Pharmacology
EMSP	2267	Practicum – Emergency Medical Technician (EMT Paramedic)

1. A student who has the EMT - Basic certification has met this requirement
2. May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH-2419
3. May substitute PHED-1102, PHED-1104, PHED-1106, PHED-1111, PHED-1112, PHED-1114, PHED-1116, PHED-1117, PHED-1118, PHED-1120, PHED-1121, PHED-1126, PHED-1127, PHED-1131, PHED-1136, PHED-1137, PHED-1140, PHED-1147 or PHED-1148
4. May substitute SPCH-1321

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Certificate – EMS Paramedic

42 credit hours

PREREQUISITES

EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) - Basic [1]
EMSP	1371	Introduction to Emergency Medical Technician (EMT) [1]
EMSP	1501	Emergency Medical Technician [1]

FIRST YEAR

First Semester

EMSP	1356	Patient Assessment and Airway Management
EMSP	1438	Introduction to Advanced Practice

Second Semester

EMSP	1161	Clinical - Emergency Medical Technician (EMT Paramedic) - Advanced I
EMSP	2444	Cardiology
EMSP	2534	Medical Emergencies

Summer Semester

EMSP	1162	Clinical - Emergency Medical Technician (EMT Paramedic)- Advanced II
EMSP	1355	Trauma Management

SECOND YEAR

First Semester

EMSP	2160	Clinical - Emergency Medical Technician (EMT Paramedic) - Advanced III
EMSP	2330	Special Populations
EMSP	2338	EMS Operations

Second Semester

EMSP	2143	Assessment Based Management (Capstone)
EMSP	2248	Emergency Pharmacology
EMSP	2267	Practicum – Emergency Medical Technician (EMT Paramedic)

1. *A student who has the EMT - Basic certification has met this requirement*

MSAA – Emergency Medical Services Professions

9 credit hours

EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) - Basic
EMSP	1371	Introduction to Emergency Medical Technician (EMT)
EMSP	1501	Emergency Medical Technician

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

Fire Academy

Also see, Fire Science

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

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

found throughout Texas - all of them making a difference in their communities.

This certification program was developed to prepare students for a career as a professional firefighter. The Collin College Fire Academy meets the curriculum requirements of the Texas Commission on Fire Protection (TCFP) for certification as a basic firefighter.

Many fire departments require applicants to complete basic firefighter training before they take a fire department entrance exam. Students accepted into the Fire Academy will also complete Emergency Medical Technician (EMT) training for state certification. This program awards 29 credits.

Students are accepted into the Fire Academy on a competitive basis. Students interested in enrolling in the Fire Academy should contact the Fire Science Office at 972.548.6836. Fire Academy application packets may be printed from the Fire Science website: http://www.collin.edu/firescience or students may pick-up an application at either the Fire Science or Advising Office. Students may request to receive an application by mail.

FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

Regulations governing this program require all applicants to meet specific functional abilities – some are without accommodations – for admission and / or successful completion of the program. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the ACCESS department or Program Director as soon as this program is of interest.

ADDITIONAL ADMISSIONS REQUIREMENTS FOR FIREFIGHTER CERTIFICATION COURSES:

- 18 years of age
- Provide proof of high school graduation or GED
- Complete Collin College application
- Complete program application
- Complete Compass Reading Diagnostic Test (Minimum score 75)
- Compass Pre-Algebra Test (Minimum score 72)
- Complete the physical ability exam and personal interview scheduled through the Program Director
- Criminal history check
- Applicant must be in academic good standing with a 2.0 or higher GPA

Registration is by permission only. Additional information may be obtained from the Fire Science/EMS Office, the Health Sciences, Biology and Chemistry Office or at the Fire Science website: http://www.collin.edu/firescience .

AAS – Basic Firefighter Certification

70 – 71 credit hours

FIRST YEAR
First Semester

CHEM	1405	Introduction to Chemistry I [1]
ENGL	1301	Composition I
FIRT	1301	Fundamentals of Fire Protection
MATH	1332	Math for Liberal Arts I [2]
PHED	1100	Beginning Weight Training [3]
SPCH	1311	Introduction to Speech Communication (See Speech Options)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Second Semester

EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) – Basic [4]
EMSP	1371	Introduction to Emergency Medical Technician (EMT) [4]
EMSP	1501	Emergency Medical Technician [4]
FIRT	1315	Hazardous Materials I
GOVT	2306	Texas Government (Texas constitution and topics)
PHIL	2306	Introduction to Ethics (See Humanities / Fine Arts Options)

SECOND YEAR
First Semester

FIRS	1301	Firefighter Certification I
FIRS	1407	Firefighter Certification II
FIRS	1313	Firefighter Certification III
FIRS	1319	Firefighter Certification IV
FIRT	1327	Building Construction in the Fire Service

Second Semester

ENGL	2311	Technical and Business Writing
FIRS	1323	Firefighter Certification V
FIRS	1329	Firefighter Certification VI
FIRS	1433	Firefighter Certification VII (Capstone)
FIRT	1338	Fire Protection Systems
PSYC	2301	General Psychology [5]

1. May substitute BIOL-1408
2. May substitute MATH-1314, MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH-2419

3. May substitute PHED-1102, PHED-1104, PHED-1106, PHED-1111, PHED-1112, PHED-1114, PHED-1116, PHED-1117, PHED-1118, PHED-1120, PHED-1121, PHED-1126, PHED-1127, PHED-1131, PHED-1136, PHED-1137, PHED-1140, PHED-1147 or PHED-1148
4. A student that has the EMT – Basic certification has met this requirement
5. May substitute ANTH-2302, ANTH-2346, ANTH-2351, ECON-1301, ECON-2301, ECON-2302, GOVT-2305, HIST-1301, HIST-1302, HIST-2301 or SOCI-1301

Certificate – Basic Firefighter

32 credit hours

First Semester

EMSP	1160	Clinical - Emergency Medical Technician (EMT Paramedic) – Basic [1]
EMSP	1371	Introduction to Emergency Medical Technician (EMT) [1]
EMSP	1501	Emergency Medical Technician [1]
FIRS	1301	Firefighter Certification I
FIRS	1407	Firefighter Certification II
FIRS	1313	Firefighter Certification III

Second Semester

FIRS	1319	Firefighter Certification IV
FIRS	1323	Firefighter Certification V
FIRS	1329	Firefighter Certification VI
FIRS	1433	Firefighter Certification VII (Capstone)

1. A student that has the EMT – Basic certificate has met this requirement.

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 STATEMENT

Regulations governing this program require all applicants to meet specific functional abilities – some are without accommodations – for admission and / or successful completion of the program. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information and application packets. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the ACCESS department or Program Director as soon as this program is of interest.

Registration is by permission only. Additional information may be obtained from the Fire Science/EMS Office, the Health Sciences, Biology and Chemistry Office or at the Fire Science website:
http://www.collin.edu/firescience .

AAS – Fire Officer Certification

62 - 65 credit hours

FIRST YEAR
First Semester

ECON	1301	Introduction to Economics [1]
ENGL	1301	Composition I
FIRT	1301	Fundamentals of Fire Protection
MATH	1332	Math for Liberal Arts I [2]
PHED	1100	Beginning Weight Training [3]
PSYC	2301	General Psychology [4]

Second Semester

CHEM	1405	Introduction to Chemistry I [5]
FIRT	1315	Hazardous Materials I
GOVT	2306	Texas Government (Texas constitution and topics)
HUMA	1301	Introduction to Humanities I (See Humanities / Fine Arts Options)
SPCH	1311	Introduction to Speech Communication (See Speech Options)

SECOND YEAR
First Semester

ENGL	2311	Technical and Business Writing
FIRT	1327	Building Construction in the Fire Service
FIRT	1342	Fire Officer I
FIRT	2305	Fire Instructor I
FIRT	2309	Firefighting Strategies and Tactics I

Second Semester

FIRT	1338	Fire Protection Systems
FIRT	1343	Fire Officer II
FIRT	1349	Fire Administration II
FIRT	2307	Fire Instructor II
FIRT	2351	Company Fire Officer (Capstone)

1. *May substitute ECON-2301 or ECON-2302*
2. *May substitute MATH-1314, MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH-2419*
3. *May substitute PHED-1102, PHED-1104, PHED-1106, PHED-1111, PHED-1112, PHED-1114, PHED-1116, PHED-1117, PHED-1118, PHED-1120, PHED-1121, PHED-1126, PHED-1127, PHED-1131, PHED-1136, PHED-1137, PHED-1140, PHED-1147, PHED-1148 or PHED-1338*
4. *May substitute ANTH-2302, ANTH-2346, ANTH-2351, GOVT-2305, HIST-1301, HIST-1302, HIST-2301 or SOCI-1301*
5. *May substitute BIOL-1408*

Certificate – Fire Officer

18 credit hours

First Semester

FIRT	1342	Fire Officer I
FIRT	2305	Fire Instructor I
FIRT	2309	Firefighting Strategies and Tactics I

Second Semester

FIRT	1343	Fire Officer II
FIRT	2307	Fire Instructor II
FIRT	2351	Company Fire Officer (Capstone)

MSAA – Fire Officer Candidate

9 credit hours

FIRT	1342	Fire Officer I
FIRT	2305	Fire Instructor I
FIRT	2309	Firefighting Strategies and Tactics I

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

Geospatial Information Science (GIS)

Department Chair:

| Glen Grimes | SCC-J127 | 972.578.5520 |

Faculty Contact:

| George Jackson | PRC-H118 | 972.377.1613 |

Academic Advisor:

| Tiffany Goertz | SCC-F131 | 972.881.5165 |

Program Options:
AAS – Geospatial Information Science (GIS)
Certificate – Geospatial Information Science (GIS)

Geospatial Information Science (GIS) uses hardware, software, and data to analyze and display location-based information. GIS allows us to easily visualize information in a form that aids the decision-making process. GIS allows us to solve spatial problems in business, government, environmental studies, and geological studies, etc., and present the information in a way that is

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

easy to understand and interpret. GIS specialties include remote sensing, geospatial intelligence, image analysis, etc. According to the U.S. Department of Labor, job growth in this field is expected to be "faster than average" with annual wages of between $38,800 and $70,010.

AAS – Geospatial Information Science (GIS)

60 credit hours

FIRST YEAR
First Semester

BCIS	1305	Business Computer Applications
GISC	1411	Introduction to Geographic Information Systems (GIS)
GISC	1421	Introduction to Raster-Based Geographic Information Systems (GIS)
ITSW	1307	Introduction to Database - Access
MATH	1314	College Algebra [1]

Second Semester

COSC	1315	Fundamentals of Programming [2]
ENGL	1301	Composition I
GISC	2420	Intermediate Geographic Information Systems (GIS)
HUMA	1301	Introduction to Humanities I (See other Humanities / Fine Arts Options)
ITSW	1304	Introduction to Spreadsheets - Excel

SECOND YEAR
First Semester

BCIS	2390	Systems Analysis and Design
ENGL	2311	Technical and Business Writing
GISC	2402	Geographic Information Systems (GIS) Design with Raster Analysis
ITSE	1311	Beginning Web Programming
SPCH	1311	Introduction to Speech Communication (See other Speech Options)

Second Semester

ECON	1301	Introduction to Economics [3]
GISC	2231	Advanced Problems in Geographic Information Systems (GIS) [4] (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*
2. *May substitute COSC-1436 or ITSE-1332*
3. *May substitute ECON-2301 or ECON-2302*
4. *May substitute GISC-2281*

* *Electives (6 credit hours): BIOL-2406, ENVR-1401, GEOG-1301, GEOG-1302, GEOG-1303, GEOL-1305, GEOL-1401, GEOL-1402, or MATH-1342*

Certificate – Geospatial Information Science (GIS)

18 credit hours

First Semester

GISC 1411 Introduction to Geographic Information Systems (GIS)

GISC 1421 Introduction to Raster-Based Geographic Information Systems (GIS)

Second Semester

GISC 2402 Geographic Information Systems (GIS) Design with Raster Analysis

GISC 2420 Intermediate Geographic Information Systems (GIS)

Third Semester

GISC 2231 Advanced Problems in Geographic Information Systems (GIS) (Capstone) [1]

1. May substitute GISC-2281

Graphic Design and Web

Also see Photography, Commercial

Department Chair:

Laura Flores   SCC-K241   972.578.5527

Academic Advisors:

John Ciccia   CPC-D117G   972.578.5563

Samantha Dean   SCC-G122   972.881.5190

Program Options:

AAS – Graphic Design
     Print Track
     Web Track

Certificate – Graphic Design
     Print Track
     Web Track

MSAA – Graphic Design

MSAA – Web-Interactive Media

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

This program's overall emphasis is on traditional graphic design and art direction concepts applied to technical skills for print and web media. The Print Track focuses on strong concept development skills and production techniques in print and other media. The Web Track focuses on website development, web animation and interactive media. Both tracks prepare students for careers in advertising, commercial art and visual communication.

AAS – Graphic Design Print Track

72 credit hours

FIRST YEAR

First Semester

ARTC 1305 Basic Graphic Design

ARTC 1325 Introduction to Computer Graphics

ARTS 1316 Drawing I

ARTV 1211 Storyboard

ENGL 1301 Composition I

MATH 1332 Math for Liberal Arts I (See Mathematics / Natural Sciences Options)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Second Semester

ARTC	1302	Digital Imaging I
ARTC	1353	Computer Illustration I
ARTC	2311	History of Communication Graphics
ARTV	1303	Basic Animation
IMED	1316	Web Design I

Third Semester

ARTC	1313	Digital Publishing I
ARTC	1327	Typography
ARTC	2305	Digital Imaging II – Photoshop [1]

SECOND YEAR

First Semester

ARTC	1321	Illustration Techniques I
ARTC	1349	Art Direction I
ARTC	2347	Design Communication II
ARTS	2348	Digital Photography I [2]
PHED / DANC		Any 1 credit hour activity course (See PHED / DANC Options)
SPCH	1311	Introduction to Speech Communication (See Speech Options)

Second Semester

ARTC	2335	Portfolio Development for Graphic Design (Capstone)
ARTC	2349	Art Direction II
ARTS	1301	Art Appreciation (See Humanities / Fine Arts Options)
PSYC	2301	General Psychology (See Social / Behavioral Sciences Options)

TECHNICAL ELECTIVE *

1. May substitute ARTC-2340
2. May substitute ARTS-2356 or PHTC-1311

* Technical Elective (3 credit hours): ARTC-2301, ARTC-2305, ARTC-2340, ARTS-1317, ARTV-1345, ARTV-2301, FLMC-1331, GRPH-1380 or IMED-2315

AAS – Graphic Design
Web Track

72 credit hours

FIRST YEAR

First Semester

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTS	1316	Drawing I
ARTV	1211	Storyboard
ENGL	1301	Composition I
MATH	1332	Math for Liberal Arts I (See Mathematics / Natural Sciences Options)

Second Semester

ARTC	1302	Digital Imaging I
ARTC	1353	Computer Illustration I
ARTC	2311	History of Communication Graphics
ARTV	1303	Basic Animation
IMED	1316	Web Design I

Third Semester

ARTC	1313	Digital Publishing I
ARTC	1327	Typography
ARTV	2301	2-D Animation I

SECOND YEAR

First Semester

ARTC	1349	Art Direction I
ARTS	2348	Digital Photography I [1]
ARTV	1343	Digital Sound
IMED	2315	Web Design II
PHED / DANC		Any 1 credit hour activity course (See PHED / DANC Options)
SPCH	1311	Introduction to Speech Communication (See Speech Options)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Second Semester

ARTC	2335	Portfolio Development for Graphic Design (Capstone)
ARTC	2349	Art Direction II
ARTS	1301	Art Appreciation (See Humanities / Fine Arts Options)
PSYC	2301	General Psychology (See Social / Behavioral Sciences Options)

TECHNICAL ELECTIVE *

1. May substitute ARTS-2356 or PHTC-1311

* Technical Elective (3 credit hours): ARTC-2305, ARTC-2340, ARTC-2347, ARTS-1317, ARTV-1345, ARTV-2330, FLMC-1331, GRPH-1380 or IMED-2359

Certificate – Graphic Design Print Track

41 credit hours

FIRST YEAR
First Semester

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTC	2311	History of Communication Graphics
ARTS	1316	Drawing I
ARTV	1211	Storyboard

Second Semester

ARTC	1302	Digital Imaging I
ARTC	1353	Computer Illustration I
ARTV	1303	Basic Animation
IMED	1316	Web Design I

SECOND YEAR
First Semester

ARTC	1313	Digital Publishing I
ARTC	1327	Typography
ARTC	1349	Art Direction I

Second Semester

| ARTC | 2335 | Portfolio Development for Graphic Design (Capstone) |
| ARTC | 2349 | Art Direction II |

Certificate – Graphic Design Web Track

41 credit hours

FIRST YEAR
First Semester

ARTC	1305	Basic Graphic Design
ARTC	1325	Introduction to Computer Graphics
ARTC	2311	History of Communication Graphics
ARTS	1316	Drawing I
ARTV	1211	Storyboard

Second Semester

ARTC	1302	Digital Imaging I
ARTC	1353	Computer Illustration I
ARTV	1303	Basic Animation
IMED	1316	Web Design I

SECOND YEAR
First Semester

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

Second Semester

| ARTC | 2335 | Portfolio Development for Graphic Design (Capstone) |
| IMED | 2315 | Web Design II |

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

MSAA – Graphic Design

12 credit hours

ARTC   1302   Digital Imaging I
ARTC   1313   Digital Publishing I
ARTC   1353   Computer Illustration I
ELECTIVE *

* Elective (3 credit hours): ARTC-2305, ARTC-2340
   or ARTC-2347

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

MSAA – Web-Interactive Media

14 credit hours

ARTC   1302   Digital Imaging I
ARTV   1211   Storyboard
IMED   1316   Web Design I
ELECTIVE *
ELECTIVE *

* Electives (6 credit hours): ARTC-1353, ARTV-1303,
   ARTV-2301 or IMED-2315

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

Green Interior and Architectural Design

Program Director:
Dave Galley   PRC-H213   972.377.1676
Faculty Contact:
Ali Kholdi   PRC-H217   972.377.1716
Academic Advisor:
Catherine Smith   PRC-F134   972.377.1780

Department Website:
http://www.collin.edu/iad

Program Options:
**AAS – Green Interior and Architectural
      Design**
**Certificate – Level II - Green Interior and
      Architectural Design**
**Certificate – Level I - Green Interior and
      Architectural Design**
**MSAA – Green Interior and Architectural
Design**

The Green Interior and Architectural Design
Program prepares students to enter the world of
spatial design. Specialized knowledge needed by
an architect or interior designer includes spatial
composition, drafting, space planning, building
codes, and materials. Electives allow for more in-
depth study of architecture, interior design, or
illustration. Students are immediately valuable to
employers upon graduation with our strong
curriculum in CAD drafting. The program's
strengths in advanced levels of drafting and
modeling means students can position themselves
within interior and architectural design firms to
further their training and development in their
respective fields. The Green Interior and
Architectural Design program provides courses
that are helpful to students who seek to enhance
their knowledge of Green Design, as well as
expanding their marketability.

Interior Design and Architectural Design are state-licensed professions and all state requirements must be met before either title can be used.

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

All new students: Please contact one of the Green Interior and Architectural Design faculty or the college academic advisor prior to registering for any INDS courses. Please call 972.377.1676 or 972.377.1716 to make an appointment with a faculty member.

AAS – Green Interior and Architectural Design

60 credit hours

FIRST YEAR
First Semester
DFTG	1309	Basic Computer-Aided Drafting
ECON	1301	Introduction to Economics (See other Social / Behavioral Sciences Options)
INDS	1301	Basic Elements of Design
INDS	1341	Color Theory and Application
INDS	1371	Introduction to Green Design

Second Semester
INDS	1351	History of Interiors I
INDS	1372	Computer-Aided Drafting for Interior Designers
INDS	1373	Green Interiors
MATH	1324	Mathematics for Business and Social Sciences [1]

Summer
ENGL	1301	Composition I

SECOND YEAR
First Semester
HUMA	1301	Introduction to Humanities I (See other Humanities / Fine Arts 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
INDS	1345	Commercial Design I
INDS	1375	Green Building Certification Training
INDS	2374	Sustainable Living
SPCH	1311	Introduction to Speech Communication (See other Speech Options)

Summer
INDS	2330	Interior Design Building Systems (Capstone)

1. *May substitute MATH-1314, MATH-1316, MATH-1325, MATH-1332, MATH-1342, MATH-1350, MATH-1351, MATH-2305, MATH-2312, MATH-2318, or MATH-2320*

Certificate – Level II - Green Interior and Architectural Design

45 credit hours

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Second Semester

INDS	1351	History of Interiors I
INDS	1372	Computer-Aided Drafting for Interior Designers
INDS	1373	Green Interiors

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

INDS	1345	Commercial Design I
INDS	1375	Green Building Certification Training
INDS	2374	Sustainable Living

Summer

| INDS | 2330 | Interior Design Building Systems (Capstone) |

Certificate – Level I - Green Interior and Architectural Design

21 credit hours

First Semester

DFTG	1309	Basic Computer-Aided Drafting
INDS	1301	Basic Elements of Design
INDS	1341	Color Theory and Application
INDS	1371	Introduction to Green Design

Second Semester

INDS	1351	History of Interiors I
INDS	1372	Computer-Aided Drafting for Interior Designers (Capstone)
INDS	1373	Green Interiors

MSAA – Green Interior and Architectural Design

12 credit hours

First Semester

| DFTG | 1309 | Basic Computer-Aided Drafting |
| INDS | 1371 | Introduction to Green Design |

Second Semester

| INDS | 1373 | Green Interiors |
| INDS | 1375 | Green Building Certification Training |

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

Health Information Management

Also see Health Information Management / Medical Coding and Billing

Program Director:
Michelle Millen, BS, RHIT
         CPC-B122B   972.548.6676
Academic Advisor:
Tori Hoffman   CPC-D117E   972.548.6779

Program Option:
AAS – Health Information Management
ESC – Healthcare Case Management

The Associate of Applied Science (AAS) in Health Information Management (HIM) at Collin College is an 18 month program (two academic years) that will prepare the student for the workforce, as a health information professional. The curriculum is based on the American Health Information Management Association's (AHIMA) competencies for the Certified Coding Associate (CCA) and the Registered Health Information

Technician (RHIT). This curriculum is approved by the Texas Higher Education Coordinating Board and accredited by the Commission on Accreditation for Health Informatics and Information Management (CAHIIM) Education.

Upon successful completion of the program, the graduate should make application to AHIMA to take the credentialing examination. After passing the certification examination, the graduate can use the designation RHIT or CCA behind the professional signature. Students must meet eligibility requirements for certification.

ACCREDITATION
The AAS in Health Information Management is accredited through the CAHIIM. They may be contacted at:

> 233 N. Michigan Ave., 21st floor
> Chicago, IL 60601-5800
> 312.233.1100
> www.cahiim.org

FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT
After initial acceptance to this program, all students are required to meet specific functional abilities - with or without accommodations - for successful completion of the program and to function safely and effectively in a variety of professional settings. The specific functional requirements are found in the Functional Abilities / Core Performance Standards document provided in the program information on the Health Information Management website www.collin.edu/him. 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 2nd Friday in November, for spring eligibility; 2nd Friday in May, for fall eligibility. Eligibility will be based on the following requirements:

- Complete Collin College Admission requirements
- Complete Collin College reading, writing and mathematics assessments, placing at the College-Level (TSI Testing).
- Overall GPA of 2.5 with a minimum grade of "C" in all prerequisite courses. Please note that a grade of "C" or better must be earned in all courses completed and applicable to the Health Information Management degree plan
- Completion of the Health Occupations Basic Entrance Exam (HOBET), prior to Application Deadline, with satisfactory results
- Provide documentation of immunizations required by the Texas Department of State Health Services (TDSHS) *
- Submission of the application packet to the Health Sciences, Biology and Chemistry Office, B122G, at the Central Park Campus (CPC). A complete Health Information Management Admission Packet includes:
    - Completed HIM Application
    - Consent for background check
    - Consent for drug screening
    - Immunization documentation *
    - Complete and sign the *Functional Abilities / Core Performance Standards for Health Information Management Program - Clinical Expectations*
    - Sign the Success in HIM document

o Submit a 500 word essay explaining why you have chosen to become a Health Information professional

o 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, Biology and Chemistry 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. A flu and TB screening is required before a student is permitted into a clinical setting.*

Health Insurance – All Health Information Management students are required to show proof of health insurance prior to starting clinical rotations each semester.

Once the student is admitted to this program, they must earn a grade of "C" or better in all major course work to continue.

Clinical courses require students to be placed at a clinical site. Clinical I (HITT-1160), students will be spending a total of 16 hours at various healthcare facilities. Clinical II (HITT-2361), students will be spending 80 hours in a healthcare facility. These hours are typically Monday through Friday during normal business hours and arrangements should be made by students to be available for their scheduled clinical visits. For more information contact the Health Information Management Department.

Students interested in the program should see an academic advisor. Once admitted, the Program Director will construct an academic degree plan. Consult the college website for more specific information as well as the HIM website at: www.collin.edu/him

AAS – Health Information Management
60 credit hours

PRE-ENTRANCE REQUIREMENTS
A) Students planning to apply for admission to the program must have completed, or be in the process of completing, the following courses with a minimum grade of "C" prior to the application deadline. Provisional acceptance, into the program, may be presented until verification the student earned the minimum grade of "C" in ALL courses:
   1) ENGL 1301, Composition I
   2) HITT 1305, Medical Terminology I
   3) PHIL 2306, Introduction to Ethics
   4) PSYC 2301, General Psychology
   5) BIOL 2404, Human Anatomy and Physiology Basic
   6) HITT 2471, Pharmacology and Pathophysiology
B) Students entering the program must be prepared to enter college-level mathematics by either completion of MATH 0310 or by placement at the MATH 1314, College Algebra level.

The following layout is a suggestion of course progression. It reflects the course load for a full-time student. Students may take classes part-time. All courses listed in the degree plan are available online, with the exception of the clinical courses.

PREREQUISITES

ENGL	1301	Composition I
HITT	1305	Medical Terminology I
PHIL	2306	Introduction to Ethics [1]
PSYC	2301	General Psychology [2]

FIRST YEAR
First Semester

BIOL	2404	Human Anatomy and Physiology Basic [1]
HITT	1301	Health Data Content and Structure
HITT	2471	Pharmacology and Pathophysiology
HPRS	2232	Health Care Communications

Second Semester

HITT	1311	Health Information Systems
HITT	1341	Coding and Classification Systems
HITT	1345	Health Care Delivery Systems
HUMA	1301	Introduction to Humanities I [3]

SECOND YEAR
First Semester

HITT	1160	Clinical I - Health Information / Medical Records Technology
HITT	1353	Legal and Ethical Aspects of Health Information
HITT	2339	Health Information Organization and Supervision
HITT	2346	Advanced Medical Coding
HITT	2435	Coding and Reimbursement Methodologies

Second Semester

HITT	2249	RHIT Competency Review
HITT	2361	Clinical II - Health Information / Medical Records Technology [4]
HITT	2443	Quality Assessment and Performance Improvement

1. *May substitute PHIL 1301, PHIL 1304, PHIL 2303, PHIL 2307 or PHIL 2321*
2. *May substitute ANTH 2302, ANTH 2346, ANTH 2351, ECON 1301, ECON 2301, ECON 2302, GOVT 2305, GOVT 2306, HIST 1301, HIST 1302, HIST 2301 or SOCI 1301*
3. *May substitute ARTS-1301, ARTS-1303, ARTS-1304, ARTS-1313, DANC-2303, DRAM-1310, DRAM-2361, DRAM-2362, DRAM-2366, DRAM-2367, ENGL-2322, ENGL-2323, ENGL-2327, ENGL-2328, ENGL-2332, ENGL-2333, ENGL-2342, ENGL-2343, ENGL-2351, FREN-2303, FREN-2304, HIST-2311, HIST-2312, HIST-2321, HIST-2322, MUSI-1306, MUSI-130, orMUSI-1310*
4. *HITT-2361 is the Capstone course.*

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.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

ESC-Healthcare Case Management [1]

9 credit hours

HPRS	2371	The Case Management Process
HPRS	2372	Case Management Coordination and Financial Management
HPRS	2373	Case Studies in Healthcare Case 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.*

Health Information Management / Medical Coding and Billing

Also see Health Information Management

Program Director:
Michelle Millen, BS, RHIT
CPC-B122B   972.548.6676
Academic Advisor:
Tori Hoffman   CPC-D117E   972.548.6779

Program Options:
Certificate - Medical Coding and Billing

The Medical Coding and Billing Certificate is a 30 credit hour on-line program that will prepare the student for workforce as a medical coder / biller. The curriculum is based on the American Health Information Management Association's (AHIMA) competencies.

Certificate – Medical Coding and Billing

30 credit hours

PREREQUISITES

BIOL	2404	Human Anatomy and Physiology Basic
HITT	1305	Medical Terminology I
HITT	2471	Pharmacology and Pathophysiology

FIRST YEAR
First Semester

HITT	1301	Health Data Content and Structure
HITT	1311	Health Information Systems
HITT	1341	Coding and Classification Systems

Second Semester

HITT	1353	Legal and Ethical Aspects of Health Information
HITT	2346	Advanced Medical Coding (Capstone)
HITT	2435	Coding and Reimbursement Methodologies

Note: Students may take HITT-2245, Coding Certification Exam Review, after completing this certificate, to better prepare for the certification exam.

Hospitality and Food Service Management

Department Chair:
Karen Musa   PRC-L229   972.377.1672
Academic Advisors:
Yajaira Diaz   PRC-F132   972.377.1513

Department Website:
http://www.collin.edu/hospitality

Program Options:
AAS – Hospitality and Food Service Management
> *Hotel / Restaurant Management Track*
> *Meetings and Event Management Track*

Certificate – Hotel / Restaurant Management
Certificate – Meetings and Event Management

Students completing the Hospitality and Food Service Management program at Collin will be qualified for a variety of mid-management positions and career advancement in the hospitality industry.

The Hospitality and Food Service Management curriculum emphasizes problem-solving, creativity and industry involvement, in addition to practical on-the-job experience. Upon completion of this degree, the student will have achieved over 300 hours of work experience directly related to this chosen field.

Day and night classes are open-entry courses that provide a flexible schedule and meet a variety of individual needs.

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

TRANSFER
Articulation agreements are being developed with nationally recognized hospitality programs such as the University of North Texas, Texas Women's University and the University of Houston.

AAS – Hospitality and Food Service Management
Hotel / Restaurant Management Track
60 credit hours

FIRST YEAR
First Semester
CHEF	1305	Sanitation and Safety [1,2]
ENGL	1301	Composition I
HAMG	1321	Introduction to Hospitality Industry
HAMG	1340	Hospitality Legal Issues
TRVM	2301	Introduction to Convention / Meeting Management

Second Semester
HAMG	1313	Front Office Management
HAMG	1324	Hospitality Human Resources Management
HAMG	2337	Hospitality Facilities Management
HUMA	1301	Introduction to Humanities I (See Humanities / Fine Arts Options)
RSTO	1325	Purchasing for Hospitality Operations

Third Semester
ECON	1301	Introduction to Economics (See Social / Behavioral Sciences 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 Operations
HAMG	2307	Hospitality Marketing and Sales
HAMG	2380	Cooperative Education – Hospitality Administration / Management, General
SPCH	1321	Business and Professional Communication (See Speech Options)

Second Semester

HAMG	2305	Hospitality Management and Leadership (Capstone)
HAMG	2332	Hospitality Financial Management
RSTO	2307	Catering

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

AAS – Hospitality and Food Service Management Meetings and Event Management Track

60 credit hours

FIRST YEAR
First Semester

ENGL	1301	Composition I
HAMG	1321	Introduction to Hospitality Industry
HAMG	1340	Hospitality Legal Issues
TRVM	1327	Special Events Design
TRVM	2301	Introduction to Convention / Meeting Management

Second Semester

HAMG	1324	Hospitality Human Resources Management
HUMA	1301	Introduction to Humanities I (See Humanities / Fine Arts Options)
TRVM	1323	Group Tour Operations
TRVM	2341	International Convention / Meeting Management
TRVM	2355	Exposition and Trade Show Operations

Third Semester

ECON	1301	Introduction to Economics (See Social / Behavioral Sciences Options)
HAMG	1319	Computers in Hospitality
MATH	1332	Math for Liberal Arts I [1]

SECOND YEAR
First Semester

HAMG	2301	Principles of Food and Beverage Operations
HAMG	2307	Hospitality Marketing and Sales
SPCH	1321	Business and Professional Communication (See Speech Options)
TRVM	2380	Cooperative Education – Tourism and Travel Services Management

Second Semester

HAMG	2332	Hospitality Financial Management
RSTO	2307	Catering
TRVM	2333	Applied Convention / Meetings Management (Capstone)

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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Certificate – Hotel / Restaurant Management

24 credit hours

First Semester

CHEF	1305	Sanitation and Safety [1,2]
HAMG	1321	Introduction to Hospitality Industry
HAMG	1340	Hospitality Legal Issues
HAMG	2307	Hospitality Marketing and Sales

Second Semester

HAMG	2301	Principles of Food and Beverage Operations
HAMG	2332	Hospitality Financial Management (Capstone)
HAMG	2337	Hospitality Facilities Management

ELECTIVE*

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 credit hours

First Semester

HAMG	1321	Introduction to Hospitality Industry
HAMG	2307	Hospitality Marketing and Sales
TRVM	1327	Special Events Design
TRVM	2301	Introduction to Convention / Meeting Management

Second Semester

HAMG	2301	Principles of Food and Beverage Operations
TRVM	2341	International Convention / Meeting Management (Capstone)
TRVM	2355	Exposition and Trade Show Operations

ELECTIVE *

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

Information Systems Cybersecurity

Program Director:
Dave Galley   PRC-H213   972.377.1676
Academic Advisor:
Catherine Smith   PRC-F134   972.377.1780

Program Options:
AAS – Information Systems Cybersecurity
Certificate – Information Systems Cybersecurity
Certificate – CISSP Information Systems Cybersecurity Professional

The Information Systems Cybersecurity AAS degree prepares students for a career in cybersecurity management and support in addition to the tasks relating to network management, system administration, technical support, hardware/software installation, and equipment repair. The program graduate will be able to design and install secure network systems based on customer requirements, monitor and maintain network traffic and security, and maintain network hardware and software.

Courses and hands-on labs in this program will assist the graduate in preparing to take a variety of Cisco, Microsoft, and CompTIA certification examinations.

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

AAS – Information Systems Cybersecurity

63 credit hours

FIRST YEAR
First Semester

CPMT	1305	IT Essentials I: PC Hardware and Software
ITMT	1370	Configuring and Supporting Microsoft Windows 7
ITMT	2301	Windows Server 2008 Network Infrastructure Configuration
ITNW	1358	Network +
MATH	1314	College Algebra [1]

Second Semester

ECON	1301	Introduction to Economics (See other Social / Behavioral Sciences Options)
ITCC	1371	CCNA 1 Cisco - Introduction to Networks
ITMT	2351	Windows Server 2008: Server Administrator
ITSC	1316	Linux Installation and Configuration
ELECTIVE *		

Summer

ENGL	1301	Composition I
ITCC	1374	CCNA 2 - Routing and Switching Essentials

SECOND YEAR
First Semester

ITCC	2371	CCNA 3 - Scaling Networks
ITCC	2372	CCNA 4 - Connecting Networks
ITSY	2300	Operating System Security
ITSY	2301	Firewalls and Network Security
ITSY	2342	Incident Response and Handling

Second Semester

HUMA	1301	Introduction to Humanities I (See other Humanities / Fine Arts Options)
ITSY	2341	Security Management Practices (Capstone)
ITSY	2343	Computer System Forensics
SPCH	1311	Introduction to Speech Communication (See other Speech Options)

1. *May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1332, MATH-1342, MATH 1350, MATH-1351, MATH-1414, MATH-2305, MATH 2312, MATH-2318, or MATH-2320*

* *Elective (3-5 credit hours): ITSY-1300 or ITSY-2572*

Note: Many ITCC, ITMT, ITNW (except ITNW 2374), and ITSY courses are offered in eight-week express sessions.

Certificate – Information Systems Cybersecurity

33 credit hours

FIRST YEAR
First Semester

ITCC	1371	CCNA 1 Cisco - Introduction to Networks
ITMT	2301	Windows Server 2008 Network Infrastructure Configuration
ITNW	1358	Network +

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Second Semester

ITCC 1374 CCNA 2 - Routing and
Switching Essentials
ITMT 2351 Windows Server 2008: Server
Administrator
ELECTIVE *

SECOND YEAR
First Semester
ITSY 2300 Operating System Security
ITSY 2301 Firewalls and Network Security
ITSY 2342 Incident Response and Handling

Second Semester
ITSY 2341 Security Management Practices
ITSY 2343 Computer System Forensics

** Elective (3-5 credit hours): ITMT 2356, ITSY-1300
or ITSY-2572*

*Note: Many ITCC, ITMT, ITNW (except ITNW 2374),
and ITSY courses are offered in eight-week
express sessions.*

Certificate – CISSP Information Systems Cybersecurity Professional

17 credit hours

First Semester
ITNW 1358 Network +
ELECTIVE*

Second Semester
ITSY 1300 Fundamentals of Information
Security
ITSY 2341 Security Management Practices
ITSY 2572 Certified Information Systems
Security Professional (CISSP)
Common Body of Knowledge
Domain Instruction (Capstone)

** Elective (3 credit hours): Any ITSY course not listed
above, with consent of Program Director*

*Note: Many ITCC, ITMT, ITNW (except ITNW 2374),
and ITSY courses are offered in eight-week
express sessions.*

Interpreter Preparation Program / Deaf

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

Department Chair:
Ana Giron   SCC-G215   972.881.5724
Academic Advisor:
Ana Giron   SCC-G215   972.881.5724
Communication and Humanities Division Office
SCC-B189   972.881.5810

Program Options:
AAS – Interpreter Preparation Program / Deaf
Certificate – Interpreter Trainee
*(Note: Beginning January 2012, in order to
become a Texas BEI Certified Interpreter, you
must have an Associate's Degree or have
earned 60 credit hours from an accredited
college or university.)*

Because of the passage of the Americans with
Disabilities Act, there is currently a national and
statewide shortage of interpreters. Moreover, the
quality as well as the quantity of the interpreters
that the market demands is increasing.

The Interpreter Preparation Program / Deaf
(IPPD) provides a focused and balanced education
for students who desire to become sign language
interpreters. With an emphasis on receptive skills,
the program concentrates on synthesizing the
study of American Sign Language (ASL), Deaf
Culture and interpreting as a profession.

Interpreting requires excellence in ASL and a thorough knowledge of oneself and one's ethics because interpreters are privy to confidential information.

Collin's IPPD program has a greater number of deaf teachers and ASL assistants than non-deaf teachers and ASL assistants, which allows students the opportunity to become fluent in ASL and to develop culturally appropriate behaviors and responses.

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

PASS / FAIL OPTION
Non-degree-seeking students may take a sign language class as pass / fail. Degree-seeking students should not pursue this option. The pass / fail option will not satisfy the degree-seeking transfer requirements.

Note: Students may not convert a pass / fail grade to a letter grade. Foreign language classes, including sign language, cannot be audited.

AAS – Interpreter Preparation Program / Deaf

69-70 credit hours

FIRST YEAR
Summer

| SGNL | 1401 | Beginning American Sign Language I [+] |

First Semester

ENGL	1301	Composition I
MATH	1314	College Algebra [1]
SGNL	1402	Beginning American Sign Language II [+]
SLNG	1347	Deaf Culture
SPCH	1311	Introduction to Speech Communication [2]

Second Semester

DRAM	1351	Acting I
ENGL	1302	Composition II
SGNL	2301	Intermediate American Sign Language I [+]
SLNG	1311	Fingerspelling and Numbers
PHED / DANC		Any 1 credit hour activity course (See PHED / DANC Options)

Summer

| SLNG | 1321 | Introduction to the Interpreting Profession |

SECOND YEAR
First Semester

PHIL	2306	Introduction to Ethics [3] (See Humanities / Fine Arts Options)
SLNG	2301	Interpreting I
SOCI	2319	Minority Studies
TECHNICAL CORE *		

Second Semester

PSYC	2301	General Psychology [4]
SGNL	2302	Intermediate American Sign Language II [+]
SLNG	2302	Interpreting II
SLNG	2403	Transliterating
TECHNICAL CORE *		

Third Semester

| SLNG | 2266 | Practicum - Sign Language Interpretation and Translation (Capstone) |
| SLNG | 2331 | Interpreting III |

1. *May substitute MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH-2419*
2. *No substitutions*
3. *PHIL-2306 is recommended for IPPD majors*

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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.*

* *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*

Certificate – Interpreter Trainee

33 credit hours

FIRST YEAR
First Semester

SGNL	1401	Beginning American Sign Language I [+]
SLNG	1347	Deaf Culture
ELECTIVE *		
ELECTIVE *		

Second Semester

PHED / DANC		Any one credit hour activity course (See PHED / DANC Options)
SGNL	1402	Beginning American Sign Language II [+]
SLNG	1311	Fingerspelling and Numbers
ELECTIVE *		

Third Semester

SGNL	2301	Intermediate American Sign Language I [+]

SECOND YEAR
First Semester

SGNL	2302	Intermediate American Sign Language II [+]
SLNG	1321	Introduction to the Interpreting Profession (Capstone)

Marketing

Department Chair:
Christine DeLaTorre, Ph.D.
            PRC-J214   972.548.6637
Faculty Contact:
Gloria Cockerell SCC-J247   972.881.5736
Academic Advisors:
Yajaira Diaz   PRC-F132   972.377.1513

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.

AAS – Marketing
60 credit hours

FIRST YEAR
First Semester

BMGT	1307	Team Building
BMGT	2347	Critical Thinking and Problem Solving
MATH	1332	Math for Liberal Arts I [1]
MRKG	1301	Customer Relationship Management [4]
MRKG	1311	Principles of Marketing

Second Semester

BMGT	1305	Communications in Management
BMGT	1341	Business Ethics
BUSG	2309	Small Business Management / Entrepreneurship
ENGL	1301	Composition I
IBUS	1354	International Marketing Management [3]
MRKG	2349	Advertising and Sales Promotion [3]

SECOND YEAR
First Semester

BMGT	1327	Principles of Management
HUMA	1301	Introduction to Humanities I (See Humanities / Fine Arts Options)
IBUS	2341	Intercultural Management
MRKG	2312	e-Commerce Marketing
MRKG	2333	Principles of Selling [4]

Second Semester

ECON	1301	Introduction to Economics [2]
MRKG	2348	Marketing Research and Strategies [3]
MRKG	2381	Cooperative Education – Marketing / Marketing Management, General (Capstone)
SPCH	1321	Business and Professional Communication (See Speech Options)

1. *May substitute MATH-1314 (recommended for transfer students), MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH-2419*
2. *May substitute ECON-2301, ECON-2302 or, PSYC-2301*
3. *Offered spring semester only*
4. *Offered fall semester only*

Certificate – Marketing
18 credit hours

First Semester

BMGT	2347	Critical Thinking and Problem Solving
IBUS	1354	International Marketing Management
MRKG	1311	Principles of Marketing

Second Semester

BMGT	1341	Business Ethics
BUSG	2309	Small Business Management / Entrepreneurship (Capstone)
MRKG	1301	Customer Relationship Management

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Music, Commercial

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

Department Chair:
Christopher Morgan, Ph. D.
SCC-B183   972.516.5010
Academic Advisors:
John Ciccia   CPC-D117G   972.578.5563
Samantha Dean   SCC-G122   972.881.5190

Program Options:
AAS – Commercial Music
Certificate - Audio Engineering
 Studio Track
 Live Sound Track
Certificate – Music Business

Collin's Commercial Music program provides career training in performance, audio engineering and sound reinforcement, electronic music, and composition / songwriting. Internship opportunities are available through the Cooperative Work Experience program for practical training in the field.

Many Collin graduates perform professionally or work in recording studios, tape duplication and editing facilities, or sound reinforcement companies.

Collin's Audio Engineering Certificate program offers students the training and skills needed for today's professional recording studio environments. The curriculum focuses on developing the expertise needed to work as a mixing engineer in both large and small studio environments. In addition to the studio-based classes such as the audio engineering and MIDI courses, the one-year certificate also develops hands-on proficiency in running live sound, understanding music business contracts and marketing as well as performing audio equipment troubleshooting.

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

AAS – Commercial Music

60 credit hours

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

Second Semester
MUSC	1313	Commercial Music Theory I
MUSC	2427	Audio Engineering II ~
MUSI	1116	Aural Skills I [1]
SPCH	1321	Business and Professional Communication (See Speech Options)
ELECTIVE *		
ELECTIVE *		

SECOND YEAR
First Semester
ENGL	1301	Composition I
MATH	1314	College Algebra (See Mathematics / Natural Sciences Options)
MUSB	2301	Music Marketing
MUSC	1331	MIDI I
MUSP	1113	Introductory Group Piano I [2]
ELECTIVE *		

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Second Semester

MUSB	2350	Commercial Music Project (Capstone) [3]
MUSC	1405	Live Sound I
MUSC	2355	MIDI II
MUSI	1307	Introduction to Music Literature [4]
MUSP	1114	Introductory Group Piano II [5]
PSYC	2301	General Psychology (See Social/Behavioral Sciences Options)

1. *Required for Commercial Music Majors*
2. *May substitute MUSI-1114 or MUSP-1110, departmental permission required*
3. *May substitute MUSB-2380, departmental permission required*
4. *Required to fulfill the Humanities / Fine Arts requirement - No course substitutions*
5. *May substitute MUSI-1115 or MUSP-1110 or MUSP-2235, departmental permission required*

~ *Audio Engineering courses (MUSC-1327, MUSC-2427, MUSC-2447 and MUSC-2448) are offered in both eight- and sixteen-week formats. Students planning to follow the curriculum outline above may need to take the courses in the eight-week format in order to meet the prerequisite requirements.*

* *Electives (minimum of 7 credit hours) If not used in degree requirements: Any MUAP, any MUEN, MUSB-1341, MUSB-2345, MUSB-2355, MUSB-2380, MUSC-1209, MUSC-1321, MUSC-1323, MUSC-1333, MUSC-2313, MUSC-2314, MUSC-2330, MUSC-2345, MUSC-2351, MUSC-2356, MUSC-2447, MUSC-2448, MUSI-1117, MUSI-1183, MUSI-1184, MUSI-1192, MUSI-1193, MUSI-1312, MUSI-1386, MUSI-2114, MUSI-2115, MUSI-2116, MUSI-2117, MUSI-2192, MUSI-2193, MUSI-2311, MUSI-2312, MUSP-1104, MUSP-1105, MUSP-1110, MUSP-1117, MUSP-1127, MUSP-1151, MUSP-1153, MUSP-1202, MUSP-2230, MUSP-2233, MUSP-2235, MUSP-2237 or MUSP-2249*

Certificate – Audio Engineering Studio Track

31 credit hours

FIRST YEAR
Summer

MUSC	1327	Audio Engineering I ~

First Semester

MUSB	1305	Survey of the Music Business
MUSB	2301	Music Marketing
MUSC	1405	Live Sound I
MUSC	2427	Audio Engineering II ~

Second Semester

MUSC	1323	Audio Electronics
MUSC	1331	MIDI I
MUSC	2447	Audio Engineering III ~
MUSC	2448	Audio Engineering IV ~ (Capstone)

~ *Audio Engineering courses (MUSC-1327, MUSC-2427, MUSC-2447 and MUSC-2448) are offered in both eight- and sixteen-week formats. Students planning to follow the curriculum outline above would need to take the courses in the eight-week format in order to meet the prerequisite requirements.*

Certificate – Audio Engineering Live Sound Track

31 credit hours

FIRST YEAR
Summer

MUSC	1327	Audio Engineering I ~

First Semester

MUSB	1305	Survey of the Music Business
MUSB	1341	Concert Promotion and Venue Management
MUSC	1405	Live Sound I
MUSC	2427	Audio Engineering II ~

Second Semester

MUSC 1323 Audio Electronics
MUSC 1331 MIDI I
MUSC 2403 Live Sound II
MUSC 2453 Live Sound III (Capstone)

~ *Audio Engineering courses (MUSC-1327 and MUSC-2427) are offered in both eight- and sixteen-week formats. Students planning to follow the curriculum outline above would need to take the courses in the eight-week format in order to meet the prerequisite requirements.*

Certificate – Music Business

33 credit hours

FIRST YEAR
Summer
MUSB 1305 Survey of the Music Business

First Semester
MUSB 1341 Concert Promotion and Venue Management
MUSB 2301 Music Marketing
MUSC 1327 Audio Engineering I
MUSI 1310 American Music
SPCH 1321 Business and Professional Communication

Second Semester
MUSB 2345 Live Music and Talent Management
MUSB 2350 Commercial Music Project (Capstone)
MUSC 1331 MIDI I
ELECTIVE *
ELECTIVE *

* *Elective - (minimum of 6 credit hours): MUSB-2355, MUSB-2380, MUSC-1321, MUSC-1405, MUSC-2355, MUSC-2356 or MUSC-2427*

Nursing

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

Dean, Academic Affairs - Nursing:
Donna Hatch, MSN, RN
　　　　　CPC-E302　　972.548.6772
MSAA Contact:
Health Sciences, Biology and Chemistry Office
　　　　　CPC-B122G　972.548.6678
Academic Advisors:
Tori Hoffman　　CPC-D117E　972.548.6779
Lisa Gibbs　　　CPC-D117F　972.548.6778

Program Options:
AAS – Nursing: Nursing Innovation Grant (NIG) Pilot
Nursing: Nursing Innovation Grant (NIG) Pilot Bridge for LVN / Paramedic
MSAA – Health Professions
　　Certified Nurse Assistant Track (CNA)
　　Phlebotomy Track (PHLEB)
MSAA – Patient Care Technician

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 Accreditation Commission for Education in Nursing (ACEN). Students must meet eligibility requirements for licensure as established by the Texas Board of Nursing. If an individual has reason to believe he/she is ineligible for licensure, he/she may petition the board for a declaratory order. This should be done prior to entering the program. Contact the Program Director for further information.

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

Students planning to transfer to another college or university for completion of their Bachelor's Degree should check with the Collin academic advisor prior to beginning this program to verify course transferability.

For students interested in transferring to a BSN program, please see the Associate of Arts - Nursing Field of Study.

FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities - with or without accommodations - for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information on the Nursing website www.collin.edu/nursing. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

ACCREDITATION

The Nursing Program is fully accredited by the Accreditation Commission for Education in Nursing (ACEN) . They may be contacted at:
  3343 Peachtree Road NE, Suite 850
  Atlanta, GA 30326
  404.975.5000
  www.acenursing.org

SCHOLARSHIPS

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

ADDITIONAL ADMISSIONS REQUIREMENTS

Admission to the Nursing Program is selective. Admission to the college does not guarantee admission to the Nursing Program. Registration is by permission only. Information and applications may be obtained from the Health Sciences Office, the Nursing 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, and dental exam
- Completion of immunizations required by the Texas Department of State Health Services (TDSHS) *

* *It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Director. In such cases, the applicant must sign a declination form. All immunizations must be complete before the first clinical visit.*

Health Insurance – All nursing students are required to show proof of health insurance prior to starting clinical rotations each semester.

Placement in mathematics and English courses is based upon the results of each student's assessments and subjects completed before admission.

Nursing Innovation Grant Pilot

Collin has been given an opportunity to be a part of the Nursing Innovation Grant (NIG). The purpose of the grant is to reduce time to degree by using concept-based curriculum. This type of curriculum allows for deep learning and promotes higher level clinical judgment. Students focus on generalities of specifically identified concepts and then apply what those concepts within the context of specific priority exemplars. The greatest advantage of concept-based learning, from a curriculum point-of-view, is that it provides a more efficient content management process. Nursing concepts are divided into two categories: *Health Care Concepts, and Professional Nursing Concepts*. These concepts are learned in the classroom and applied using sound clinical judgment in practical settings such as the campus hospital and Health Sciences Simulation labs as well as in local healthcare facilities.

AAS – Nursing: Nursing Innovation Grant (NIG) Pilot

60 credit hours

PREREQUISITES

BIOL	2401	Anatomy and Physiology I [1]
BIOL	2402	Anatomy and Physiology II
BIOL	2420	Microbiology for Non-Science Majors

FIRST YEAR
First Semester

PSYC	2301	General Psychology [1]
RNSG	1161	Clinical I – Nursing – Registered Nurse Training
RNSG	1170	Introduction to Nursing Concepts
RNSG	1171	Professional Nursing Concepts I
RNSG	1271	Professional Nursing Competencies
RNSG	1471	Health Care Concepts I

Second Semester

PSYC	2314	Life-Span Growth and Development
RNSG	2172	Professional Nursing Concepts II
RNSG	2361	Clinical II – Nursing – Registered Nurse Training
RNSG	2572	Health Care Concepts II

SECOND YEAR
First Semester

ENGL	1301	Composition I
RNSG	2173	Professional Nursing Concepts III
RNSG	2362	Clinical III – Nursing – Registered Nurse Training
RNSG	2573	Health Care Concepts III

Second Semester

HUMA	1301	Introduction to Humanities I (See Humanities / Fine Arts Options)
RNSG	2174	Professional Nursing Concepts IV (Capstone)
RNSG	2363	Clinical IV – Nursing – Registered Nurse Training
RNSG	2574	Health Care Concepts IV

1. No course substitutions

Note: The communication competency is met throughout the degree.

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

60 credit hours

PREREQUISITES

BIOL	2401	Anatomy and Physiology I [1]
BIOL	2402	Anatomy and Physiology II
BIOL	2420	Microbiology for Non-Science Majors
PSYC	2301	General Psychology [1]
PSYC	2314	Life-Span Growth and Development

Nursing faculty will determine the application and approval process. Students accepted into the Grant Pilot Bridge Program will receive credit for the following courses:
RNSG-1161, RNSG-1171, RNSG-1471, RNSG-2172 and RNSG-2572

FIRST YEAR
Summer

RNSG	1163	Clinical – Nursing Transition from LVN/Paramedic
RNSG	1170	Introduction to Health Care Concepts
RNSG	1172	Professional Nursing Competencies
RNSG	2371	Concept-Based Transition to Professional Nursing Practice

SECOND YEAR
First Semester

ENGL	1301	Composition I
RNSG	2173	Professional Nursing Concepts III
RNSG	2362	Clinical III – Nursing – Registered Nurse Training
RNSG	2573	Health Care Concepts III

Second Semester

HUMA	1301	Introduction to Humanities I (See Humanities / Fine Arts Options)
RNSG	2174	Professional Nursing Concepts IV (Capstone)
RNSG	2363	Clinical IV – Nursing – Registered Nurse Training
RNSG	2574	Health Care Concepts IV

1. No course substitutions

Note: The communication competency is met throughout the degree.

Marketable Skills Achievement Awards

Courses used in these awards, except HITT 1305 and HPRS 1271, are only offered through dual-credit at select high schools. Please contact the Health Sciences, Biology and Chemistry Office at the Central Park Campus (CPC), Room B122G, or call 972.548.6678 for additional information.

MSAA – Health Professions – Certified Nursing Track (CNA)

9 credit hours

HITT	1305	Medical Terminology I
HPRS	1271	Introduction to the Healthcare System [1]
NURA	1160	Clinical – Nursing Aide and Patient Care Assistant
NURA	1301	Nurse Aide for Health Care

1. May substitute HPRS-1204

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

MSAA – Health Professions – Phlebotomy Track (PHLEB)

11 credit hours

HITT	1305	Medical Terminology I
HPRS	1271	Introduction to the Healthcare System [1]
PLAB	1323	Phlebotomy
PLAB	1360	Clinical – Phlebotomy

1. *May substitute HPRS-1204*

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

MSAA – Patient Care Technician

This award requires successful CNA, PHLEB and EKG course completion.
14 credit hours

DSAE	1340	Diagnostic Electrocardiography
ECRD	1111	Electrocardiography
NURA	1160	Clinical – Nursing Aide and Patient Care Assistant
NURA	1301	Nurse Aide for Health Care
PLAB	1323	Phlebotomy
PLAB	1360	Clinical – Phlebotomy

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

Office Systems Technology

Department Chair:
Mary Milford   PRC-H119   469.365.1801
Faculty Contact:
Linda Thompson
                          SCC-J115   972.548.6815
Academic Advisor:
Nadia Khedairy   SCC-G147   469.365.1816

Program Options:
AAS – Office Systems Technology
Certificate – Office Systems Technology
Certificate – Medical Office Support
MSAA – Accounting Support
MSAA – Office Systems Technology

The Office Systems Technology Program is designed to incorporate both the technical and behavioral aspects of careers in the general or medical fields. Areas of study include: office keyboarding; word processing, desktop publishing; proofreading and editing; records and information management; business correspondence and communications; database, presentation, and spreadsheet software; office management; and manual and computerized office accounting.

Some of the courses required for this AAS degree are also excellent preparation for the experienced secretary who plans to take the Certified Professional Secretary exam. The secretary who has already passed the CPS exam may apply for academic credit from Collin to be applied toward the AAS degree in Office Systems Technology.

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

AAS – Office Systems Technology

60 credit hours

One or both of the following courses may be needed before proceeding with this degree. Please check the applicable course descriptions for prerequisite(s). You may be able to bypass the course prerequisite(s) through special enrollment permission by taking an online basic competency typing test as justification and documentation. Please check with a faculty contact for eligibility information.

POFT 1127 Introduction to Keyboarding
POFT 1329 Beginning Keyboarding

FIRST YEAR
First Semester
COSC 1301 Computers and Technology [1]
ENGL 1301 Composition I
POFT 1307 Proofreading and Editing
POFT 1319 Records and Information Management I
POFT 2301 Intermediate Keyboarding

Second Semester
ACNT 1303 Introduction to Accounting I
ECON 1301 Introduction to Economics (See other Social / Behavioral Sciences Options)
MATH 1332 Math for Liberal Arts I [2]
POFI 2301 Word Processing – MS Word
POFT 2303 Speed and Accuracy Building

Summer
HUMA 1301 Introduction to Humanities I (See other Humanities / Fine Arts Options)
ELECTIVE *

SECOND YEAR
First Semester
ACNT 1311 Introduction to Computerized Accounting
ITSC 1309 Integrated Software Applications I – MS Office
POFT 2312 Business Correspondence and Communication
ELECTIVE *

Second Semester
POFT 1349 Administrative Office Procedures II (Capstone)
SPCH 1311 Introduction to Speech Communication (See other Speech Options)
ELECTIVE *
ELECTIVE *

1. May substitute BCIS 1305
2. May substitute MATH-1324 or MATH-1314

* Electives (12 hours): BMGT-2309, HITT-1305, HITT-1311, HITT 1341, HITT 2435, HPRS-2321, IMED-1301, ITSW-1304, ITSW-1307, LGLA-1307, LGLA-2333, POFI-2331, POFT-1380, or POFT-2380

Certificate – Office Systems Technology

27 credit hours

One or more of the following courses may be needed before proceeding with this certificate. Please check the applicable course descriptions for prerequisite(s). You may be able to bypass the course prerequisite(s) through special enrollment permission by taking an online accounting test and/or a basic competency typing test as justification and documentation. Please check with a faculty contact for eligibility information.

ACNT	1303	Introduction to Accounting I
POFT	1127	Introduction to Keyboarding
POFT	1329	Beginning Keyboarding

First Semester

ITSC	1309	Integrated Software Applications I - MS Office
POFT	1307	Proofreading and Editing
POFT	1319	Records and Information Management I
POFT	2301	Intermediate Keyboarding

Second Semester

POFI	2301	Word Processing - MS Word
POFT	1349	Administrative Office Procedures II (Capstone)
POFT	2303	Speed and Accuracy Building
POFT	2312	Business Correspondence and Communication
ELECTIVE *		

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

Certificate – Medical Office Support

37 credit hours

One or both of the following courses may be needed before proceeding with this certificate. Please check the applicable course descriptions for prerequisite(s). You may be able to bypass the course prerequisite(s) through special enrollment permission by taking an online basic competency typing test as justification and documentation. Please check with a faculty contact for eligibility information.

| POFT | 1127 | Introduction to Keyboarding |
| POFT | 1329 | Beginning Keyboarding |

First Semester

HITT	1305	Medical Terminology I
POFI	2301	Word Processing – MS Word
POFT	1307	Proofreading and Editing
POFT	2301	Intermediate Keyboarding
POFT	2303	Speed and Accuracy Building

Second Semester

HITT	1341	Coding and Classification Systems
HPRS	2321	Medical Law and Ethics for Health Professionals
ITSC	1309	Integrated Software Applications I - MS Office
POFT	1319	Records and Information Management I

Summer

HITT	2435	Coding and Reimbursement Methodologies
POFT	1349	Administrative Office Procedures II (Capstone)
POFT	2312	Business Correspondence and Communication

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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

Department Chair:
Cynthia Farris Gruver
PRC-L232   972.881.5747
Academic Advisor:
Nadia Khedairy   SCC-G147   469.365.1816

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.

Paralegal Program Goals
Consistent with the core values of the district, the mission of the paralegal studies program is to further the paralegal profession by providing specialized training and education in law and legal procedure that will produce graduates who are prepared to enter the legal workforce with sufficient technology skills and a firm understanding of the ethical responsibilities of the attorney and paralegal.
The goals of the paralegal program are:
1. The program will reflect a diverse student body.
2. The program will produce graduates who possess the legal knowledge and technology skills necessary to qualify them for employment in a legal work environment.
3. The program will produce graduates who demonstrate an understanding of their ethical responsibility in the legal profession.

4. The program will emphasize written communication skills.
5. The program will promote opportunities to service the needs of the local community and encourage *pro bono* and public interest causes.

Texas Woman's University (TWU) and Collin Paralegal/Legal Assistant programs entered an articulation agreement effective fall 1999, which establishes a plan for students to obtain an AAS degree from Collin and a Bachelor of Science in Government - Legal Studies Emphasis degree from TWU. Collin College established a similar articulation agreement with Texas A&M University-Commerce, effective Fall 2004, for the Bachelor of Arts/Science in Political Science with Emphasis in Paralegal Studies degree.

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

60 credit hours

FIRST YEAR
First Semester

ENGL	1301	Composition I
LGLA	1307	Introduction to Law and the Legal Professions
LGLA	2303	Torts and Personal Injury Law
MATH	1314	College Algebra [1]

Second Semester

GOVT	2305	Federal Government (Federal constitution and topics)
LGLA	1303	Legal Research
LGLA	1305	Legal Writing
LGLA	1342	Federal Civil Litigation

Summer

ENGL	1302	Composition II
LGLA	1351	Contracts
LGLA	2311	Business Organizations
PHIL	2303	Introduction to Formal Logic [2]

SECOND YEAR
First Semester

LGLA	1344	Texas Civil Litigation
LGLA	1355	Family Law
SPCH	1311	Introduction to Speech Communication (See other Speech Options)

LAW ELECTIVE *

Second Semester

| LGLA | 1353 | Wills, Trusts, and Probate Administration |
| LGLA | 2339 | Certified Paralegal Exam Review (Capstone) [3] |

LAW ELECTIVE *
LAW ELECTIVE *

1. *May substitute MATH-1316, MATH-1324, MATH-1332, MATH-1342, MATH-1350, MATH-1351, or MATH-1414*
2. *May substitute PHIL-1301, PHIL-2306, or PHIL-2307 (PHIL-2303 is recommended for students planning to take the LSAT.)*
3. *Successful completion of the AAS Paralegal/Legal Assistant program meets the current eligibility requirements to qualify to take the Certified Paralegal Examination. Students should contact the National Association of Legal Assistants (NALA) for changes or alternate qualifications to sit for the CP Exam.*

* *Law Electives (9 credit hours): LGLA-1323, LGLA-1343, LGLA-1380, LGLA-2307, LGLA-2309, LGLA-2313, LGLA-2323, or LGLA-2333*

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Certificate – Paralegal General

36 credit hours

First Semester
LGLA 1307 Introduction to Law and the Legal Professions
LGLA 1342 Federal Civil Litigation
LGLA 2303 Torts and Personal Injury Law
TECHNOLOGY ELECTIVE *

Second Semester
LGLA 1303 Legal Research
LGLA 1305 Legal Writing
LAW ELECTIVE **
LAW ELECTIVE **

Third Semester
LGLA 1344 Texas Civil Litigation
LGLA 1351 Contracts
LGLA 2311 Business Organizations
LGLA 2339 Certified Paralegal Exam Review (Capstone) [1]

1. *Students should contact the National Association of Legal Assistants (NALA) for current exam eligibility requirements.*

* *Technology Elective (3 credit hours): BCIS-1305, COSC-1301, LGLA-2333, or POFI-2301. If a student is planning further study in a business-related area, the student should take BCIS -1305 rather than COSC-1301.*

** *Law Electives (6 credit hours): LGLA-1323, LGLA-1343, LGLA-1353, LGLA- 1355, LGLA-1380, LGLA-2307, LGLA-2309, LGLA-2313, LGLA-2323, or LGLA-2333*

Note: A course will be counted only once – either as a Technology Elective or as a Law Elective.

Pastry Arts

Also see Culinary Arts

Department Chair:
Karen Musa   PRC-L229   972.377.1672
Academic Advisor:
Yajaira Diaz   PRC-F132   972.377.1513

Program Options:
AAS – Pastry Arts
Certificate – Pastry Arts

Students completing the Pastry Arts program at Collin College will be qualified for a variety of hands-on bakery positions in the food service industry. The food service industry is the largest private sector employer in the United States. The curriculum at Collin College emphasizes a broad selection of hands-on food preparation courses, building on baking and pastry foundation skills that will allow the student to be effective in a commercial bakeshop environment. Collin College's Pastry Arts career education offers classes in the daytime and in the evening. The curriculum is designed by industry experts and taught by experienced pastry professionals. The degree program offers an Associate of Applied Science in Pastry Arts. A Certificate in Pastry Arts is also available.

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

ACCREDITATION
The Culinary Arts Program is fully accredited by the American Culinary Federation Education Foundation. They may be contacted at:
180 Center Place Way
St. Augistine, FL 32095
800.624.9458
www.acfchefs.org

ADMISSION REQUIREMENTS

Students are required to attend mandatory Pastry Arts Orientation. Please contact Program Chair for dates and times.

Note: Pastry lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

AAS – Pastry Arts

60 credit hours

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

FIRST YEAR
First Semester

CHEF	1301	Basic Food Preparation
CHEF	1305	Sanitation and Safety [1, 2]
HAMG	1321	Introduction to Hospitality Industry
MATH	1332	Math for Liberal Arts I [3]
PSTR	1301	Fundamentals of Baking

Second Semester

IFWA	1310	Nutrition and Menu Planning
PSTR	1305	Breads and Rolls
PSTR	1310	Pies, Tarts, Teacakes, and Cookies
RSTO	1325	Purchasing for Hospitality Operations

Third Semester

ENGL	1301	Composition I
HAMG	1319	Computers in Hospitality
PSTR	1306	Cake Decorating I

SECOND YEAR
First Semester

ECON	1301	Introduction to Economics (See Social / Behavioral Sciences Options)
HAMG	1324	Hospitality Human Resources Management
PSTR	2301	Chocolates and Confections
PSTR	2307	Cake Decorating II

Second Semester

HUMA	1301	Introduction to Humanities I (See Humanities / Fine Arts Options)
PSTR	2331	Advanced Pastry Shop (Capstone)
PSTR	2380	Cooperative Education - Baking and Pastry Arts / Baker / Pastry Chef
SPCH	1321	Business and Professional Communication (See Speech Options)

1 Certification in ServSafe
2 Certification in Food Protection Management
3 May substitute MATH-1314 (recommended for transfer students), MATH-1316, MATH-1324, MATH-1325, MATH-1342, MATH-1350, MATH-1351, MATH-1414, MATH-2305, MATH-2312, MATH-2318, MATH-2320, MATH-2413, MATH-2414, MATH-2415, MATH-2417 or MATH-2419

Certificate – Pastry Arts

21 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

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Second Semester

PSTR 1305 Breads and Rolls
PSTR 1306 Cake Decorating I
PSTR 1310 Pies, Tarts, Teacakes, and
Cookies (Capstone)

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

Photography, Commercial

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

Department Chair:
Laura Flores   SCC-K241   972.578.5527
Academic Advisors:
John Ciccia   CPC-D117G   972.578.5563
Samantha Dean   SCC-G122   972.881.5190

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
ARTS 1313 Foundations of Art
(See Humanities / Fine Arts
Options)
ARTS 2348 Digital Photography I
MATH 1332 Math for Liberal Arts I [1]

Second Semester
ARTC 1349 Art Direction I
ARTS 2349 Digital Photography II
ENGL 1301 Composition I
PHTC 1353 Portraiture I
PHTC 2331 Architectural Photography

Third Semester
ARTV 1211 Storyboard
SPCH 1311 Introduction to Speech
Communication
(See Speech Options)

SECOND YEAR
First Semester
ARTS 2336 Papermaking / Bookbinding I
ARTV 1351 Digital Video
PHED / DANC Any1 credit hour activity course
(See PHED / DANC Options)
PHTC 1341 Color Photography I (Theory
and Management)
PHTC 1345 Illustrative Photography I
PHTC 2340 Photographic Studio
Management

Second Semester
ARTC 1313 Digital Publishing I
PHTC 2343 Portfolio Development
(Capstone)
PSYC 2301 General Psychology
(See Social / Behavioral
Sciences 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 Foundations of Art
ARTS 2348 Digital Photography I

Second Semester
ARTC 1349 Art Direction I
ARTS 2349 Digital Photography II
PHTC 1353 Portraiture I
PHTC 2340 Photographic Studio
Management

SECOND YEAR
First Semester
PHTC 1341 Color Photography I (Theory
and Management)
PHTC 1345 Illustrative Photography I
PHTC 2343 Portfolio Development
(Capstone)
OPTION 1 [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.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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

Primary Contact - Program Coordinator:
Amber Allen, BA, RPSGT, RST
                CPC-B203B   214.491.6238
Program Director:
Araceli Solis, BS, RRT-NPS
                CPC-B203J   972.548.6870
Academic Advisor:
Lisa Gibbs   CPC-D117F   972.548.6778

Program Options:
AAS – Polysomnographic Technology
Certificate – Polysomnographic Technology

The Collin College Polysomnographic Technology Program prepares students for an allied health specialty in the clinical care and management of sleep disorders. Sleep medicine is a growing field with more than 80 sleep disorders identified, and an estimated 60 million people in the United States suffering from at least one sleep disorder. As more patients seek diagnosis and treatment of their sleep disorders, the demand for qualified polysomnographic technologists grows. Polysomnographic technologists conduct the sleep studies that allow physicians to diagnose and treat patients suffering from sleep disorders. Through this program, Collin College students are prepared to enter the growing and challenging field of sleep medicine by equipping them with the skills and fundamental knowledge to effectively monitor, manage, and treat sleep disorders under medical supervision.

The Polysomnographic Technology Program offers two degree options: an Associate of Applied Science (AAS) and a Certificate. The 22-month AAS degree track is for students who do not have a background in healthcare. The 12-month Certificate is for individuals who have earned an associate or higher degree in a healthcare field and are board registered in that field. Those who are board certified in polysomnographic technology (RPSGT) or electroencephalography (REEGT) without an associate or higher degree also qualify for the Certificate track. Spaces in the Polysomnographic Technology Program are limited.

Upon graduation from either award, the graduate is eligible to sit for the Board of Registered Polysomnographic Technologists exam to become a Registered Polysomnographic Technologist (RPSGT) and/or the American Board of Sleep Medicine exam to become a Registered Sleep Technologist (RST).

Mathematics and science courses that are part of the curriculum but completed at a regionally accredited institution must have been completed within five years of the fall semester of the admission year in order to receive transfer credits. The minimum passing grade for all Polysomnographic Technology lecture, lab and clinical course work is 75 percent.

FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT

After initial acceptance to this program, all students are required to meet specific functional abilities—with or without accommodations—for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information on the Polysomnographic Technology website: www.collin.edu/sleep . Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

ACCREDITATION

The Collin College Polysomnographic Technology program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation for Polysomnographic Technologist Education (www.coapsg.org). They may be contacted at:

> Commission on Accreditation of Allied Health Education Programs
> 1361 Park Street
> Clearwater, FL 33756
> 727.210.2350
> www.caahep.org

ADDITIONAL ADMISSION REQUIREMENTS

Registration is by permission only. Information and applications may be obtained online at www.collin.edu/sleep or the Health Sciences, Biology and Chemistry Office. To apply, students must:

- Submit the required application form by the designated deadline
- Provide proof of high school graduation or GED
- Submit official copies of all college transcripts

- Complete Collin College reading, writing and mathematics assessments
- Complete Psychological Services Bureau (PSB) Health Occupations Aptitude Exam
- Document acceptable findings on drug screens, background checks and physical/mental competencies
- Complete program admission criteria (see Admission Packet)
- Completion of immunizations required by the Texas Department of State Health Services (TDSHS) *

* *It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Coordinator. In such cases, the applicant must sign a declination form. All immunizations must be complete before assignment to clinical training.*

Health Insurance - *All Polysomnographic Technology students are required to show proof of health insurance prior to starting clinical rotations each semester.*

PROGRAM COMPLETION 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.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

AAS – Polysomnographic Technology

60 credit hours

PRE-ENTRANCE REQUIREMENTS

A) Students planning to apply for admission to the program must have the following courses completed with a grade of "C" or better before the application deadline.
   1) BIOL-2404, Human Anatomy and Physiology Basic
   2) HPRS-1204, Basic Health Profession Skills
B) Students entering the program must be prepared to enter college-level mathematics by either completion of MATH-0310 or by placement at the MATH-1314, College Algebra level. Students must complete MATH-1314 ,College Algebra during or before the fall semester of the program admission year.

Note: All science and mathematics courses that are part of the curriculum, but completed at a regionally accredited institution, must have been completed within five years of the fall semester for the fall semester of the admission year in order to receive transfer credit.

PREREQUISITES

BIOL	2404	Human Anatomy and Physiology Basic
HPRS	1204	Basic Health Profession Skills

FIRST YEAR
First Semester

ENGL	1301	Composition I
MATH	1314	College Algebra [1]
PSGT	1215	Introduction to Polysomnography
PSGT	1310	Neuroanatomy and Physiology
RSPT	1207	Cardiopulmonary Anatomy and Physiology

Second Semester

PSGT	1205	Neurophysiology of Sleep
PSGT	1340	Sleep Disorders
PSGT	1400	Polysomnography I
RSPT	1237	Basic Dysrhythmia Interpretation
SPCH	1311	Introduction to Speech Communication (See Speech Options)

Third Semester (Summer)

PSGT	1360	AAS Clinical I – Polysomnography

SECOND YEAR
First Semester

PSGT	2205	Sleep Scoring and Staging
PSGT	2360	AAS Clinical II – Polysomnography
PSGT	2411	Polysomnography II
PSYC	2301	General Psychology (See Social / Behavioral Sciences Options)

Second Semester

PHIL	2303	Introduction to Formal Logic (See Humanities / Fine Arts Options)
PSGT	2250	Infant and Pediatric Polysomnography
PSGT	2271	Pharmacology for Polysomnography
PSGT	2272	Polysomnography Exam Preparation (Capstone)
PSGT	2361	AAS Clinical III – Polysomnography

1. *May substitute MATH-1324, MATH-1342 MATH-1414 or MATH-2312*

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Certificate – Polysomnographic Technology

28 credit hours

PRE-ENTRANCE REQUIREMENTS

Prior to being admitted to this program, students must provide official documentation showing they have earned an associate of higher degree in a healthcare field and be board registered in that field –OR- be board registered in polysomnographic technology (RPSGT) or electroencephalography (REEGT).

FIRST YEAR
First Semester

PSGT	1260	Certificate Clinical I – Polysomnography
PSGT	1400	Polysomnography I
PSGT	1573	Polysomnographic Anatomy and Physiology
RSPT	1237	Basic Dysrhythmia Interpretation

Second Semester

PSGT	1340	Sleep Disorders
PSGT	2205	Sleep Scoring and Staging
PSGT	2250	Infant and Pediatric Polysomnography
PSGT	2272	Polysomnography Exam Preparation (Capstone)
PSGT	2411	Polysomnography II

Real Estate

Department Chair:
Mary Milford   PRC-H119   469.365.1801
Academic Advisor:
Nadia Khedairy   SCC-G147   469.365.1816
Department Website:
http://www.collin.edu/realestate

Program Options:
AAS – Real Estate
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

60 credit hours

This degree provides the required real estate courses for the Texas Salesperson Exam.

FIRST YEAR
First Semester

Each of these courses is offered as a 5-week express course.

RELE	1300	Contract Forms and Addenda
RELE	1301	Principles of Real Estate I
RELE	1311	Law of Contracts
RELE	1319	Real Estate Finance
RELE	1338	Principles of Real Estate II
RELE	2301	Law of Agency

Second Semester

ENGL	1301	Composition I
GOVT	2305	Federal Government (Federal constitution and topics)
SPCH	1311	Introduction to Speech Communication (See other Speech Options)

REAL ESTATE ELECTIVE*
REAL ESTATE ELECTIVE*

SECOND YEAR
First Semester

BUSI	1301	Business Principles
ECON	1301	Introduction to Economics [1]
ENGL	1302	Composition II
HIST	1301	United States History I [2]

REAL ESTATE ELECTIVE*

Second Semester

HUMA	1301	Introduction to Humanities I (See other Humanities / Fine Arts Options)
MATH	1332	Math for Liberal Arts I [3]

REAL ESTATE ELECTIVE *
GENERAL ELECTIVE **

1. *May substitute ECON-2301 or ECON-2302*
2. *May substitute ANTH-2346, ANTH-2351, HIST-1302, HIST-2301, PSYC-2301, or SOCI-1301*
3. *May substitute MATH-1324 or MATH-1314 (recommended for transfer students)*

* *Real Estate Electives (12 credit hours): RELE-1303, RELE-1307, RELE-1315, RELE-1321, RELE-1325, or RELE-2331.*
***General Elective (3credit hours): ACCT-2301, BMGT-1327, BUSG-2309, GOVT-2306, ITSW-1304, or RELE-1380.*

Certificate – Real Estate Salesperson

18 credit hours

This certificate provides the required real estate courses for the Texas Salesperson Exam.

RELE	1300	Contract Forms and Addenda
RELE	1301	Principles of Real Estate I
RELE	1311	Law of Contracts
RELE	1319	Real Estate Finance
RELE	1338	Principles of Real Estate II
RELE	2301	Law of Agency

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Respiratory Care

Program Director:
Araceli Solis, BS, RRT, RCP
          CPC-B203J   972.548.6870
Academic Advisor:
Lisa Gibbs   CPC-D117F   972.548.6778

Program Option:
AAS - Respiratory Care
MSAA - Electrocardiography

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
   1248 Harwood Road
   Bedford, Texas 76021-4244
   Phone: 817.283.2835
   Fax: 817.354.8519

FUNCTIONAL ABILITIES / CORE PERFORMANCE STANDARDS STATEMENT
After initial acceptance to this program, all students are required to meet specific functional abilities - with or without accommodations - for successful completion of the program and to function safely and effectively in the variety of the profession's settings. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information on the Respiratory Care website: www.collin.edu/rcp . 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, Biology and Chemistry Office. To apply, students must:
- Submit the required application form by the designated deadline
- Provide proof of high school graduation or GED
- Submit official copies of all college transcripts
- Complete Collin College reading, writing and mathematics assessments
- Overall GPA of 2.5 with a minimum grade of "C" in all prerequisite courses

- Complete Psychological Services Bureau (PSB), Health Occupations Aptitude Exam prior to the application deadline
- Agree to criminal background check. Findings from the background check that do not meet clinical affiliation specification will result in the student not being admitted to the program
- Once admitted, student must pass a drug screen at the student's expense, when requested and as directed by the program
- Attend a student orientation prior to the start of the first semester in the program
- Successful complete all program admission criteria (see Admission Packet)
- Complete all immunizations required by the Texas Department of State Health Services (TDSHS) *
- * *It is important to note that one of the required vaccinations, Hepatitis B, consists of a three dose series, which can take up to 7 months to complete. Individuals unable to receive the HBV must inform the Program Director. In such cases, the applicant must sign a declination form. All immunizations must be complete before assignment to clinical training.*
- **Health Insurance -** *All Respiratory Care students are required to show proof of health insurance prior to starting clinical rotations each semester.*

PROGRAM COMPLETION REQUIREMENTS

In addition to successfully completing the respiratory care curriculum, students are required to complete comprehensive CRT and RRT Self Assessment Examinations during the second year of the program.

1. The CRT Self Assessment Exam will be given in the fall semester of the second year.
2. The RRT Self Assessment Exams will be given in the spring semester of the second year.
   a. Written Registry Self Assessment Exam
   b. Clinical Simulation Self Assessment Examination
3. Meet all Collin College graduation requirements.

Satisfactory completion of these exams is required for graduation from the program. Students who do not pass any of these exams will be required to complete prescribed remediation assignments and retest. The program reserves the right to limit the number of retests. Repeat testing will be at student expense.

CRT TRANSITION PROGRAM

The program, after admission to the college, offers a transition option to allow students who hold a CRT credential, have regionally accredited college credit in entry level respiratory care, and have one year of clinical experience as a respiratory therapist to enter the second year of the Respiratory Therapy Program, receive their degree and become registry-eligible. Content and clinical skill competency tests must be satisfactorily completed for students to enter this option. Contact the Program Director for more information.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

AAS – Respiratory Care

72 credit hours

PRE-ENTRANCE REQUIREMENTS

A) Students planning to apply for admission to the program must have three of the four following prerequisite courses completed with a grade of "C" or better before the application deadline.
   1) BIOL 2401 Anatomy and Physiology I
   2) BIOL 2402 Anatomy and Physiology II
   3) BIOL 2420 Microbiology for Non-Science Majors
   4) HPRS 1204 Basic Health Profession Skills

B) Students entering the program must be prepared to enter college-level mathematics by either completion of MATH-0310 or by placement at the MATH-1314 College Algebra level. Students must complete MATH-1314 College Algebra during or before the fall semester of the program admission year.

Note: All science and mathematics courses that are part of the curriculum, but completed at a regionally accredited institution, must have been completed within five years of the fall semester for the fall semester of the admission year in order to receive transfer credit.

PREREQUISITES

BIOL	2401	Anatomy and Physiology I [1]
BIOL	2402	Anatomy and Physiology II
BIOL	2420	Microbiology for Non-Science Majors
HPRS	1204	Basic Health Profession Skills

FIRST YEAR

First Semester

MATH	1314	College Algebra [2]
RSPT	1160	Clinical I - Respiratory Care Therapist
RSPT	1201	Introduction to Respiratory Care
RSPT	1307	Cardiopulmonary Anatomy and Physiology
RSPT	1410	Respiratory Care Procedures I

Second Semester

RSPT	1361	Clinical II - Respiratory Care Therapist
RSPT	1411	Respiratory Care Procedures II
RSPT	2217	Respiratory Care Pharmacology
RSPT	2310	Cardiopulmonary Disease

Summer

RSPT	1362	Clinical III - Respiratory Care Therapist
RSPT	2471	Respiratory Care Procedures III

SECOND YEAR

First Semester

ENGL	1301	Composition I
PSYC	2301	General Psychology [3]
RSPT	2255	Critical Care Monitoring
RSPT	2353	Neonatal / Pediatric Cardiopulmonary Care
RSPT	2360	Clinical IV - Respiratory Care Therapist

Second Semester

PHIL	2303	Introduction to Formal Logic (See Humanities / Fine Arts Options)
RSPT	2130	Respiratory Care Examination Preparation
RSPT	2139	Advanced Cardiac Life Support
RSPT	2231	Simulations in Respiratory Care
RSPT	2247	Specialties in Respiratory Care
RSPT	2361	Clinical V - Respiratory Care Therapist (Capstone)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

1 No course substitutions
2. May substitute MATH-1316, MATH-1324,
    MATH-1325, MATH-1350, MATH-1351,
    MATH-2305, MATH-2312, MATH-2318 or
    MATH-2320
3. May substitute SOCI-1301

Note: The communication competency is met
     throughout the degree.

MSAA –Electrocardiography

9 credit hours

DSAE	1340	Diagnostic Electrocardiography
ECRD	1111	Electrocardiography
HITT	1305	Medical Terminology I
HPRS	1271	Introduction to the Healthcare System [1]

1. May substitute HPRS-1204

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

Semiconductor Manufacturing Technology

Program Director:
Dave Galley   PRC-H213   972.377.1676
Academic Advisor:
Catherine Smith PRC-F134   972.377.1780

Program Options:
AAS – Semiconductor Manufacturing
    Technology

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.

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

60 credit hours

FIRST YEAR
First Semester
CETT	1303	DC Circuits
CETT	1325	Digital Fundamentals
ENGL	1301	Composition I
ENGR	1201	Introduction to Engineering
MATH	1314	College Algebra [1]

Second Semester
CETT	1305	AC Circuits
DFTG	1309	Basic Computer-Aided Drafting
MATH	1316	Plane Trigonometry
PHYS	1401	College Physics I

Summer
| ECON | 1301 | Introduction to Economics (See other Social / Behavioral Sciences Options) |
| SPCH | 1311 | Introduction to Speech Communication (See other Speech Options) |

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

SECOND YEAR
First Semester
CETT 1329 Solid State Devices
HUMA 1301 Introduction to Humanities I
(See other Humanities / Fine
Arts Options)
SMFT 1343 Semiconductor Manufacturing
Technology
Elective *

Second Semester
CETT 1357 Linear Integrated Circuits
CETT 2380 Cooperative Education -
Computer Engineering
Technology/Technician
(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*

* *Elective (9 credit hours): Any CETT, CPMT, EECT,
  ENGR, or SMFT course not listed above with
  consent of Program Director*

Surgical Technology

Program Director:
Jeanne Glapion, MBA, CRCST, CST
CPC-B304   214.491.6218
Academic Advisor:
Lisa Gibbs   CPC-D117F   972.548.6778

Program Option:
AAS – Surgical Technology
Certificate – Central Sterile Processing

The Associate of Applied Science (AAS) in
Surgical Technology at Collin College is an 18-
month program (two academic years) that will
prepare the student for an entry-level position as a
surgical technologist. First year of the program
consists of prerequisites and general education
courses. Upon completion of the first year, the
student may apply for admission into the program
through the Special Admission Requirements
listed below.

The course of study consists of approved courses
from the Workforce Education Course Manual of
Texas. These courses must be taken in full
sequence to assure progression of content from
simple to complex. The Surgical Technology
curriculum is approved by the Texas Higher
Education Coordinating Board and modeled after
the Association of Surgical Technologists national
curriculum.

The Surgical Technology Program is a recipient
of the Merit Award from the National Board of
Surgical Technology and Surgical Assisting
(NBSTSA) for achievement of graduate pass rates
on the Certified Surgical Technologist (CST)
examination.

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 Surgical Technology Office in B304 on the Central Park Campus (CPC) of a completed and signed Surgical Technology Program Application Form by the second Friday in April. The Application Form is available on line in the Admission Packet at www.collin.edu/surgtech.
- Completion of or current enrollment in the prerequisite four pre-entrance required courses with a grade of 'C' or above and a cumulative prerequisite course GPA of 2.5. These courses are listed below and include: BIOL-2401, BIOL-2402, HITT-1305 and HPRS-1204. If prerequisite courses are being completed during the spring preceding admission, students will automatically receive conditional enrollment pending completion of prerequisites with a cumulative prerequisite GPA of 2.5.
- Be prepared to enter college algebra (MATH-1314 or equivalent), or completion of college-level math course within the past five years of the application date.

- Completion of the PSB for Health Occupations Examination prior to the deadline for application. The PSB for Nursing will be considered in lieu of the Health Occupations Exam. Results are good for one year. Satisfactory completion of math, reading and writing assessments administered by the college.
- Submit a handwritten, well-developed, one- to two-page essay discussing why surgical technology has been selected as a career choice and why attendance at the Collin College program is desired. Submit this essay with your Application Form.
- Request two letters of reference from employers or teachers (not friends or family) that can attest to your character and aptitude in a healthcare career. These letters should be directly mailed by whomever writes them to: Attn: Director of Surgical Technology Program, Health Sciences, Biology and Chemistry 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. (To review Core Performance Standards, see the Surgical Technology website at www.collin.edu/surgtech).
- Pass a drug screen at the student's expense when requested by the program. Positive drug screens can result in students not being admitted to the program.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

- 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 prior to the beginning of clinical rotations.
- Complete and provide written proof of all immunizations recommended by the Department of State Health Services according to the following schedule: (http://www.dshs.state.tx.us/immunize/Schedule/schedule_adult.shtm)
  - Influenza Vaccine – once a year
  - Tetanus, diphtheria, pertussis – primary series or booster within the last 10 years
  - MMR – one (1) or two (2) doses if born before 1957
  - Varicella – two (2) doses or documented age-appropriate vaccination or physician report of evidence of disease (chicken pox)
  - Hepatitis A – two (2) doses, the second dose should be administered 6 – 18 months after the first dose
  - Hepatitis B – three (3) dose series, the second dose should be administered one month after the first dose; the third dose should be given at least two months after the second dose (and at least four months after the first dose)

  - Combined Hepatitis A and B – three (3) doses, the second dose should be administered one month after the first dose; the third dose should be given at six months

NOTE: Students interested in admission to the program for summer semester should see their physician and begin immunizations four (4) months prior to the beginning of the semester.

Functional Abilities / Core Performance Standards Statement
After initial acceptance to this program, all students are required to meet specific functional abilities, with or without accommodations, for successful completion of the program, and to function safely and effectively in the variety of professional settings. The specific functional requirements are found in the Functional Abilities / Core Performance Standards documents provided in the program information packet and on the Surgical Technology website. Students who think they may not be able to meet the functional standards and need accommodation are encouraged to contact the college ACCESS department as soon as this program is of interest.

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 Office and on the Surgical Technology website.

AAS – Surgical Technology

64 - 66 credit hours

FIRST YEAR
First Prerequisite Semester

BIOL	2401	Anatomy and Physiology I [1]
ENGL	1301	Composition I
HPRS	1204	Basic Health Profession Skills
PHED / DANC		Any activity course (See PHED / DANC Options)
SPCH	1311	Introduction to Speech Communication (See Speech Options)

Second Prerequisite Semester

BIOL	2402	Anatomy and Physiology II
COSC	1301	Computers and Technology
HITT	1305	Medical Terminology I
PHIL	2303	Introduction to Formal Logic (See Humanities / Fine Arts Options)
PSYC	2301	General Psychology [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	2420	Microbiology for Non-Science Majors
SRGT	1171	Transition to Practice for the Surgical Technologist
SRGT	1542	Surgical Procedures II
SRGT	2130	Professional Readiness
SRGT	2561	Clinical - Surgical Technology III (Capstone)

1 No course substitutions
2. May substitute SOCI-1301

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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)

BANNER SUBJECT / RUBRIC NAMES
By Subject

Subject/Rubric Title	Subject/Rubric	Subject/Rubric Title	Subject/Rubric
Accnting/Office Systs	ACNT	Culinary - Nutrition	IFWA
Accounting	ACCT	Culinary Arts	CHEF
Air Force ROTC	AERS	Dance	DANC
Anthropology	ANTH	Dental Hygiene	DHYG
Arabic	ARAB	Desktop Publishg Word	GRPH
Arts/Photography	ARTS	Economics	ECON
Biology	BIOL	Education	EDUC
Biotechnology	BITC	Elect/Electronic Comm	EECT
Business - Human Resource	HRPO	Electrical - Circuits	ENGT
Business Administration	BUSI	Electronic Enginrng	ENTC
Business Management	BMGT	Electronic Engnrng/Equip	INTC
Chemistry	CHEM	Electronic Technology	CETT
Child Development	CDEC	Emergency Medical Servs	EMSP
Child Dvelpmnt/Tching	TECA	Engineering	ENGR
Chinese	CHIN	Engineering Technology	BIOM
College Success	COSU	English	ENGL
Comm Design - Anim/Video	FLMC	Environmenatl Science	ENVR
Comm Design - Animation	ARTV	ESL Grammar	ESLG
Comm Design - Game	GAME	ESL Listening/Convers	ESLC
Comm Design - Graphic	ARTC	ESL Reading	ESLR
Comm Design - Photo	PHTC	ESL Vocabulary	ESLV
Comm Design - Video	RTVB	ESL Writing	ESLW
Comm/Jour/Spch/Phot	COMM	Fire Technology	FIRT
Comp Aided Drfting/Dsgn	DFTG	Firefighter	FIRS
Computer Aided Drafting	ARCE	French	FREN
Computer Applications	ITSW	Geographic Infrmton Sys	GISC
Computer Infrmtion Sys	ITSC	Geography	GEOG
Computer Maintenance Tech	CPMT	Geology	GEOL
Computer Media / Graph Ds	IMED	German	GERM
Computer Networking	ITCC	Government	GOVT
Computer Netwrking Tech	ITNW	Health Info - Medical	HPRS
Computer Programming	INEW	Health Info Technology	HITT
Computer Science	COSC	Health/Surg/EMS	MDCA
Computer Syst Secrity	ITSY	History	HIST
Computer Systems	BCIS	Hotel - Management	RSTO
Computer/Web Progrmmg	ITSE	Hotel - Tourism	TRVM
Criminal Justice	CRIJ	Hotel/Restaurant Mgmt	HAMG

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

Subject/Rubric Title	Subject/Rubric	Subject/Rubric Title	Subject/Rubric
Humanities	HUMA	Office Systems Tech	POFT
Integrated Read/Writing	INRW	Paralegal/Legal Asstnt	LGLA
Interior & Arch Design	INDS	Pastry Arts	PSTR
Interpreter Prep/Deaf	SLNG	Philosophy	PHIL
Italian	ITAL	Physical Education	PHED
Japanese	JAPN	Physical Science/Physics	PHYS
Leadership Academy	LEAD	Polysomnographic Technology	PSGT
Management MSWinSrv	ITMT	Psychology	PSYC
Marketing	MRKG	Reading	READ
Marketing - Business	BUSG	Real Estate	RELE
Marketing - International	IBUS	Respiratory Care	RSPT
Mathematics	MATH	Robotics	RBTC
Music	MUSI	Russian	RUSS
Music Ensemble	MUEN	Semiconductor Mnfctring	SMFT
Music, Applied	MUAP	Sign Language	SGNL
Music, Business	MUSB	Social Work	SOCW
Music, Commercial	MUSC	Sociology	SOCI
Music, Comrcial Perform	MUSP	Solar Technology	HART
Nursing	RNSG	Spanish	SPAN
Nursing - Electro Diag	DSAE	Speech	SPCH
Nursing - Electrocardio	ECRD	Surgical Technology	SRGT
Nursing - Nurse Asst	NURA	Theatre / Drama	DRAM
Nursing - Phlebotomy	PLAB		
Office Admin-Office	POFI		

Subject/Rubric Title	Subject/ Rubric	Subject/Rubric Title	Subject/ Rubric
Accounting	ACCT	English	ENGL
Accnting/Office Systs	ACNT	Engineering	ENGR
Air Force ROTC	AERS	Electrical - Circuits	ENGT
Anthropology	ANTH	Electronic Enginrng	ENTC
Arabic	ARAB	Environmenatl Science	ENVR
Computer Aided Drafting	ARCE	ESL Listening/Convers	ESLC
Comm Design - Graphic	ARTC	ESL Grammar	ESLG
Arts/Photography	ARTS	ESL Reading	ESLR
Comm Design - Animation	ARTV	ESL Vocabulary	ESLV
Computer Systems	BCIS	ESL Writing	ESLW
Biology	BIOL	Firefighter	FIRS
Engineering Technology	BIOM	Fire Technology	FIRT
Biotechnology	BITC	Comm Design - Anim/Video	FLMC
Business Management	BMGT	French	FREN
Marketing - Business	BUSG	Comm Design - Game	GAME
Business Administration	BUSI	Geography	GEOG
Child Development	CDEC	Geology	GEOL
Electronic Technology	CETT	German	GERM
Culinary Arts	CHEF	Geographic Infrmton Sys	GISC
Chemistry	CHEM	Government	GOVT
Chinese	CHIN	Desktop Publishg Word	GRPH
Comm/Jour/Spch/Phot	COMM	Hotel/Restaurant Mgmt	HAMG
Computer Science	COSC	Solar Technology	HART
College Success	COSU	History	HIST
Computer Maintenance Tech	CPMT	Health Info Technology	HITT
Criminal Justice	CRIJ	Health Info - Medical	HPRS
Dance	DANC	Business - Human Resource	HRPO
Comp Aided Drfting/Dsgn	DFTG	Humanities	HUMA
Dental Hygiene	DHYG	Marketing - International	IBUS
Theatre / Drama	DRAM	Culinary - Nutrition	IFWA
Nursing - Electro Diag	DSAE	Computer Media / Graph Ds	IMED
Economics	ECON	Interior & Arch Design	INDS
Education	EDUC	Computer Programming	INEW
Nursing - Electrocardio	ECRD	Integrated Read/Writing	INRW
Elect/Electronic Comm	EECT	Electronic Engnrng/Equip	INTC
Emergency Medical Servs	EMSP	Italian	ITAL
		Computer Networking	ITCC

Subject/Rubric Title	Subject/ Rubric	Subject/Rubric Title	Subject/ Rubric
Management MSWinSrv	ITMT	Nursing - Phlebotomy	PLAB
Computer Netwrking Tech	ITNW	Office Admin-Office	POFI
Computer Infrmtion Sys	ITSC	Office Systems Tech	POFT
Computer/Web Progrmmg	ITSE	Polysomnographic Technology	PSGT
Computer Applications	ITSW	Pastry Arts	PSTR
Computer Syst Secrity	ITSY	Psychology	PSYC
Japanese	JAPN	Robotics	RBTC
Leadership Academy	LEAD	Real Estate	RELE
Paralegal/Legal Asstnt	LGLA	Nursing	RNSG
Mathematics	MATH	Respiratory Care	RSPT
Health/Surg/EMS	MDCA	Hotel - Management	RSTO
Marketing	MRKG	Comm Design - Video	RTVB
Music, Applied	MUAP	Russian	RUSS
Music Ensemble	MUEN	Sign Language	SGNL
Music, Business	MUSB	Interpreter Prep/Deaf	SLNG
Music, Commercial	MUSC	Semiconductor Mnfctring	SMFT
Music	MUSI	Sociology	SOCI
Music, Comrcial Perform	MUSP	Social Work	SOCW
Nursing - Nurse Asst	NURA	Spanish	SPAN
Physical Education	PHED	Speech	SPCH
Philosophy	PHIL	Surgical Technology	SRGT
Comm Design - Photo	PHTC	Child Dvelpmnt/Tching	TECA
Physical Science/Physics	PHYS	Hotel - Tourism	TRVM

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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   Principles of Financial Accounting

This course is an introduction to the fundamental concepts of financial accounting as prescribed by U.S. generally accepted accounting principles (GAAP) as applied to transactions and events that affect business organizations. Students will examine the procedures and systems to accumulate, analyze, measure, and record financial transactions. Students will use recorded financial information to prepare a balance sheet, income statement, statement of cash flows, and statement of shareholders' equity to communicate the business entity's results of operations and financial position to users of financial information who are external to the company. Students will study the nature of assets, liabilities, and owners' equity while learning to use reported financial information for purposes of making decisions about the company. Students will be exposed to International Financial Reporting Standards (IFRS). Lab required. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)

ACCT 2302   Principles of Managerial Accounting

This course is an introduction to the fundamental concepts of managerial accounting appropriate for all organizations. Students will study information from the entity's accounting system relevant to decisions made by internal managers, as distinguished from information relevant to users who are external to the company. The emphasis is on the identification and assignment of product costs, operational budgeting and planning, cost control, and management decision making. Topics include product costing methodologies, cost behavior, operational and capital budgeting, and performance evaluation. Lab required. Prerequisite: ACCT 2301. 3 credit hours. (A)

ACNT 1303   Introduction to Accounting I

A study of analyzing, classifying, and recording business transactions in a manual and computerized environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliations, and payroll. Lab required. 3 credit hours. (W)

ACNT 1311   Introduction to Computerized Accounting

Introduction to utilizing the computer in maintaining accounting records with primary emphasis on a general ledger package. Lab required. 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
The study of human origins and bio-cultural
adaptations. Topics may include primatology,
genetics, human variation, forensics, health, and
ethics in the discipline. Prerequisite: Meet TSI
college-readiness standard for Reading and
Writing; or equivalent. 3 credit hours. (A).

ANTH 2302   Introduction to Archeology
The study of the human past through material
remains. The course includes a discussion of
methods and theories relevant to archeological
inquiry. Topics may include the adaption of
agriculture, response to environmental charge, the
emergence of complex societies, and ethics in the
discipline. Prerequisite: Meet TSI college-
readiness standard for Reading and Writing; or
equivalent. 3 credit hours. (A)

ANTH 2346   General Anthropology
The study of human beings, their antecedents,
related primates, and their cultural behavior and
institutions. Introduces the major subfields:
physical and cultural anthropology, archeology,
linguistics, their applications, and ethics in the
discipline. Prerequisite: Meet TSI college-
readiness standard for Reading and Writing; or
equivalent. 3 credit hours. (A)

ANTH 2351   Cultural Anthropology
The study of human cultures. Topics may include
social organization, institutions, diversity,
interactions between human groups, and ethics in
the discipline. Prerequisite: Meet TSI college-
readiness standard for Reading and Writing; or
equivalent. 3 credit hours. (A)

ANTH 2389   Academic Co-op Anthropology
Integrates on-campus study with practical hands-on
work experience in anthropology. In conjunction
with class seminars, the student will set specific
goals and objectives in the study of anthropology.
Contact the Cooperative Work Experience Office.
Prerequisites: Consent of Instructor, and meet TSI
college-readiness standard for Reading and
Writing; or equivalent. 3 credit hours. (A)

ARAB 1411   Beginning Arabic I
This course, which is designed for students with
little or no prior training in the language, focuses
on developing the four basic skills of speaking,
reading, writing and listening, as well as the study
of selected aspects of Arabic civilization.
Instruction is enhanced by the use of audio and
video materials. Lab required. 3 credit hours. (A)

ARAB 1412   Beginning Arabic II
This course is a continuation of ARAB 1411. It
continues the development of the four basic skills
of speaking, reading, writing and listening, as well
as the study of selected aspects of Arabic
civilization. Instruction is enhanced by the use of
audio and video materials. Lab required.
Prerequisite: ARAB 1411 or consent of Instructor
or Department Chair. 3 credit hours. (A)

ARCE 1352   Structural Drafting
A study of structural systems including concrete
foundations and frames, wood framing and trusses,
and structural steel framing systems. Includes
detailing of concrete, wood, and steel to meet
industry standards including the American Institute
of Steel Construction and The American Concrete
Institute. Lab required. Prerequisite: DFTG 1309.
3 credit hours. (W)

ARCE 2352 Mechanical and Electrical Systems

The properties of building materials (assemblies), specifications, codes, vendor references, and uses of mechanical, plumbing, conveying, and electrical systems as they relate to architecture for residential and commercial construction. Lab required. Prerequisite: DFTG 2328. 3 credit hours. (W)

ARTC 1302 Digital Imaging I

Digital imaging using raster image editing and/or image creation software: scanning, resolution, file formats, output devices, color systems, and image-acquisitions. Lab required. Prerequisite: ARTC 1325. 3 credit hours. (W)

ARTC 1305 Basic Graphic Design

Graphic design with emphasis on the visual communication process. Topics include basic terminology and graphic design principles. Lab required. 3 credit hours. (W)

ARTC 1313 Digital Publishing I

The fundamentals of using digital layout as a primary publishing tool and the basic concepts and terminology associated with typography and page layout. Lab included. Prerequisites: ARTC 1305 and ARTC 1325. 3 credit hours. (W)

ARTC 1321 Illustration Techniques I

A study of illustration techniques in various media. Emphasis on creative interpretation and the discipline of draftsmanship for visual communication of ideas. Lab required. Prerequisite: ARTS 1316. 3 credit hours. (W)

ARTC 1325 Introduction to Computer Graphics

A survey of computer design concepts, terminology, processes, and procedures. Topics include computer graphics hardware, electronic images, electronic publishing, vector-based graphics, and interactive multimedia. Lab required. 3 credit hours. (W)

ARTC 1327 Typography

A study of letterforms and typographic concepts as elements of graphic communication. Emphasis on

developing a current, practical typographic knowledge based on industry standards. Lab required. Prerequisites: ARTC 1305 and ARTC 1325. 3 credit hours. (W)

ARTC 1349 Art Direction I

Creation of projects in art direction for advertising graphic campaigns for products, services, or ideas. Topics include all campaign procedures from initial research and creative strategy to final execution and presentation of a comprehensive project. Lab required. Prerequisites: ARTC 1305 and ARTC 1325. 3 credit hours. (W)

ARTC 1353 Computer Illustration I

Use of the tools and transformation options of an industry-standard vector drawing program to create complex illustrations or drawings. Includes principles of layout and design and manipulation of text and graphics. Lab required. Prerequisite: ARTC 1325. 3 credit hours. (W)

ARTC 1394 Special Topics in Animation, Interactive Technology, Video Graphics and Special Effects

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

Advanced 3-D Applications

Study of advanced computer graphics techniques using software applications adopted by the animation, visual effects and game industries. Topics will include 3-D modeling, animation, dynamics, texturing, shading, rendering and compositing in industry-standard production pipelines. Prerequisite: ARTV 1345 or consent of instructor.

Illustration for Digital Media

Development of drawing techniques applied to visual concept development for animation, visual effects and games. Emphasis on traditional art methods and media for use in narrative and interactive storytelling and communication. Prerequisite: Consent of Department Chair.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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
A general introduction to the visual arts designed to create an appreciation of the vocabulary, media, techniques, and purposes of the creative process. Students will critically interpret and evaluate works of art within formal, cultural, and historical context. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

ARTS 1303 Art History I (Prehistoric to the 14th century)
A chronological analysis of the historical and cultural contexts of the visual arts from prehistoric times to the 14th century. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 1304 Art History II (14th century to the present)
A chronological analysis of the historical and cultural contexts of the visual arts from the 14th century to the present day. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 1311 Design I (2-dimensional)
An introduction to the fundamental terminology, concepts, theory, and application of two-dimensional design. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 1312 Design II (3-dimensional)
An introduction to the fundamental terminology, concepts, theory, and application of three-dimensional design. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 1313   Foundations of Art
Introduction to the creative media designed to enhance artistic awareness and sensitivity through the creative and imaginative use of art materials and tools. Includes art history and culture through the exploration of a variety of art works with an emphasis on aesthetic judgment and growth. Additionally, the examination of the change in art creation based on the advancement of tools and materials pushing art production from optic technology in Renaissance painting to mechanical art to technology based art. 3 credit hours. (A)

ARTS 1316   Drawing I
A foundation studio course exploring drawing with emphasis on descriptive, expressive and conceptual approaches. Students will learn to see and interpret a variety of subjects while using diverse materials and techniques. Course work will facilitate a dialogue in which students will engage in critical analysis and begin to develop their understanding of drawing as a discipline. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 1317   Drawing II
A studio course exploring drawing with continued emphasis on descriptive, expressive and conceptual approaches. Students will further develop the ability to see and interpret a variety of subjects while using diverse materials and techniques. Course work will facilitate a dialogue in which students will employ critical analysis to broaden their understanding of drawing as a discipline. Lab required. Prerequisite: ARTS 1316. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2311   Advanced 2-D Design
Continued study of two-dimensional visual organization dealing with the elements and principles of design. Further exploration of the use of various black and white and/or color media. Emphasis on the resolution of complex two-dimensional design problems. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate level during

the evaluation period. Lab required. Prerequisites: ARTS 1311 and ARTS 1316. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2312   Advanced 3-D Design
Continued study of three-dimensional design problems utilizing various methods and materials. Further exploration of form in a variety of media. Emphasis on the resolution of complex three-dimensional design problems. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate level during the evaluation period. Lab required. Prerequisite: ARTS 1312. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2316   Painting I
Introduction to painting including use of materials, techniques, color study, and composition. Various painting styles will be practiced. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2317   Painting II
Increases the student's ability to use various techniques, color, and composition with acrylics, oils, and other media. Explores realistic and abstract approaches to painting. Emphasis on design, imagination, personal expression and painting style. Lab required. Prerequisite: ARTS 2316. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2323   Figure Drawing I
Drawing of the life model including instruction in anatomical and creative approaches to figure drawing. Emphasis on personal expression and creativity. Lab required. Prerequisite: ARTS 1316. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2324   Figure Drawing II
Continuation of study of the life model; emphasis on personal expression and creativity. Lab required. Prerequisite: ARTS 2323. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2326   Sculpture I
Study of three-dimensional form and introduction to sculpture techniques including basic methods of modeling, construction, and simple casting procedures. Exploration of various media including stone, wood, metal, plaster, and paper. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2327   Sculpture II
Continued application of three-dimensional form and sculpture techniques gaining experience in composition and problem solving in various media. Emphasis on creative expression and personal style. Lab required. Prerequisite: ARTS 2326. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2333   Printmaking I
Introduction to the process of intaglio and relief printing including linoleum cuts, etching, aquatint, collagraph, and monotypes. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2334   Printmaking II
Continued application of the intaglio and relief printing processes gaining experience in composition and problem solving in various techniques. Emphasis on creative expression and personal style. Lab required. Prerequisite: ARTS 2333. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2336   Papermaking/Bookbinding I
Elements of structure and principles of design using two- and three-dimensional concepts in the fiber forms of papermaking and bookbinding. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2337   Papermaking/Bookbinding II
Advanced elements of structure and principles of design using two- and three-dimensional concepts in the fiber forms of papermaking and bookbinding. Lab required. Prerequisite: ARTS 2336. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2341   Jewelry/Art Metals I
Exploration of wearable and small sculptural forms using non-ferrous and precious metals. Metal construction and jewelry making techniques including soldering, lost wax casting, cold connections, patinas and surface embellishment. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2342   Jewelry/Art Metals II
Continuation of ARTS 2341, 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 Photography II
This is an intermediate digital photography course. It is a studio art course that explores the potential of the computer hardware and software medium for visual, conceptual, and practical uses in the visual arts. Emphasis is on advanced image editing, software instruction and professional workflow. Lab required. Prerequisite: ARTS 2348 or PHTC 1311 or consent of Instructor. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2356   Photography I/Darkroom
Introduction to photography: basic camera operations and darkroom techniques; emphasis on visual imagination and design. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2357   Photography II/Darkroom
Intermediate black-and-white course; emphasis on developing a visual language, problem solving, craftsmanship, and learning to edit personal work. Technical considerations include print and negative quality, use of studio lighting, and large format cameras. Lab required. Prerequisite: ARTS 2356. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2366   Watercolor I
Introduction to watercolor including instruction in the use of brushes, papers, materials, and various painting techniques on wet and dry paper. Gain experience in mixing colors, color methods, and problem solving in the use of technique and in skillful observation of composition and painting style. Lab required. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2367   Watercolor II
Increases the student's ability to master technique, identify the different pigment properties of color and determine their best use. Exploration of different tools, papers, materials and techniques will be practiced. Emphasis on personal expression and painting style. Lab required. Prerequisite: ARTS 2366. 3 credit hours. (A)
Note: Students should expect additional supply costs.

ARTS 2389   Academic Co-op Arts/Photography
Integrates on-campus study with practical hands-on work experience in art/photography. In conjunction with class seminars, the student will set specific goals and objectives in the study of art. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

ARTV 1211   Storyboard
Techniques of storyboarding including organizing a project's content and arranging it in a visual format. Lab required. 2 credit hours. (W)

ARTV 1303   Basic Animation
Examination of animation concepts, principles, and storyboard for basic production. Emphasizes creating movement and expression utilizing traditionally or digitally generated image sequences. Lab required. Prerequisite: ARTC 1325. 3 credit hours. (W)

ARTV 1341   3-D Animation I
Intermediate level 3-D course introducing animation tools and techniques used to create movement. Emphasis on using the principles of animation. Lab required. Prerequisite: ARTV 1345 or consent of Instructor. 3 credit hours. (W)

ARTV 1343   Digital Sound
Digitizing sound and incorporating it into video games, multimedia or web projects for various delivery systems. Emphasizes compression issues, sampling, synchronizing, and resource management. Lab required. 3 credit hours. (W)

ARTV 1345   3-D Modeling and Rendering I-Maya
Techniques of three-dimensional (3-D) modeling utilizing industry standard software. Includes the creation and modification of 3-D geometric shapes, use of a variety of rendering techniques, camera, light sources, texture, and surface mapping. Lab required. Prerequisite/Concurrent enrollment: ARTC 1325. 3 credit hours. (W)

ARTV 1351 Digital Video
Producing and editing video and sound for multimedia or web productions. Emphasizes capture, editing, and outputting of video using a digital video workstation. Lab required. Prerequisites: ARTC 1325 and ARTV 1211. 3 credit hours. (W)

ARTV 2301 2-D Animation I
Skill development in the use of software to develop storyboards and two-dimensional animation including creating, importing, and sequencing media elements to create multimedia presentations. Emphasis on conceptualization, creativity, and visual aesthetics. Lab required. Prerequisite: ARTV 1303. 3 credit hours. (W)

ARTV 2330 2-D Animation II
Advanced study of technical aspects of animation. Emphasizes aesthetic design, storytelling and completion of an animation project. Includes application of advanced skills and knowledge. Lab required. Prerequisite: ARTV 2301. 3 credit hours. (W)

ARTV 2335 Portfolio Development for Animation
A course in the development of a professional portfolio to showcase the student's skills in animation. Includes self-promotion, resumes, portfolio distribution, and interview techniques. Lab required. Prerequisite: Consent of Department Chair. 3 credit hours. (W)

ARTV 2341 Advanced Digital Video
Advanced digital video techniques for post-production. Emphasizes integration of special effects and animation for film, video, and the Internet. Exploration of new and emerging compression and video streaming technologies. Lab required. Prerequisite: ARTV 1351. Prerequisite/Concurrent enrollment: FLMC 1304. 3 credit hours. (W)

ARTV 2345 3-D Modeling and Rendering II-Maya
A studio course focused on advanced 3-D modeling and rendering techniques using industry standard software, modeling techniques, camera settings, lighting, and surfacing to develop detailed environments. Lab required. Prerequisite: ARTV 1345. 3 credit hours. (W)

ARTV 2351 3-D Animation II – Maya
Advanced level 3-D course utilizing animation tools and techniques used to develop movement. Emphasis on advanced animation techniques. Lab required. Prerequisite: GAME 2325 (or ARTV 2355). 3 credit hours. (W)

ARTV 2371 Advanced Skill Development for Animation and Games
An upper level course in the development of concepts and execution of assets for 2D/3D animation and games. The student's incoming skill level and abilities are reviewed and areas of improvement are targeted. Includes the integration of aesthetic and technical skills as introduced in various lower level courses. Lab required. Prerequisite: GAME 2325, or consent of Department Chair. 3 credit hours. (W)

BCIS 1305 Business Computer Applications
Students will study computer terminology, hardware, and software related to the business environment. The focus of this course is on business productivity software applications and professional behavior in computing, including word processing (as needed), spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet. Prerequisite: Meet TSI college-readiness standard for Reading; or equivalent. 3 credit hours. (A)

BCIS   2390   Systems Analysis and Design
Analysis of business information needs and preparation of specifications and requirements for appropriate data system solutions. Includes instruction in information requirements analysis, specification development and writing, prototype evaluation, and network application interfaces. This course is offered in the Spring semester only. Lab required. Prerequisite: BCIS 1305 or consent of Instructor or Department Chair. 3 credit hours. (A)

BIOL   1322   General Nutrition
Nutrients and nutritional processes including functions, food sources, digestion, absorption, and metabolism with application to normal and therapeutic human nutritional needs. For biology and nutrition majors. 3 credit hours. (A)

BIOL   1323   Nutrition and Diet Therapy
Applications of nutrition principles and techniques of nutrition care for healthy individuals and patients/clients at nutritional risk. Nutrition risk screening, interviewing/counseling methods, diet evaluation, basic diet calculations, and documentation. 3 credit hours. (A)

BIOL   1406   Biology for Science Majors I
Lecture: Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. Lab: Laboratory activities will reinforce the fundamental principles of living organisms, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Study and examination of the concepts of cytology, reproduction, genetics, and scientific reasoning are included. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-

readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

BIOL   1407   Biology for Science Majors II
Lecture: The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Lab: Laboratory activities will reinforce study of the diversity and classifications of life, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Lab required. Prerequisite: BIOL 1406. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information

BIOL   1408   Biology for Non-Science Majors I
Lecture: Provides a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Lab: Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including chemistry of life, cells, structure, function, and reproduction. Lab required. 4 credit hours. (A)

BIOL   1409   Biology for Non-Science Majors II
Lecture: This course will provide a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Lab: Laboratory activities will reinforce a survey of biological principles with an emphasis on humans, including evolution, ecology, plant and animal diversity, and physiology. Lab required. Prerequisite: BIOL 1408. 4 credit hours. (A)

BIOL 1411 General Botany

Lecture: Fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi. (This course is intended for science majors.) Lab: Laboratory activities will reinforce fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi. (This course is intended for science majors.) Lab required. Prerequisite: BIOL 1406 or BIOL 1408. 4 credit hours. (A)

Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

BIOL 1414 Introduction to Biotechnology I

Overview of classical genetics, DNA structure, the flow of genetic information, DNA replication, gene transcription, protein translation. Principles of major molecular biology and genetic engineering techniques, including restriction enzymes and their uses, major types of cloning vectors, construction of libraries, Southern and Northern blotting, hybridization, PCR, DNA typing. Applications of these techniques in human health and welfare, medicine, agriculture and the environment. Introduction to the human genome project, gene therapy, molecular diagnostics, forensics, creation and uses of transgenic plants and animal and animal cloning and of the ethical, legal, and social issues and scientific problems associated with these technologies. Relevant practical exercises in the above areas. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

BIOL 1415 Introduction to Biotechnology II

Lecture to focus on an integrative approach to study biomolecules with an emphasis on protein structures, functions and uses in the modern bioscience laboratory. Students will investigate the mechanisms involved in the transfer of information from DNA sequences to proteins to biochemical functions. The course will integrate biological and chemical concepts with techniques that are used in research and industry. Critical thinking will be applied in laboratory exercises using inquiry-based approaches, troubleshooting and analyzing experimental data. Lab required. Prerequisite/Concurrent enrollment: BIOL 1414. 4 credit hours. (A)

Note: This course is also offered through the Center of Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

BIOL 2389 Academic Co-op Biology

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

BIOL 2401 Anatomy and Physiology I

Study of cell structure and function, tissues, integumentary, skeletal, muscular, nervous systems, and special senses. 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 satisfactory score on the BIOL 2401 Readiness Test. We strongly recommend that you successfully complete BIOL 1406. 4 credit hours. (A)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

BIOL 2402 Anatomy and Physiology II
Continued study of structure and function related to the human endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems. Additional topics include: composition and functions of blood; the immune response; fluid, electrolyte and pH balance; and human development. Emphasis is placed on the interrelationships of these systems. Lab required. Prerequisite: BIOL 2401 with a grade of "C" or better within the last five years. 4 credit hours. (A)

BIOL 2404 Human Anatomy and Physiology Basic
A one-semester survey of the structure and function of the human body, including discussion and study of cells, tissues, organs, and systems. Lab required. 4 credit hours. (A)

BIOL 2406 Environmental Biology
Lecture: Principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. Lab: Laboratory activities will reinforce principles of environmental systems and ecology, including biogeochemical cycles, energy transformations, abiotic interactions, symbiotic relationships, natural resources and their management, lifestyle analysis, evolutionary trends, hazards and risks, and approaches to ecological research. Lab required, including field trips. 4 credit hours. (A)

BIOL 2416 Genetics
Study of the principles of molecular and classical genetics, and the function and transmission of hereditary material. Special emphasis on molecular genetics and genetic engineering. Lab required. Prerequisite: BIOL 1406. 4 credit hours. (A)

BIOL 2420 Microbiology for Non-Science Majors
Study of the morphology, physiology, and taxonomy of representative groups of pathogenic and nonpathogenic microoogranisms. Pure cultures of microorganisms grown on selected media are used in learning laboratory techinques. Includes a brief preview of food microbes, public health, and immunology. Lab required. Prerequisite: BIOL 2401 with a grade of "C" or better within the last three years, and Prerequisite/Concurrent enrollment in BIOL 2402 with a grade of "C" or better within the last three years. 4 credit hours. (A)

BIOL 2421 Microbiology for Science Majors
Lecture: Principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment. Lab: Laboratory activities will reinforce principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment. Lab required. Prerequisites: BIOL 1407 and CHEM 1411. 4 credit hours. (A)

BIOM 1355 Medical Electronic Applications
Presentation of sensors, transducers, and supporting circuits used in medical instrumentation devices. Lab required. 3 credit hours. (W)

BIOM 2280 Cooperative Education - Biomedical Technology Technician
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 2 credit hours. (W)

BIOM 2380 Cooperative Education - Biomedical Technology Technician

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

BITC 1350 Special Studies and Bioethical Issues of Biotechnology

Addresses current events, skills, attitudes, and behaviors pertinent to biotechnology and relevant to the professional development of the student. Includes exploration of ethical and legal behaviors in the context of the biotechnology industry. Prerequisites: BIOL 1414 and BIOL 1415 or consent of Instructor. 3 credit hours. (W)

BITC 2350 Bioinformatics

Current topics in bioinformatics and computational biology. Includes methods for high-throughput data collection, storing, and accessing biological data. Covers programs and algorithms used to analyze data. Prerequisite: BITC 2411 or Departmental Consent. 3 credit hours. (W)

BITC 2386 Internship-Biology Technician/Biotechnology Laboratory Technician

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Contact the Cooperative Work Experience Office. Prerequisite: Completed 9 hours of biotechnology courses and consent of Department Chair. Major Requirement: Biotechnology. 3 credit hours. (W)

BITC 2411 Biotechnology Laboratory Instrumentation

Presentation of theory, applications, and operation of various analytical instruments. Addresses separation and identification techniques including electrophoresis, spectrophotometry, and chromatography. Lab required. Prerequisites: BIOL 1414 and BIOL 1415 or consent of Instructor. 4 credit hours. (W)

BITC 2431 Cell Culture Techniques

Theory and applications of cell culture techniques. Laboratory emphasis on the principles and practices of initiation, cultivation, maintenance, preservation of cell lines, and applications. Lab required. Prerequisites: BIOL 1406 or consent of Instructor. 4 credit hours. (W)

BITC 2441 Molecular Biology Techniques

In depth coverage of the theory and laboratory techniques in molecular biology with an emphasis on gene expression and regulation, recombinant DNA, and nucleic acids. Lab required. Prerequisites: BIOL 1414 and BIOL 1415 or consent of Instructor. 4 credit hours. (W)

BMGT 1305 Communications in Management

Basic theory and processes of communication skills necessary for the management of an organization's workforce. 3 credit hours. (W)

BMGT 1307 Team Building

Principles of building and sustaining teams in organizations. Includes team dynamics, process improvement, trust and collaboration, conflict resolution, and the role of the individual in the team. 3 credit hours. (W)

BMGT 1327 Principles of Management

Concepts, terminology, principles, theories, and issues in the field of management. 3 credit hours. (W)

BMGT 1341 Business Ethics

Discussion of ethical issues, the development of a moral frame of reference, and the need for an awareness of social responsibility in management practices and business activities. Includes ethical corporate responsibility. 3 credit hours. (W)

**BMGT 1344   Negotiations and Conflict
                     Management**
Theories which aid in the diagnosis of
interpersonal and intergroup conflict. The role of
manager as negotiator, intermediary, and problem
solver. 3 credit hours. (W)

BMGT 2309   Leadership
Leadership and its relationship to management.
Prepares the student with leadership and
communication skills needed to motivate and
identify leadership styles. 3 credit hours. (W)

BMGT 2311   Change Management
Knowledge, skills, and tools that enable a
leader/organization to facilitate change in a
participative style. 3 credit hours. (W)

**BMGT 2331   Principles of Quality
                     Management**
Includes planning and implementing quality
programs in an organization and analyzing
cost/benefit of quality. Also covers the impact of
employee empowerment. 3 credit hours. (W)

BMGT 2341   Strategic Management
Strategic management process, including analysis
of how organizations develop and implement a
strategy for achieving organizational objectives in
a changing environment. Prerequisite: BMGT
1327. Prerequisite/Concurrent enrollment: BMGT
2311. 3 credit hours. (W)

**BMGT 2347   Critical Thinking and Problem
                     Solving**
Interpreting data for problem solving and
recommending corrective action. Emphasis on a
structured approach to critical thinking and
problem solving in a team environment. 3 credit
hours. (W)

**BMGT 2382   Cooperative Education -
                     Business Administration and
                     Management, General**
Career-related activities encountered in the
student's area of specialization offered through an
individualized agreement among the college,
employer, and student. Under the supervision of
the college and the employer, the student combines
classroom learning with work experience. Includes
a lecture component. Contact the Cooperative
Work Experience Office. 3 credit hours. (W)

**BUSG 2309   Small Business
                     Management/Entrepreneurship**
Starting, operating, and growing a small business.
Includes essential management skills, how to
prepare a business plan, accounting, financial
needs, staffing, marketing strategies, and legal
issues. 3 credit hours. (W)

BUSI 1301   Business Principles
This course provides a survey of economic
systems, forms of business ownership, and
considerations for running a business. Students
will learn various aspects of business,
management, and leadership functions;
organizational considerations; and decision-making
processes. Financial topics are introduced,
including accounting, money and banking, and
securities markets. Also included are discussions
of business challenges in the legal and regulatory
environment, business ethics, social responsibility,
and international business. Emphasized is the
dynamic role of business in everyday life. 3 credit
hours. (A)

BUSI 1307   Personal Finance
Personal financial issues including financial
planning, insurance, budgeting, credit, home
ownership, savings and tax problems. 3 credit
hours. (A)

BUSI 2301 Business Law
The course provides the student with foundational information about the U.S. legal system and dispute resolution, and their impact on business. The major content areas will include general principles of law, the relationship of business and the U.S. Constitution, state and federal legal systems, the relationship between law and ethics, contracts, sales, torts, agency law, intellectual property, and business law in the global context. Prerequisite: High school coursework in U.S. history and government; or equivalent. 3 credit hours. (A)

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 birth through age eight. Lab required. 3 credit hours. (W)

CDEC 1317 Child Development Associate Training I
Based on the requirements for the Child Development Associate credential (CDA). Topics include CDA overview, observation skills, and child growth and development. The four functional areas of study are creative, cognitive, physical, and communication. Lab required. 3 credit hours. (W)

CDEC 1319 Child Guidance
An exploration of guidance strategies for promoting pro-social behaviors with individual and groups of children. Emphasis on positive guidance principles and techniques, family involvement, and cultural influences. Lab required. 3 credit hours. (W)

CDEC 1321 The Infant and Toddler
A study of appropriate infant and toddler programs (birth to age 3), including an overview of development, quality routines, learning environments, materials and activities, and teaching/guidance techniques. Lab required. 3 credit hours. (W)

CDEC 1323 Observation and Assessment
A study of observation skills, assessment techniques, and documentation of children's development. Lab required. 3 credit hours. (W)

CDEC 1358 Creative Arts for Early Childhood
An exploration of principles, methods and materials for teaching music, movement, visual arts, and dramatic play through process-oriented experiences to support divergent thinking for children birth through age eight. Lab required. 3 credit hours. (W)

CDEC 1359 Children with Special Needs
A survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, intervention strategies, available resources, referral processes, the advocacy role, and legislative issues. Lab required. 3 credit hours. (W)

CDEC 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**
Exploration of principles, methods, and materials
for teaching children math and science concepts
and process skills through discovery and play. Lab
required. 3 credit hours. (W)

**CDEC 2322   Child Development Associate
                Training II**
A continuation of the study of the requirements for
the Child Development Associate credential
(CDA). The six functional areas of study include
safe, healthy, learning environment, self, social,
and guidance. Lab required. 3 credit hours. (W)

**CDEC 2324   Child Development Associate
                Training III**
Continuation of the requirements for the Child
Development Associate credential (CDA). The
three functional areas of study include family,
program management, and professionalism. Lab
required. 3 credit hours. (W)

**CDEC 2326   Administration of Programs
                for Children I**
Application of management procedures for early
care and education programs. Includes planning,
operating, supervising, and evaluating programs.
Topics cover philosophy, types of programs,
policies, fiscal management, regulations, staffing,
evaluation, and communication. Lab required. 3
credit hours. (W)

**CDEC 2328   Administration of Programs
                for Children II**
An in-depth study of the skills and techniques in
managing early care and education programs,
including legal and ethical issues, personnel
management, team building, leadership, conflict
resolution, stress management, advocacy,
professionalism, fiscal analysis, technical
applications in programs and planning parent
education / partnerships. Lab required. 3 credit
hours. (W)

**CDEC 2336   Administration of Programs
                for Children III**
An advanced study of the skills and techniques in
administering early care education programs. Lab
required. 3 credit hours. (W)

**CDEC 2340   Instructional Techniques for
                Children with Special Needs**
Exploration of development and implementation of
curriculum for children with special needs. Lab
required. 3 credit hours. (W)

**CDEC 2371   Using Technology in the
                Classroom**
An overview of technology, media and digital
information in education. This course includes a
review of research on the impact, as well as
methodology on effective use, of technology and
media on children and teachers in the classroom
and in curriculum planning and presentation. Lab
required. 3 credit hours. (W)

**CDEC 2385   Cooperative Education-Child
                Development**
Career-related activities encountered in the
student's area of specialization offered through an
individualized agreement among the college,
employer, and student. Under the supervision of
the college and the employer, the student combines
classroom learning with work experience. Includes
a lecture component. Contact the Cooperative
Work Experience Office. Prerequisite: Consent of
Department Chair. 3 credit hours. (W)

CETT 1303   DC Circuits
Formerly CETT 1403
A study of the fundamentals of direct current including Ohm's law, Kirchhoff's law, and circuit analysis techniques. Lab required. 3 credit hours. (W)

CETT 1305   AC Circuits
Formerly CETT 1405
A study of the fundamentals of alternating current including series and parallel AC circuits, phasors, capacitive and inductive networks, transformers, and resonance. Lab required. Prerequisite: CETT 1303 or consent of Instructor or Program Director. 3 credit hours. (W)

CETT 1325   Digital Fundamentals
Formerly CETT 1425
An entry level course in digital electronics covering number systems, binary mathematics, digital codes, logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits. Lab required. 3 credit hours. (W)

CETT 1329   Solid State Devices
Formerly CETT 1429
A study of diodes and other semiconductor devices, including analysis of static and dynamic characteristics, biasing techniques, and thermal considerations. Lab required. 3 credit hours. (W)

CETT 1345   Microprocessor
Formerly CETT 1445
An introductory course in microprocessor software and hardware, its architecture, timing sequence, operation, and programming, and discussion of appropriate software diagnostic language and tools. Lab required. Prerequisite: CETT 1325 or consent of Instructor or Program Director. 3 credit hours. (W)

CETT 1357   Linear Integrated Circuits
Formerly CETT 1457
Characteristics, operations, stabilization, testing, and feedback techniques of linear integrated circuits. Applications of computation, measurements, instrumentation, and active filtering. Lab required. Prerequisite: CETT 1305 or consent of Instructor or Program Director. 3 credit hours. (W)

CETT 2380   Cooperative Education-
Computer Engineering
Technology/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. Lab required. Prerequisite: Mandatory Culinary / Pastry Arts Orientation. 3 credit hours. (W)

CHEF 1302   Principles of Healthy Cuisine
Introduction to the principles of planning, preparation, and presentation of nutritionally balanced meals. Alternative methods and ingredients will be used to achieve a healthier cooking style. Lab required. Prerequisites: CHEF 2331 with a grade of "C" or better and IFWA 1310. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 1305   Sanitation and Safety
A study of personal cleanliness; sanitary practices in food preparation; causes, investigation, control of illness caused by food contamination (Hazard Analysis Critical Control Points); and work place safety standards. 3 credit hours. (W)

CHEF 1310   Garde Manger
A study of cold foods and garnishes. Emphasis on design, techniques, and display of fine foods. Lab required. Prerequisite / Concurrent enrollment: CHEF 2331 with a grade of "C" or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 1314   A La Carte Cooking
A course in a la carte or "cooking to order" concepts. Topics include menu and recipe interpretation and conversion, organization of work station, employment of appropriate cooking methods, plating, and saucing principles. Lab included. Prerequisites: CHEF 1310, CHEF 1341, CHEF 1345, and PSTR 1301. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 1341   American Regional Cuisine
A study of the development of regional cuisine's in the United States with emphasis on the similarities in production and service systems. Application of skills to develop, organize, and acquire knowledge of recipe strategies and production systems. Professional chef uniform and kitchen tools required. Lab required. Prerequisite / Concurrent enrollment: CHEF 2331 with a grade of "C" or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 1345   International Cuisine
The study of classical cooking skills associated with the preparation and service of international and ethnic cuisine's. Topics include similarities between food production systems used in the United States and other regions of the world. Professional chef uniform and kitchen tools required. Lab required. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 1380   Cooperative Education -
                      Culinary Arts/Chef Training
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

CHEF 2302   Saucier
Instruction in the preparation of stocks, soups, classical sauces, contemporary sauces, accompaniments, and the pairing of sauces with a variety of foods. Lab included. Prerequisite: CHEF 2331 with a grade of "C" or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

CHEF 2331   Advanced Food Preparation
Advanced concepts of food preparation and presentation techniques. Identify and prepare breakfast meats, eggs, cereals, and batter products, discuss the applicability of convenience, value added, further processed or par cooked food items; and demonstrate food presentation techniques and writing standardized recipes. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1301 with a grade of "C" or better and CHEF 1305 with a grade of "C" or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 2341   Advanced Culinary Competition
Skill development for culinary competition by offering advanced experience in salon presentations as well as hot food competition. Lab required. 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 and CHEF 2331. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

CHEF 2380   Cooperative Education - Culinary Arts/Chef Training
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisites: CHEF 1301 with a grade of "C" or better and CHEF 1305 with a grade of "C" or better. 3 credit hours. (W)

CHEF 2581   Cooperative Education - Culinary Arts/Chef Training
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 5 credit hours. (W)

CHEM 1405   Introduction to Chemistry I
For non-science majors. Survey of chemistry including scientific calculations, chemical equations, theory of atoms and bonding, states of matter, nuclear chemistry, elementary thermodynamics, and acid-base chemistry. Lab and recitation required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

CHEM 1411   General Chemistry I
Lecture: Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry. Lab: Basic laboratory experiments supporting theoretical principles presented in the lecture section; introduction of the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports. High school chemistry is strongly recommended. Lab and recitation required. Prerequisites: MATH 1314 equivalent or higher level within the last 5 years with a grade of "C" or better, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

CHEM 1412   General Chemistry II
Lecture: Chemical equilibrium; phase diagrams
and spectrometry; acid-base concepts;
thermodynamics; kinetics; electrochemistry;
nuclear chemistry; an introduction to organic
chemistry and descriptive inorganic chemistry.
Lab: Basic laboratory experiments supporting
theoretical principles presented in the lecture
section; introduction of the scientific method,
experimental design, chemical instrumentation,
data collection and analysis, and preparation of
laboratory reports. Lab and recitation required.
Prerequisite: CHEM 1411 within the last five years
with a grade of "C" or better. 4 credit hours. (A)
Note: This course is also offered through the Center for
Advanced Study in Mathematics and Natural Sciences
(CASMNS). Contact the Natural Sciences Department
for further information.

CHEM 2389   Academic Co-op Chemistry
Integrates on-campus study with practical hands-on
work experience in chemistry. In conjunction with
class seminars, the student will set specific goals
and objectives in the study of chemistry. Contact
the Cooperative Work Experience Office. 3 credit
hours. (A)

CHEM 2401   Analytical Chemistry
Lab intensive course focusing on the principles and
problems associated with quantitative chemical
analysis. Explores the techniques and precautions
required to quantitatively measure a variety of
chemical species utilizing volumetric, gravimetric
and spectroscopic methods. Introduces
experimental design and the statistical aspects of
data treatment. Lab required. Prerequisite: CHEM
1412 within the last 5 years with a grade of "C" or
better. 4 credit hours. (A)

CHEM 2423   Organic Chemistry I
Lecture: Fundamental principles of organic
chemistry will be studied, including the structure,
bonding, properties, and reactivity of organic
molecules; and properties and behavior of organic
compounds and their derivatives. Emphasis is
placed on organic synthesis and mechanisms.
Includes study of covalent and ionic bonding,
nomenclature, stereochemistry, structure and
reactivity, reaction mechanisms, functional groups,
and synthesis of simple molecules. This course is
intended for students in science or pre-professional
programs. Lab: Laboratory activities will reinforce
fundamental principles of organic chemistry,
including the structure, bonding, properties, and
reactivity of organic molecules; and properties and
behavior of organic compounds and their
derivatives. Emphasis is placed on organic
synthesis and mechanisms. Includes study of
covalent and ionic bonding, nomenclature,
stereochemistry, structure and reactivity, reaction
mechanisms, functional groups, and synthesis of
simple molecules. Methods for the purification
and identification of organic compounds will be
examined. Lab and recitation required.
Prerequisite: CHEM 1412 within the last five years
with a grade of "C" or better. 4 credit hours. (A)
Note: This course is also offered through the Center for
Advanced Study in Mathematics and Natural Sciences
(CASMNS). Contact the Natural Sciences Department
for further information.

CHEM 2425   Organic Chemistry II
Lecture: Advanced principles of organic chemistry will be studied, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. This course is intended for students in science or pre-professional programs. Lab: Laboratory activities reinforce advanced principles of organic chemistry, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. Lab and recitation required. Prerequisite: CHEM 2423 within the last 5 years with a grade of "C" or better. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

CHIN   1411   Beginning Chinese I
Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of Chinese culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, and video cassettes. Lab required. 4 credit hours. (A)

CHIN   1412   Beginning Chinese II
Continuation of CHIN 1411. Lab required. Prerequisite: CHIN 1411 or consent of Instructor or 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)

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. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COMM 1335   Survey of Radio / 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. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COMM 2300   Media Literacy
Criticism and analysis of the function, role, and responsibility of the mass media in modern society from the consumer perspective. Includes the ethical problems and issues facing each media format, with the effect of political, economic, and cultural factors on the operation of the media. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COMM 2330   Introduction to Public Relations
Exploration of the history and development of public relations 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. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COMM 2331   Radio / Television Announcing
Principles of, and practice in, radio and TV announcing, including the study of voice (diction, pronunciation, and delivery) as it relates to mediated contexts and experience in news announcing, interviewing, and acting in commercial. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COMM 2332   Radio/Television News
The preparation and analysis of news styles for the electronic media. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COMM 2339   Writing for Radio, Television, and Film
Designed to train the student in all typical forms of broadcast and film writing, including news, commercial copy, critique and commentary, radio theatre, comedy and dramatic teleplay, and screenplay. Course provides both writing and production experiences. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

COMM 2366   Introduction to Cinema
Survey and analyze cinema including history, film techniques, production procedures, selected motion pictures, and cinema's impact on and reflection of society. Lab required. 3 credit hours. (A)
Note: Students may take either DRAM 2366 or COMM 2366, but not both.

COMM 2389   Academic Co-op Communication
For students with interest or major in mass communications, radio, TV, or film. Integrates on-campus study with practical hands-on work experience in communication. In conjunction with class seminars, the student will set specific goals and objectives in the study of communication. Contact the Cooperative Work Experience Office. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 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. Prerequisite: Meet TSI college-readiness standard for Reading; or equivalent. 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)
This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: COSC 1315 or COSC 1436 or consent of Instructor or Department Chair. 3 credit hours. (A)
Note: Students may take either COSC 1337 or COSC 1437 but not both.

COSC 1436   Programming Fundamentals I (C++)
This course introduces the fundamental concepts of structured programming, and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing, and debugging. This course assumes computer literacy. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 4 credit hours. (A)

COSC 1437   Programming Fundamentals II (C++)
This course focuses on the object-oriented programming paradigm, emphasizing the definition and use of classes along with fundamentals of object-oriented design. The course includes basic analysis of algorithms, searching and sorting techniques, and an introduction to software engineering processes. Students will apply techniques for testing and debugging software. (This course is included in the Field of Study Curriculum for Computer Science.) Prerequisite: COSC 1436 or consent of Department Chair. 4 credit hours. (A)
Note: Students may take either COSC 1337 or COSC 1437 but not both.

COSC 2325   Computer Organization
The organization of computer systems is introduced using assembly language. Topics include basic concepts of computer architecture and organization, memory hierarchy, data types, computer arithmetic, control structures, interrupt handling, instruction sets, performance metrics, and the mechanics of testing and debugging computer systems. Embedded systems and device interfacing are introduced. Additionally, this class is taught with Intel assembly language. Prerequisites: COSC 1436 or consent of Department Chair. 3 credit hours. (A)

COSC 2336   Programming Fundamentals III (C++)
Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), and algorithmic analysis. Prerequisite: COSC 1437 or consent of Department Chair. 3 credit hours. (A)
Note: Students may take either COSC 2336 or COSC 2436 but not both.

COSC 2436   **Programming Fundamentals III (Java)**

Further applications of programming techniques, introducing the fundamental concepts of data structures and algorithms. Topics include recursion, fundamental data structures (including stacks, queues, linked lists, hash tables, trees, and graphs), and algorithmic analysis. Prerequisite: COSC 1337 or consent of Department Chair. 4 credit hours. (A)

Note: Students may take either COSC 2336 or COSC 2436 but not both.

COSU 0300   **College Success**

Explores various methods and techniques of improving study skills and habits, including time management, notetaking, reading, communication, test preparation, test taking, problem solving and learning styles. 3 credit hours. (D)

Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census date, it will not count against you.

COSU 0301   **Test-Taking and Study Skills for Non-Native English Speakers**

This class will prepare non-native English speaking students for success by providing instruction and practice in test-taking techniques as well as exposing them to the expectations and realities of college academic coursework. Topics that will be covered include information processing, memory, strategic learning, self-regulation, goal setting, motivation, educational planning, and learning styles. Techniques of study such as organization, time-management, listening/speaking/reading/writing in a lecture or classroom setting, note-taking, research skills, and test preparation will be covered. This course will be particularly beneficial to students who are required to complete the TOEFL or the IELTS prior to admission to college or university. Prerequisites: ESLC 0310, ESLR 0310 and ESLW 0310, or consent of ESL Testing Coordinator or ESL Department Chair. 3 credit hours. (D)

Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.

CPMT 1305   **IT Essentials I: PC Hardware and Software**

Formerly CPMT 1405

Provides comprehensive overview of computer hardware and software and an introduction to advanced concepts. Lab required. 3 credit hours. (W)

CRIJ 1301   **Introduction to Criminal Justice**

This course provides a historical and philosophical overview of the American criminal justice system, including the nature, extent, and impact of crime; criminal law; and justice agencies and processes. 3 credit hours. (A)

CRIJ 1306   **Court Systems and Practices**

This course is a study of the court system as it applies to the structures, procedures, practices and sources of law in American courts, using federal and Texas statutes and case law. 3 credit hours. (A)

CRIJ 1307   **Crime in America**

American crime problems in historical perspective, social and public policy factors affecting crime, impact and crime trends, social characteristics of specific crimes, and prevention of crime. 3 credit hours. (A)

CRIJ 1310   **Fundamentals of Criminal Law**

This course is the study of criminal law including application of definitions, statutory elements, defenses and penalties using Texas statutes, the Model Penal Code, and case law. The course also analyzes the philosophical and historical development of criminal law and criminal culpability. 3 credit hours. (A)

CRIJ 1313 Juvenile Justice System

A study of the juvenile justice process to include specialized juvenile law, role of the juvenile law, role of the juvenile courts, role of police agencies, role of correctional agencies, and theories concerning delinquency. 3 credit hours. (A)

CRIJ 2313 Correctional Systems and Practices

This course is a survey of institutional and non-institutional corrections. Emphasis will be placed on the organization and operation of correctional systems; treatment and rehabilitation; populations served; Constitutional issues; and current and future issues. 3 credit hours. (A)

CRIJ 2314 Criminal Investigation

Investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation. 3 credit hours. (A)

CRIJ 2323 Legal Aspects of Law Enforcement

Police authority; responsibilities; constitutional constraints; laws of arrest, search, and seizure; and police liability. 3 credit hours. (A)

CRIJ 2328 Police Systems and Practices

This course examines the establishment, role and function of police in a democratic society. It will focus on types of police agencies and their organizational structure, police-community interaction, police ethics, and use of authority. 3 credit hours. (A)

DANC 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 1128   Ballroom I
Instruction and participation in Ballroom dance
technique. Additionally, this course provides an
introduction to the fundamentals of ballroom
dance. An exploration of various ballroom dance
styles will include: Merengue, Foxtrot, Rumba,
Waltz, Swing, Tango, Cha Cha and Salsa. Other
forms may be explored as time allows.
Coursework focuses on basic footwork, partnering
techniques, body isolations, musicality, social
etiquette, and cultural origins. Includes
participation in choreographed combinations and
development of performing qualities. 1 credit
hour. (A)

DANC 1129   Ballroom II
Instruction and participation in Ballroom dance
technique. Additionally, this course provides a
further study of ballroom dance forms with an
emphasis on Latin ballroom dance styles such as
Merengue, Salsa, Cha Cha and Bachata. Other
forms may be explored as time allows.
Coursework focuses on cultural origins, social
etiquette and more complex footwork, partnering
techniques, body isolations, and musicality.
Includes participation in choreographed
combinations and development of performing
qualities. Prerequisite: DANC 1128 or consent of
Instructor or Department Chair. 1 credit hour. (A)

DANC 1141   Ballet Technique I
Beginning ballet; development of elementary ballet
technique and knowledge of terminology using
barre, center work, and beginning movement
combinations; emphasis on alignment. Students
will be evaluated the first two weeks of the
semester to insure proper level placement.
Students may be asked to move to a more
appropriate technique level during the evaluation
period. 1 credit hour. (A)
Note: Students may take DANC 1110, DANC 1111,
DANC 1141, DANC 1142, DANC 1145, DANC 1146,
DANC 1147, DANC 1148, DANC 1151, DANC 1152,
DANC 1222, DANC 1223, DANC 2141, DANC 2142,
DANC 2145, DANC 2146, DANC 2147, DANC 2148,
DANC 2151, DANC 2152, DANC 2301, and DANC 2325
for a combined total of no more than 18 credit hours.

DANC 1142   Ballet Technique II
Intermediate ballet; further study of ballet
technique with focus on more complex movement
combinations of petit allegro and grand allegro,
tours and adagio work. Attention to performance
qualities. Students will be evaluated the first two
weeks of the semester to insure proper level
placement. Students may be asked to move to a
more appropriate technique level during the
evaluation period. Prerequisite: DANC 1141 or
consent of Instructor. 1 credit hour. (A)
Note: Students may take DANC 1110, DANC 1111,
DANC 1141, DANC 1142, DANC 1145, DANC 1146,
DANC 1147, DANC 1148, DANC 1151, DANC 1152,
DANC 1222, DANC 1223, DANC 2141, DANC 2142,
DANC 2145, DANC 2146, DANC 2147, DANC 2148,
DANC 2151, DANC 2152, DANC 2301, and DANC 2325
for a combined total of no more than 18 credit hours.

DANC 1145   Modern Dance Technique I
Beginning modern dance; introduction to the art
and discipline of modern dance through floor and
center work, basic rhythm, and movement
combinations. Attention to the analysis of time,
space and energy as they apply to dance. Students
will be evaluated the first two weeks of the
semester to insure proper level placement.
Students may be asked to move to a more
appropriate technique level during the evaluation
period. 1 credit hour. (A)
Note: Students may take DANC 1110, DANC 1111,
DANC 1141, DANC 1142, DANC 1145, DANC 1146,
DANC 1147, DANC 1148, DANC 1151, DANC 1152,
DANC 1222, DANC 1223, DANC 2141, DANC 2142,
DANC 2145, DANC 2146, DANC 2147, DANC 2148,
DANC 2151, DANC 2152, DANC 2301, and DANC 2325
for a combined total of no more than 18 credit hours.

DANC 1146   Modern Dance Technique II
Intermediate modern dance; further study in the art and discipline of modern dance. Includes technical development of the body for greater range of movement. Attention to focus, spatial clarity, energy dynamics, musicality, and performing qualities. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. Prerequisite: DANC 1145 or consent of Instructor. 1 credit hour. (A)
Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.

DANC 1147   Jazz Dance Technique I
Beginning jazz dance; practice in basic jazz movements including isolations, elementary jumps, and turns. Focus on the variety of jazz styles including: Funk, Lyrical, Musical Theatre, and Hip Hop/Street Jazz. Includes participation in choreographed combinations and development of performing qualities. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. 1 credit hour. (A)
Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.

DANC 1148   Jazz Dance Technique II
Intermediate jazz dance; further development of jazz dance style. Focus on movement dynamics, musicality and modes of expression. Attention to more complex movement combinations and composition development. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be

asked to move to a more appropriate technique level during the evaluation period. Prerequisite: DANC 1147 or consent of Instructor. 1 credit hour. (A)
Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.

DANC 1151   Dance Performance I
Study of dance performance through the application of artistic process skills. In-depth experience in rehearsal and concert production process. Gain experience in working with a choreographer and performing in a variety of concert settings. Prerequisite: Audition. 1 credit hour. (A)
Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.

DANC 1152   Dance Performance II
Continuation of DANC 1151. Prerequisite: Audition. 1 credit hour. (A)
Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.

DANC 1201   Dance Composition
An exploration of choreographic tools with emphasis on design, dynamics, movement forms and stage space. Includes idea forming and shaping, structure, abstraction, phrasing and style. Emphasis on creative problem-solving skills, experiencing the artistic process skills as a choreographer and critic, utilizing choreographic devices, and transforming ideas into movement. Lab required. Prerequisite: DANC 1101. 2 credit hours. (A)

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.

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.

DANC 1222   Hip Hop I
Hip Hop I is a course designed to experience the aesthetics of hip hop culture and to develop an understanding of dance/movement as a communicative and multicultural art form within the subculture of hip hop communities. The primary focus of this course is to engage in hip hop not only as a mode of entertainment, but as a medium of communication which represents and impacts the life experiences of youth in America and globally. Lab required. 2 credit hours. (A)
Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.

DANC 1223   Hip Hop II
Hip Hop II is a continuation of hip hop I. Further exploration of movement material as it relates to the historical, socio-economic and musical/aesthetic contexts from which hip hop dance emerged. Lab required. Prerequisite: DANC 1222. 2 credit hours. (A)
Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.

DANC 1305   World Dance I
Instruction in dance forms from at least three major cultures from three continents, with an emphasis on rhythmic awareness and movement development. The cultural origins, significance, and motivation, as well as the use of costumes and music will be explored in lecture and research. Instruction will include experiential and written assignments, live performances, guest artists, and multimedia resources. 3 credit hours. (A)
Note: This course does not satisfy the PHED/DANC activity core requirement

DANC 2141   Ballet Technique III
Intermediate/advanced ballet; a continuation of DANC 1142 with greater emphasis on expressive performance of classical ballet. Development of greater physical strength, stamina, and flexibility. Emphasis on experiencing and understanding the classical principles of ballet technique which include form, symmetry, balance, order, line, discipline, and control. Students will be evaluated the first two weeks of the semester to insure proper level placement. Students may be asked to move to a more appropriate technique level during the evaluation period. Prerequisite: DANC 1142. 1 credit hour. (A)
Note: Students may take DANC 1110, DANC 1111, DANC 1141, DANC 1142, DANC 1145, DANC 1146, DANC 1147, DANC 1148, DANC 1151, DANC 1152, DANC 1222, DANC 1223, DANC 2141, DANC 2142, DANC 2145, DANC 2146, DANC 2147, DANC 2148, DANC 2151, DANC 2152, DANC 2301, and DANC 2325 for a combined total of no more than 18 credit hours.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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.

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.

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.

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.

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. Prerequisite: Meet TSI standard
for INRW 0315; or equivalent. 3 credit hours. (A)

DANC 2325   Pilates/Anatomy for Dancers
The purpose of this course is to increase strength,
flexibility, range of motion, coordination and ease
of movement through the Pilates method. The
course will emphasize the application of
anatomical and kinesiological principles through a
conditioning program for the enhancement of the
student's dance or other athletic performance.
Classes will introduce beginning through
intermediate level exercises in the Pilates mat-
work. The course emphasizes the use of proper
alignment and technique to understand the
efficiency of motion, not only as a means of

technique but also a means of all motion for daily
life activities. Lab required. 3 credit hours. (A)
Note: Students may take DANC 1110, DANC 1111,
DANC 1141, DANC 1142, DANC 1145, DANC 1146,
DANC 1147, DANC 1148, DANC 1151, DANC 1152,
DANC 1222, DANC 1223, DANC 2141, DANC 2142,
DANC 2145, DANC 2146, DANC 2147, DANC 2148,
DANC 2151, DANC 2152, DANC 2301, and DANC 2325
for a combined total of no more than 18 credit hours.

DANC 2389   Academic Co-op Dance
Integrates on-campus study with practical hands-on
work experience in dance. In conjunction with
class seminars, the student will set specific goals
and objectives in the study of dance. Contact the
Cooperative Work Experience Office. 3 credit
hours. (A)

DFTG 1305   Technical Drafting
Introduction to the principles of drafting to include
terminology and fundamentals, including size and
shape descriptions, projection methods, geometric
construction, sections, auxiliary views. Lab
required. 3 credit hours. (W)

DFTG 1309   Basic Computer-Aided
                     Drafting
An introduction to computer-aided drafting.
Emphasis is placed on setup; creating and
modifying geometry; storing and retrieving
predefined shapes; placing, rotating, and scaling
objects, adding text and dimensions, using layers,
coordinating systems; and plot/print to scale. Lab
required. 3 credit hours. (W)

DFTG 1317   Architectural Drafting-
                     Residential
Architectural drafting procedures, practices, terms,
and symbols. Preparation of detailed working
drawings for residential structures. Emphasis on
light frame construction methods. Lab required. 3
credit hours. (W)

DFTG 1333   Mechanical Drafting
Study of mechanical drawings using dimensioning
and tolerances, sectioning techniques, orthographic
projection, and pictorial drawings. Lab required.
Prerequisite: DFTG 1309. 3 credit hours. (W)

**DFTG 1345   Parametric Modeling and
                Design**
Parametric-based design software for 3D design
and drafting. Lab required. Prerequisite: DFTG
1371. 3 credit hours. (W)

**DFTG 1371   Mechanical Drafting-
                Fundamentals of Sheetmetal
                Design**
The Fundamentals of Sheetmetal Design course
teaches the skills required in designing sheetmetal
parts and assemblies, trouble shooting and creating
production drawings. All functions needed to
create sheetmetal parts, drawings and assemblies
are taught in this course. The lesson modules are
structured to maximize hands-on interaction with
the Pro/Sheetmetal module in Pro/Engineer. Lab
required. Prerequisite: DFTG 1333. 3 credit
hours. (W)

**DFTG 2300   Intermediate Architectural
                Drafting –Residential**
Continued application of principles and practices
used in residential construction. Lab required.
Prerequisite: DFTG 1317. 3 credit hours. (W)

**DFTG 2319   Intermediate Computer-Aided
                Drafting**
A continuation of practices and techniques used in
basic computer-aided drafting including the
development and use of prototype drawings,
construction of pictorial drawings, extracting data
and basics of 3D. Lab required. Prerequisite:
DFTG 1309. 3 credit hours. (W)

DFTG 2321   Topographical Drafting
Plotting of surveyors field notes. Includes drawing
elevations, contour lines, plan and profiles, and
laying out traverses. Lab required. Prerequisite:
DFTG 1309. 3 credit hours. (W)

**DFTG 2328   Architectural Drafting-
                Commercial**
Architectural drafting procedures, practices,
governing codes, terms and symbols including the
preparation of detailed working drawings for a
commercial building, with emphasis on
commercial construction methods. Lab required.
Prerequisite: DFTG 1309. Prerequisite/Concurrent
enrollment: DFTG 2319. 3 credit hours. (W)

**DFTG 2332   Advanced Computer-Aided
                Drafting**
Application of advanced CAD techniques. Lab
required. Prerequisite: DFTG 2319. 3 credit hours.
(W)

**DFTG 2335   Advanced Technologies in
                Mechanical Design and
                Drafting**
Use parametric-based software (Pro/Engineer) for
mechanical assembly design and drafting for
advanced modeling and analysis. In this course the
student will learn how to create and fully detail a
multi-view drawing and create reports to contain
additional design documentation details. Drawings
for both parts and assemblies will be addressed,
with emphasis on view management and design
details. Lab required. Prerequisite: DFTG 1345 or
consent of Instructor or Program Director. 3 hours.
(W)

**DFTG 2336   Computer-Aided Drafting
                Programming**
Use of programming language to enhance CAD
software. Lab required. Prerequisite: DFTG 2319.
3 credit hours. (W)

**DFTG 2350   Geometric Dimensioning and
                Tolerancing**
Geometric dimensioning and tolerancing,
according to standards, application of various
geometric dimensions and tolerances to production
drawings. Lab required. Prerequisite: DFTG
1309. 3 credit hours. (W)

DFTG 2381   Cooperative Education-Drafting and Design Technology/Technician, General
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

DHYG 1207   General and Dental Nutrition
General nutrition and nutritional biochemistry emphasizing the effect nutrition has on oral health. Prerequisite: DHYG 1331. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1215   Community Dentistry
The principles and concepts of community public health and dental health education emphasizing community assessment, educational planning, implementation, and evaluation, including methods and materials used in teaching dental health education in various community settings. Includes rotation schedule into the community (4 hours weekly). Prerequisites: DHYG 1227, DHYG 1261, and ENGL 1301. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1227   Preventive Dental Hygiene Care
The role of the dental hygienist as a therapeutic oral health care provider with emphasis on concepts of disease management, health promotion, communication and behavior modification. Prerequisites: BIOL 2420, DHYG 1301, and DHYG 1331. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1235   Pharmacology for the Dental Hygienist
Classification of drugs and their uses, actions, interactions, side effects, contraindications with emphasis on dental applications. Prerequisite: DHYG 1331. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 1261   Clinical I-Dental Hygienist
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisites: BIOL 2420, DHYG 1301, and DHYG 1331. Major Requirement: AAS-Dental Hygiene. 2 credit hours. (W)

DHYG 1301   Orofacial Anatomy, Histology and Embryology
The histology and embryology of oral tissues, gross anatomy of the head and neck, tooth morphology, and individual tooth identification. Lab required. Prerequisites: BIOL 2401 and BIOL 2402, and CHEM 1405. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

DHYG 1304   Dental Radiology
Fundamentals of oral radiography including techniques, interpretation, quality assurance, and ethics. Lab required. Corequisite: DHYG 1301, or consent of Program Director. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

DHYG 1311   Periodontology
Normal and diseased periodontium including the structural, functional, and environmental factors. Emphasis on etiology, pathology, treatment modalities, and therapeutic and preventive periodontics. Prerequisites: DHYG 1227 and DHYG 1261. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

DHYG 1319   Dental Materials
Physical and chemical properties of dental materials including the application and manipulation of the various materials used in dentistry. Lab required. Prerequisites: CHEM 1405 and DHYG 1331. Major Requirement: AAS - Dental Hygiene. 3 credit hours. (W)

DHYG 1331   Preclinical Dental Hygiene
Foundational knowledge for performing clinical skills on patients with emphasis on procedures and rationale for performing dental hygiene care. Introduction to ethical principles as they apply to dental hygiene care. Lab required. Prerequisites: BIOL 2401, and BIOL 2402, and CHEM 1405. Major Requirement: AAS-Dental Hygiene. 3 credit hours. (W)

DHYG 1339   General and Oral Pathology
Disturbances in human body development, diseases of the body, and disease prevention measures with emphasis on the oral cavity and associated structures. Prerequisites: DHYG 1227 and DHYG 1261. Major Requirement: AAS-Dental Hygiene. 3 credit hours. (W)

DHYG 2153   Dental Hygiene Practice
Emphasis on the laws governing the practice of dentistry and dental hygiene, moral standards, and the ethical standards established by the dental hygiene profession. Practice settings for the dental hygienist, office operations, and preparation for employment. Prerequisites: DHYG 1227 and DHYG 1261. Major Requirement: AAS-Dental Hygiene. 1 credit hour. (W)

DHYG 2201   Contemporary Dental Hygiene Care I
Dental hygiene care for the medically or dentally compromised patient including supplemental instrumentation techniques. Prerequisites: DHYG 1227 and DHYG 1261. Corequisites: DHYG 2153 (or DHYG 1123) and DHYG 2361, or consent of Program Director. Major Requirement: AAS - Dental Hygiene. 2 credit hours. (W)

DHYG 2231   Contemporary Dental Hygiene Care II
A continuation of Contemporary Dental Hygiene Care I. Dental hygiene care for the medically or dentally compromised patient including advanced instrumentation techniques. Prerequisites: DHYG 2201 and DHYG 2361. Major Requirement: AAS -Dental Hygiene. 2 credit hours. (W)

DHYG 2275   Community Dental Health Applications
This course provides an opportunity for students to apply the main concepts of DHYG 1215 by individually developing community educational programs that demonstrate the promotion of health and prevention of disease for a variety of populations. Students learn the variances in the application of health education programs. This course also instructs the student on the use of a variety of media sources and the principles of effective educational presentations. Lab required. Prerequisites: DHYG 1215, DHYG 1227, and DHYG 1261. Major Requirement: AAS-Dental Hygiene. 2 credit hours. (W)

DHYG 2361   Clinical II - Dental Hygienist
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. A method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Onsite clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Prerequisites: DHYG 1227 and DHYG 1261. Corequisites: DHYG 2153 (or DHYG 1123) and DHYG 2201 or consent of Program Director. Major Requirement: AAS-Dental Hygiene. 3 credit hours. (W)

DHYG 2363   Clinical III-Dental Hygienist
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisites: DHYG 2153 (or DHYG 1123), DHYG 2201, and DHYG 2361. Corequisite: DHYG 2231. Major Requirement: AAS-Dental Hygiene. 3 credit hours. (W)

DHYG 2375   Strategies of Oral Medicine
Case presentation that emphasizes the integration of dental hygiene sciences, critical thinking and the application of evidence based research on an advanced level. Presentations by students include patient case studies and literature reviews for class discussion. Patient case studies integrate knowledge from the areas of research, pharmacology, periodontology, pathology, emergency care, ethics, nutrition, dental radiology and clinical courses that demonstrate the highest quality of care for each patient. Prerequisites: DHYG 1235, DHYG 2201, and DHYG 2361. Major Requirement: AAS-Dental Hygiene. 3 credit hours. (W)

DRAM 1120   Theatre Practicum I
Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Additionally, practicum in theatre with emphasis on performance techniques and procedures, including a major performance role in a college production. Flexible enrollment. Prerequisite: Consent of Instructor. 1 credit hour. (A)
Note: Students may take DRAM 1120 and DRAM 1121 for a combined total of no more than 6 credit hours.

DRAM 1121   Theatre Practicum II
Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Additionally, practicum in theatre with emphasis on theatre techniques and procedures, including major technical responsibilities in the production of a college play. Flexible enrollment. Prerequisite: Consent of Instructor. 1 credit hour. (A)
Note: Students may take DRAM 1120 and DRAM 1121 for a combined total of no more than 6 credit 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 Theater
Survey of theater including its history, dramatic works, stage techniques, production procedures, and relation to other art forms. Participation in productions may be required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

DRAM 1322   Stage Movement
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
Practicum in theater open to all students with emphasis on technique and procedures with experience gained in play productions. Additionally, this is an interactive practicum in theatre. Diverse topics of study will be offered on a rotating basis. Introduction to Directing has emphasis on directing technique and procedure, with experience gained through practical study. Introduction to Directing will be offered in the fall and/or spring semester. New York Field Studies, a course which introduces students first-hand to the performance and theory of the New York professional Theatre, will be offered during Summer II. Other topics of study will be offered periodically. This course may not be repeated for credit. Lab required. 3 credit hours. (A)

DRAM 1330   Stagecraft I
Study and application of the methods and components of theatrical production which may include one or more of the following: theater, facilities, scenery construction and painting, properties, lighting, costume, makeup, sound, and theatrical management. Lab required. 3 credit hours. (A)

DRAM 1341   Theatrical Makeup
Study and application of visual aesthetics in theatrical makeup, including the fundamentals of stage makeup, character makeup, corrective techniques, beards, mustaches, and three-dimensional makeup. Lab required. 3 credit hours. (A)

DRAM 1342   Introduction to Costuming
Introduction to constructing costumes for theatrical productions. Students will gain an appreciation of the art of costuming and a sense of fashion history, and will understand how the costume fits into the total concept and production of the play. Lab required. 3 credit hours. (A)

DRAM 1351   Acting I
An introduction to the fundamental principles and tools of acting as used in auditions, rehearsals, and performances. This may include ensemble performing, character and script analysis, and basic theater terminology. This exploration will emphasize the development of the actor's instrument: voice, body and imagination. Lab required. 3 credit hours. (A)

DRAM 1352   Acting II
Exploration and further training within the basic principles and tools of acting, including an emphasis on critical analysis of oneself and others. The tools include ensemble performing, character and script analysis, and basic theater terminology. This will continue the exploration of the development of the actor's instrument: voice, body and imagination. Lab required. Prerequisite: DRAM 1351 or consent of Instructor. 3 credit hours. (A)

DRAM 2331   Stagecraft II
Continued study and application of the methods and components of theatrical production which may include one or more of the following: theater facilities, scenery construction and painting, properties, lighting, costume, makeup, sound and theatrical management. Lab required. 3 credit hours. (A)

DRAM 2336   Voice 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 Theater I
Study of the history of the theater from primitive times through the Renaissance. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

DRAM 2362   History of Theater II
Study of the history of the theater from the Renaissance through today. Prerequisite: Meet TSI requirement for INRW 0315; or equivalent. 3 credit hours. (A)

DRAM 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   Introduction to Cinema
Survey and analyze cinema including history, film techniques, production procedures, selected motion pictures, and cinema's impact on and reflection of society. Lab required. 3 credit hours. (A)
Note: Students may take either DRAM 2366 or COMM 2366, but not both.

DRAM 2367   Development of the Motion Picture II
Investigates the history of motion pictures and its effect on our society as well as its contributions to our culture. Covers the period of 1950-present. Emphasis on the cinema as an art form. Lab required. 3 credit hours. (A)

DRAM 2372   Script Analysis
An investigation of dramatic structure from the points of view of the director, actor, playwright and designer. Emphasis is on theory and criticism of theatre arts. Through the study of selected plays from various styles and periods in theatre history, students will learn techniques for analyzing, interpreting and conceptualizing play structure in a manner vital for all theatre artists. Script selections will vary each semester. Lab required. 3 credit hours. (A)
Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.

DRAM 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 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. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

ECON 2302   Principles of Microeconomics
Analysis of the behavior of individual economic agents, including consumer behavior and demand, producer behavior and supply, price and output decisions by firms under various market structures, factor markets, market failures, and international trade. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

ECON 2389   Academic Co-op Economics
Integrates on-campus study with practical hands-on work experience in economics. In conjunction with class seminars, the student will set specific goals and objectives in the study of economics. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

ECRD 1111   Electrocardiography
Fundamentals of cardiovascular anatomy and physiology. Includes basic electrocardiography procedures, interpretation of basic dysrhythmias, and appropriate treatment modalities 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 1200   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. 2 credit hour. (A)
Note: Students may only take one of the following: EDUC 1200, PSYC 1100 or PSYC 1300.

EDUC 1301   Introduction to the Teaching Profession
An introduction and analysis of the culture of schooling and classrooms from the perspective of the teacher, the student and society. Includes information on degree requirements and testing for certification in Texas. Sixteen hours of field-based work in a PK-12 school is required. Lab required. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 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. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

EECT 1348   Digital Signal Processing (DSP)
Formerly EECT 1448
A study of the architecture and applications of digital signal processors (DSP) including mathematical signal processing techniques. Lab required. 3 credit hours. (W)

EECT 1371   Voice-over-Internet Protocol (CCNA VOICE)
Voice over Internet Protocol (VoIP) adds voice to existing data and video transmission networks enriching and unifying all our communication systems over a common media. It offers many benefits: lower telephony operational costs, greater flexibility, and offers the potential for a variety of present and future enhanced applications not possible on earlier communications systems. This course provides a thorough overview of the legacy Public Switched Telephone Network (PSTN), Internet Protocol (IP), and IP Telephony (IPT), including their protocols and its integration with data and video networks. VoIP I helps individuals to prepare for the Cisco CCNA Voice and CVOICE certification. This class requires extensive hands-on labs. Lab required. 3 credit hours. (W)

EECT 1381   Cooperative Education- Electrical, Electronic and Communications Engineering Technology/Technician
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

EECT 2337   Wireless Telephony Systems
Principles of wireless/cellular telephony systems to include call processing, hand-off, site analysis, antenna radiation patterns, commonly used test/maintenance equipment, and access protocol. 3 credit hours. (W)
Note: Students may take either EECT 2337 or EECT 2437 but not both.

EECT 2380   Cooperative Education - Electrical, Electronic and Communications Engineering Technology Technician
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

EMSP 1160   Clinical-Emergency Medical Technician (EMT Paramedic)- Basic
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Program Director. 1 credit hour. (W)

EMSP 1161   Clinical-Emergency Medical Technician (EMT Paramedic)- Advanced I
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Program Director. 1 credit hour. (W)

EMSP 1162   Clinical-Emergency Medical Technician (EMT Paramedic)-Advanced II
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Program Director. 1 credit hour. (W)

EMSP 1355   Trauma Management
Knowledge and skills in the assessment and management of patients with traumatic injuries. Lab required. 3 credit hours. (W)

EMSP 1356   Patient Assessment and Airway Management
Knowledge and skills required to perform patient assessment, airway management, and ventilation. Lab required. Prerequisite: Consent of Program Director. 3 credit hours. (W)

EMSP 1371   Introduction to Emergency Medical Technician (EMT)
Introduction to Emergency Medical Services including: history, organization and function, legal aspects, and ethics. Overview of human anatomy and physiology, patient assessment, airway control, and infection control techniques. Prerequisite: Consent of Program Director. Corequisites: EMSP 1160 and EMSP 1501. 3 credit hours. (W)

EMSP 1438   Introduction to Advanced Practice
Fundamental elements associated with emergency medical services to include preparatory practices, pathophysiology, medication administration, and related topics. Lab required. Prerequisites: EMSP 1160 and EMSP 1371 (or MDCA 1409) and EMSP 1501, or EMT-Basic certification, or consent of Program Director. 4 credit hours. (W)

EMSP 1501   Emergency Medical Technician
Preparation for certification as an Emergency Medical Technician (EMT). Lab required. Prerequisite: Consent of Program Director. Corequisite: EMSP 1160. 5 credit hours. (W)

EMSP 2143   Assessment Based Management
A capstone experience covering comprehensive, assessment-based patient care management. Includes specific care when dealing with pediatric, adult, geriatric, and special needs patients. 1 credit hour. (W)

EMSP 2160   Clinical-Emergency Medical (EMT Paramedic)-Advanced III
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. 1 credit hour. (W)

EMSP 2248   Emergency Pharmacology
Utilization of medications in treating emergency situations. Lab required. 2 credit hours. (W)

EMSP 2267   Practicum-Emergency Medical (EMT Paramedic)
Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. 2 credit hours. (W)

EMSP 2330   Special Populations
Knowledge and skills necessary to assess and manage ill or injured patients in diverse populations to include neonatology, pediatrics, geriatrics, and other related topics. Lab required. Prerequisite: Consent of Program Director. 3 credit hours. (W)

EMSP 2338   EMS Operations
Knowledge and skills to safely manage multi-casualty incidents and rescue situations; utilize air medical resources; identify hazardous materials and other specialized incidents. Lab required. Prerequisites: EMSP 1161, EMSP 1438 (or EMSP 1338), EMSP 1338, EMSP 1355, EMSP 1356, EMSP 2534 (or EMSP 2434), and EMSP 2444. 3 credit hours. (W)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

EMSP 2444   Cardiology
Assessment and management of patients with cardiac emergencies. Includes single and multi-lead ECG interpretation. Lab required. 4 credit hours. (W)

**EMSP 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)

EMSP 2534   Medical Emergencies
Knowledge and skills in the assessment and management of patients with medical emergencies, including medical overview, neurology, gastroenterology, immunology, pulmonology, urology, hematology, endocrinology, toxicology, and other related topics. Lab required. 5 credit hours. (W)

ENGL 1301   Composition I
Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis. Lab required. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

ENGL 1302   Composition II
Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions. Lab required. Prerequisite: ENGL 1301. 3 credit hours. (A)

ENGL 2307   Creative Writing I
Practical experience in the techniques of imaginative writing. In this course, emphasis will be on the writing of fiction or non-fiction. Each student will study selected literary works to improve critical reading toward the goal of improving creative writing. This course does not satisfy the college requirements for a sophomore literature course. Prerequisite: ENGL 1302. 3 credit hours. (A)

ENGL 2308   Creative Writing II
Practical experience in the techniques of imaginative writing. In this course, emphasis will be on the writing of poetry or drama. Each student will study selected literary works to improve critical reading toward the goal of improving creative writing. This course does not satisfy the college requirements for a sophomore literature course. Prerequisite: ENGL 1302. 3 credit hours. (A)

**ENGL 2311   Technical and Business
                           Writing**
Intensive study of and practice in professional settings. Focus on the types of documents necessary to make decisions and take action on the job, such as proposals, reports, instructions, policies and procedures, e-mail messages, letters, and descriptions of products and services. Practice individual and collaborative processes involved in the creation of ethical and efficient documents. Prerequisite: ENGL 1301. 3 credit hours. (A)

ENGL 2322   British Literature I
A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

ENGL 2323   British Literature II
A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2327   American Literature I
A survey of American literature from the period of exploration and settlement through the Civil War. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2328   American Literature II
A survey of American literature from the Civil War to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2332   World Literature I
A survey of world literature from the ancient world through the sixteenth century. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2333   World Literature II
A survey of world literature from the seventeenth century to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2342   Introduction to Literature I - Short Story and Novel
Study of short stories, novels, and nonfiction. Analysis and evaluation of major writers, their techniques, and their contributions to our literary heritage. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2343   Introduction to Literature II - Poetry and Drama
Study of poetry and drama and of mythology as it relates to these genres. Analysis of our classical heritage, origins of drama, development of contemporary drama and film, and elements and types of poetry. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2351   Mexican-American Literature
A survey of Mexican-American/Chicano/a literature including fiction, nonfiction, poetry and drama. Prerequisite: ENGL 1302 or ENGL 2311. 3 credit hours. (A)

ENGL 2389   Academic Co-op English
Integrates on-campus study with practical hands-on work experience in English. In conjunction with class seminars, the student will set specific goals and objectives in the study of English. Contact the Cooperative Work Experience Office. Prerequisites: Consent of Instructor, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

ENGR 1172   Introduction to Experimental Techniques

Electrical Engineering fundamentals laboratory that stresses laboratory procedures; learning use of common laboratory equipment such as power supplies, multimeters, signal generators, and oscilloscopes; making measurements; familiarization with simple DC resistor circuits; Ohm's law; analyzing AC signals, including frequency, period, amplitude, and rms value; inductors, capacitors and DC transients; measuring phase shift in an AC circuit due to an inductor or capacitor; and basics of laboratory report writing. Prerequisite: MATH 1314. 1 credit hour. (A)
Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.

ENGR 1201   Introduction to Engineering

An introduction to the engineering profession with emphasis on technical communication and team-based engineering design. Prerequisite: MATH 1314 or equivalent academic preparation. 2 credit hours. (A)

ENGR 1304   Engineering Graphics

Introduction to computer-aided drafting using CAD software and sketching to generate two- and three-dimensional drawings based on the conventions of engineering graphical communication; topics include spatial relationships, multi-view projections and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics. Lab required. Prerequisite: MATH 1314 or equivalent academic preparation. 3 credit hours. (A)

ENGR 2105   Electrical Circuits I Laboratory

Laboratory experiments supporting theoretical principles presented in ENGR 2305 involving DC and AC circuit theory, network theorems, time, and frequency domain circuit analysis. Introduction to principles and operation of basic laboratory equipment; laboratory report preparation. Prerequisites: MATH 2414 and PHYS 2425. Prerequisite/Concurrent enrollment: MATH 2320. Corequisite: ENGR 2305. 1 credit hour. (A)

ENGR 2106   Introduction to Digital Systems Laboratory

Basic laboratory experiments supporting theoretical principles presented in ENGR 2306 involving design, construction, and analysis of combinational and sequential digital circuits and systems, including logic gates, adders, multiplexers, encoders, decoders, arithmetic logic units, latches, flip-flops, registers, and counters; preparation of laboratory reports. Prerequisite: MATH 1314. Corequisite: ENGR 2306. 1 credit hour. (A)

ENGR 2110   Introduction to Digital Systems Laboratory

Laboratory to accompany ENGR 2310. The purpose of this laboratory is to give students an intuitive understanding of digital circuits and systems. Laboratory exercises include construction of simple digital logic circuits using prototyping kits and board-level assembly of a personal computer. Prerequisite: MATH 1314. Corequisite: ENGR 2310. 1 credit hour. (A)
Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.

ENGR 2300   Applied Linear Algebra

Matrices, vectors, determinants, linear systems of equations, Gauss-Jordan elimination, vector spaces, basis, eigenvalues, eigenvectors, numerical methods in linear algebra using MATLAB, computer arithmetic, Gaussian elimination, LU factorization, iterative solutions to linear systems, iterative methods for estimating eigenvalues, singular value decomposition, QR factorization. Prerequisite: MATH 2414. 3 credit hours. (A)
Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.

ENGR 2301   Engineering Mechanics I
Basic theory of engineering mechanics, using calculus, involving the description of forces, moments, and couples acting on stationary engineering structures; equilibrium in two and three dimensions; free-body diagrams; friction; centroids; centers of gravity; and moments of inertia. Prerequisite: PHYS2425. Prerequisite/Concurrent enrollment: MATH2414. 3 credit hours. (A)

ENGR 2302   Engineering Mechanics II
Basic theory of engineering mechanics, using calculus, involving the motion of particles, rigid bodies, and systems of particles; Newton's Laws; work and energy relationships; principles of impulse and momentum; application of kinetics and kinematics to the solution of engineering problems. Prerequisite: ENGR 2301. 3 credit hours. (A)

ENGR 2305   Electrical Circuits I
Principles of electrical circuits and systems. Basic circuit elements (resistance, inductance, mutual inductance, capacitance, independent and dependent controlled voltage, and current sources). Topology of electrical networks; Kirchhoff's laws; node and mesh analysis; DC circuit analysis; operational amplifiers; transient and sinusoidal steady-state analysis; AC circuit analysis; first-and second-order circuits; Bode plots; and use of computer simulation software to solve circuit problems. Prerequisites: MATH 2414 and PHYS 2425. Prerequisite/Concurrent enrollment: MATH 2320. Corequisite: ENGR 2105. 3 credit hours. (A)

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

ENGR 2308   Engineering Economics
Methods used for determining the comparative financial desirability of engineering alternatives. Provides the student with the basic tools required to analyze engineering alternatives in terms of their worth and cost, an essential element of engineering practice. The student is introduced to the concept of the time value of money and the methodology of basic engineering economy techniques. The course will address some aspects of sustainability and will provide the student with the background to enable them to pass the Engineering Economy portion of the Fundamentals of Engineering exam. Prerequisite: MATH 2413. 3 credit hours. (A)

ENGR 2310   Introduction to Digital Systems
Introduction to hardware structures and assembly-language concepts that form the basis of the design of modern computer systems. Internal data representation and arithmetic operations in a computer. Basic logic circuits. MIPS assembly language. Overview of PC architecture. Prerequisite: MATH 1314. Corequisite: ENGR 2110. 3 credit hours. (A)
Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.

ENGR 2332   Mechanics of Materials
Stresses, deformations, stress-strain relationships, torsions, beams, shafts, columns, elastic deflections in beams, combined loading, and combined stresses. Behavior phenomena such as fracture, fatigue, and creep are introduced. Prerequisite/Concurrent enrollment: ENGR 2301. 3 credit hours. (A)

ENGT 1401   Circuit Analysis I
Fundamental concepts of electrical science covering potential, current and power in DC circuits. Fundamental laws and relationships applied to the analysis of circuits and networks: capacitance, inductance and magnetism; single-frequency concepts; the use of computer software in design and analysis of circuits. Lab required. Prerequisite/Concurrent enrollment: MATH 2312 equivalent or higher level. 4 credit hours. (A)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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 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

Lecture: A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. Lab: Activities will cover methods used to collect and analyze environmental data. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)
Note: Students may take either GEOL 1305 or ENVR 1401 but not both.

ENVR 1402   Environmental Science II

Continued interdisciplinary study of both natural (biology, chemistry, geology) and social (economics, politics, ethics) sciences as they apply to the environment. Focus on energy issues, global warming, ozone loss, land use, conservation and management, deforestation, biodiversity, the history of environmental law and regulation and local environmental problems. Lab required. Prerequisite: ENVR 1401 or GEOL 1305. 4 credit hours. (A)

ESLC 0305   ESL Oral Communication,
**   Intermediate**

Develops listening and speaking skills in speakers of languages other than English and prepares them to function in educational, vocational and/or personal English-speaking contexts. Additionally, emphasis on developing non-native speakers' intermediate listening and speaking skills to facilitate natural communication. Oral skills are developed through individual presentations and interactions in dyads, and in small and large groups. Aural skills are developed through classroom interaction, outside assignments, and video and audio clips designed to enhance non-native speakers' skills in understanding both formal and informal speech styles of English. Focus is given to students' spoken grammar, pronunciation, vocabulary, and exposure to U.S. culture. Lab required. Prerequisite: Meet TSI standard for ESLC 0305; or equivalent. 3 credit hours. (D)
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.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

ESLC 0310   ESL Oral Communication, Advanced

Develops listening and speaking skills in speakers of languages other than English and prepares them to function in educational, vocational and/or personal English-speaking contexts. Additionally, emphasis on developing non-native speakers' advanced oral communication and listening competencies. Students practice natural communication regarding abstract concepts in classroom activities by working in dyads and in small and large groups while formal speaking skills are focused upon through delivery of oral presentations. Students participate in advanced level listening activities through interaction both in and out of the classroom and the use of video and audio tapes. Focus is given to students' spoken grammar, pronunciation, vocabulary and exposure to U.S. culture. Lab required. Prerequisite: ESLC 0305, or meet TSI standard for ESLC 0310; or equivalent. 3 credit hours. (D)

Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.

ESLC 0320   ESL Oral Communication, Pronunciation/Accent Reduction

Develops listening and speaking skills in speakers of languages other than English and prepares them to function in educational, vocational and/or personal English-speaking contexts. Additionally, emphasis on teaching aspects of spoken English, including stress and intonation, individual phonemes, and awareness of connected and reduced speech. Addresses pronunciation problems of specific language groups. Attention to productive and receptive skills is facilitated through classroom activities, student work in dyads and small and large groups, audio and video taping, and individualized feedback of Instructor. Lab required. Prerequisite: ESLC 0305 or consent of Instructor, or meet TSI standard for ESLC 0305 and ESLR 0305; or equivalent. 3 credit hours. (D)

Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.

ESLG 0305   Grammar for Non-Native Speakers, Intermediate I

Focuses on Standard English grammar usage for academic purposes. Open only to non-native speakers. Additionally, instruction for non-native speakers of English in all verb tenses (to include past, present, future in simple progressive and perfective forms), passive voice and modals. Course content supports ESLW 0305 objectives for grammar usage. Lab required. Prerequisite: Meet TSI standard for ESLG 0305; or equivalent. 3 credit hours. (D)

Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.

ESLG 0310   Grammar for Non-Native Speakers, Intermediate II

Focuses on Standard English grammar usage for academic purposes. Open only to non-native speakers. Additionally, a high-intermediate English grammar course designed for non-native speakers of English for instruction in nouns, noun clauses, gerunds, and infinitives. Course content supports ESLW 0310 objectives for grammar usage. Lab required. Prerequisite: ESLG 0305, or meet TSI standard for ESLG 0310; or equivalent. 3 credit hours. (D)

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.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

**ESLG   0315   Grammar for Non-Native
                    Speakers, Advanced**

Focuses on Standard English grammar usage for academic purposes. Open only to non-native speakers. Additionally, an advanced English grammar course designed for non-native speakers of English and focused on noun clauses, adjective clauses, adjective phrases, adverb clauses, adverbial phrases, and conditionals. Course content supports ESLW 0215 objectives for grammar usage and successful transition into English 1301. Lab required. Prerequisite: ESLG 0310, or meet TSI standard for ESLG 0315; or equivalent. 3 credit hours. (D)

Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.

**ESLR   0215   ESL Reading and Vocabulary,
                    Advanced**

Develops English reading proficiency and vocabulary for academic, career, or personal purposes in speakers of languages other than English and prepares them to function in a multicultural, multilingual society. Additionally, instruction in advanced reading comprehension to prepare non-native students for admission to reading-restrictive classes. ESLR 0215 focuses on cultural allusions, connotation of vocabulary, augmentation of reading rate for non-native speakers, implied main ideas, facts and opinion, inferences and conclusions, author's purpose, tone, point of view, vocabulary, and graphic aids in unabridged academic texts. Lab required. Prerequisites: ESLR 0310 and ESLW 0310, or meet TSI standard for ESLR 0215 and ESLW 0215; or equivalent. Corequisite: ESLW 0215. 2 credit hours. (D)

Note: May not be used to satisfy the requirement of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you. ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0310 may be taken for a combined total of no more than 9 credit hours.

**ESLR   0305   ESL Reading and Vocabulary,
                    Intermediate I**

Develops English reading proficiency and vocabulary for academic, career, or personal purposes in speakers of languages other than English and prepares them to function in a multicultural, multilingual society. Additionally, focuses on teaching students with lower-level speaking and listening skills to identify topics, main ideas, and supporting details in simplified academic and literary texts. Lab required. Prerequisite: Meet TSI standard for ESLR 0305 and ESLW 0305; or equivalent. Corequisite: ESLW 0305. 3 credit hours. (D)

Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you. ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0310 may be taken for a combined total of no more than 9 credit hours.

**ESLR   0310   ESL Reading and Vocabulary,
                    Intermediate II**

Develops English reading proficiency and vocabulary for academic, career, or personal purposes in speakers of languages other than English and prepares them to function in a multicultural, multilingual society. Additionally, focuses on teaching vernacular vocabulary and syntax in the informal register, context clues, topics, main ideas, supporting details, transitions, and organizational patterns for improving comprehension of abridged academic and literary texts. Lab required. Prerequisites: ESLR 0305 and ESLW 0305, or meet TSI standard for ESLR 0310 and ESLW 0310; or equivalent. Corequisite: ESLW 0310. 3 credit hours. (D)

Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you. ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0310 may be taken for a combined total of no more than 9 credit hours.

ESLV 0310 ESL Reading and Vocabulary, Idioms

Develops English reading proficiency and vocabulary for academic, career, or personal purposes in speakers of languages other than English and prepares them to function in a multicultural, multilingual society. Additionally, instruction in idiomatic American English for second language learners. Increases familiarity with idiomatic English to facilitate comprehension and productive use of idioms in spoken and written discourse. Lab required. Prerequisites: ESLC 0305 and ESLR 0305, or consent of Instructor or Department Chair. 3 credit hours. (D)
Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you. ESLR 0215, ESLR 0305, ESLR 0310, and ESLV 0310 may be taken for a combined total of no more than 9 credit hours.

ESLW 0215 Writing for Non-Native Speakers, Advanced

Focuses on strategies and techniques of writing and composition. Open only to non-native speakers. Additionally, instruction in advanced essay writing designed to prepare non-native students to enter ENGL 1301. Trains students to write academically acceptable papers in various rhetorical modes with a primary focus on argumentation. Focuses on mechanics of writing, common problems that ESL speakers encounter, research, and documentation. Lab required. Prerequisites: ESLR 0310 and ESLW 0310, or meet TSI standard for ESLR 0215 and ESLW 0215; or equivalent. Corequisite: ESLR 0215. 2 credit hours. (D)
Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.

ESLW 0305 Writing for Non-Native Speakers, Intermediate I

Focuses on strategies and techniques of writing and composition. Open only to non-native speakers. Additionally, instruction in intermediate writing skills for non-native speakers. Focuses on sentence-level writing and paragraph development. Introduces students to pre-academic, experiential writing. Trains students to develop and organize ideas in description and process modes. Lab required. Prerequisites: Meet TSI standard for ESLR 0305 and ESLW 0305; or equivalent. Corequisite: ESLR 0305. 3 credit hours. (D)
Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.

ESLW 0310 Writing for Non-Native Speakers, Intermediate II

Focuses on strategies and techniques of writing and composition. Open only to non-native speakers. Additionally, instruction in high-intermediate writing skills for non-native speakers. Focuses on multi-paragraph essays. Introduces students to academic writing. Trains students to develop and organize ideas in a variety of rhetorical modes. Lab required. Prerequisites: ESLR 0305 and ESLW 0305, or meet TSI standard for ESLR 0310 and ESLW 0310; or equivalent. Corequisite: ESLR 0310. 3 credit hours. (D)
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)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

FIRS 1313 Firefighter Certification III
One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Prerequisites: FIRS 1407. 3 credit hours. (W)

FIRS 1319 Firefighter Certification IV
One is a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: FIRS 1313. 3 credit hours. (W)

FIRS 1323 Firefighter Certification V
One is a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: FIRS 1319. 3 credit hours. (W)

FIRS 1329 Firefighter Certification VI
One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: FIRS 1323. 3 credit hours. (W)

FIRS 1407 Firefighter Certification II
One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, III, IV, V, VI, and VII to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: FIRS 1301, or consent of Program Director. 4 credit hours. (W)

FIRS 1433 Firefighter Certification VII
One in a series of courses in basic preparation for a new firefighter. Should be taken in conjunction with Firefighter Certification I, II, III, IV, V, and VI to satisfy the Texas Commission on Fire Protection (TCFP) curriculum for Basic Structural Fire Suppression, Course #100. Lab required. Prerequisite: FIRS 1329. 4 credit hours. (W)

FIRT 1301 Fundamentals of Fire Protection
Orientation to the fire service, career opportunities, and related fields. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements. 3 credit hours. (W)

FIRT 1315 Hazardous Materials I
The chemical characteristics and behavior of various materials. Storage, transportation, handling hazardous emergency situations, and the most effective methods of hazard mitigation. 3 credit hours. (W)

FIRT 1327 Building Construction in the Fire Service
Components of building construction that relate to life safety. Includes relationship of construction elements and building design impacting fire spread in structures. 3 credit hours. (W)

FIRT 1338 Fire Protection Systems
Design and operation of fire detection and alarm systems, heat and smoke control systems, special protection and sprinkler systems, water supply for fire protection, and portable fire extinguishers. This course meets Fire and Emergency Services Higher Education (FESHE) Model Curriculum core requirements. Prerequisite: FIRT 1301 or consent of Program Director. 3 credit hours. (W)

FIRT 1342 Fire Officer I
Meets the curriculum 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 curriculum requirements of the Texas
Commission on Fire Protection (TCFP) for Fire
Officer II certification. Prerequisite: FIRT 1342,
and FIRT 2305, or consent of Program Director. 3
credit hours. (W)

FIRT 1349 Fire Administration II
In-depth study of fire service management as
pertaining to budgetary requirements,
administration, organization of divisions within the
fire service, and relationships between the fire
service and outside agencies. Prerequisite: FIRT
1301 or consent of Program Director. 3 credit
hours. (W)

FIRT 2305 Fire Instructor I
Preparation of fire and emergency services
personnel to deliver instruction from a prepared
lesson plan. Includes the use of instructional aids
and evaluation instruments to meet the curriculum
requirements of the Texas Commission of Fire
Protection (TCFP) for Fire Instruction I
certification. Prerequisite: 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: Consent
of Instructor. 3 credit hours. (W)

FLMC 2331 Video Graphics and Visual Effects II
Advanced concepts of designing vector and raster graphics, executing rendering techniques, designing and producing three dimensional (3-D) materials, and selecting hardware, software, and peripherals for video production. Lab required. Prerequisite: FLMC 1331. 3 credit hours. (W)

FREN 1100 French Conversation I
Intensive practice in spoken French. Prerequisite: FREN 1412 or consent of Instructor or Department Chair. Corequisite: FREN 2311. 1 credit hour. (A)

FREN 1110 French Conversation II
Continuation of FREN 1100. Prerequisite: FREN 1100 or consent of Instructor or Department Chair. Corequisite: FREN 2312. 1 credit hour. (A)

FREN 1411 Beginning French I
Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of French culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, and video cassettes. Lab required. 4 credit hours. (A)

FREN 1412 Beginning French II
Continuation of FREN 1411. Lab required. Prerequisite: FREN 1411 or consent of Instructor or Department Chair. 4 credit hours. (A)

FREN 2303 French Literature I
Survey of French literature in its historical context from the 16th century through the 18th century. Continued practice in basic language skills. Reading of selected writers such as Ronsard, Moliere, and Voltaire. Prerequisite: FREN 2312 or consent of Instructor or Department Chair. 3 credit hours. (A)

FREN 2304 French Literature II
Survey of French literature in its historical context from the 19th and 20th centuries with reading from representative writers such as Hugo, Baudelaire, and Camus. Prerequisite: FREN 2312 or consent of Instructor or Department Chair. 3 credit hours. (A)

FREN 2311 Intermediate French I
Continued development of the four basic language skills with increased attention to reading and writing. Instruction enhanced by slides, tapes, and other audio-visual aids. Prerequisite: FREN 1412 or consent of Instructor or Department Chair. 3 credit hours. (A)

FREN 2312 Intermediate French II
Continuation of FREN 2311. Prerequisite: FREN 2311 or consent of Instructor or Department Chair. 3 credit hours. (A)

GAME 1303 Introduction to Game Design and Development
Introduction to electronic game development and game development careers. Includes examination of history and philosophy of games, the game production process, employee factors for success in the field, and current issues and practices in the game development industry. Lab required. Prerequisite: ARTV 1345 or consent of Instructor or Department Chair. 3 credit hours. (W)

GAME 1304 Level Design
Introduction to the tools and concepts used to create levels for games and simulations. Incorporates level design, architecture theory, concepts of critical path and flow, balancing, play testing, and storytelling. Includes utilization of toolsets from industry titles. Lab required. Prerequisite: GAME 1303. 3 credit hours. (W)

GAME 1314 Character Sculpting
Creation of original characters from the drawing stage to sculpting clay status. Explores a variety of poses using clay. Lab required. Prerequisite: ARTV 1345. 3 credit hours. (W)

GAME 2325   3-D Animation II - Character Set-Up
Skinning and weighting, forward kinematics, inverse kinetics, constraints, expressions, scripting and driven keys, mesh deformers, morph targets/blend shapes, and animation user interfaces. Lab required. Prerequisite: ARTV 1341. 3 credit hours. (W)

GAME 2359   Game and Simulation Group Project
Creation of a game and/or simulation project utilizing a team approach. Includes the integration of design, art, audio, programming, and quality assurance. Lab required. Prerequisite: GAME 1304. 3 credit hours. (W)

GAME 2386   Internship-Animation, Interactive Technology, Video Graphics and Special Effects
A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite: ARTV 1341. 3 credit hours. (W)

GEOG 1301   Physical Geography
Exploration of the physical environment; emphasis on climates, land forms, vegetation, and spatial relationships of selected geographical regions of the world. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 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. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 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. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

GEOL 1305   Environmental Science
A survey of the forces, including humans, that shape our physical and biologic environment, and how they affect life on Earth. Introduction to the science and policy of global and regional environmental issues, including pollution, climate change, and sustainability of land, water, and energy resources. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)
Note: Students may take either GEOL 1305 or ENVR 1401 but not both.

GEOL 1401   Earth Sciences for Non Science Majors I
Lecture: Survey of geology, meteorology, oceanography, and astronomy. Lab: Activities will cover methods used to collect and analyze data in geology, meteorology, oceanography, and astronomy. Lab required. Prerequisites: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

GEOL 1402   Earth Sciences for Non Science Majors II
Lecture: Extension of the study of geology, astronomy, meteorology and oceanography, focusing on natural resources, hazards and climate variability. Lab: Activities will focus on methods used to collect and analyze data related to natural resources, hazards and climate variability. Lab required. Prerequisite: GEOL 1401 or GEOL 1403. 4 credit hours. (A)

GEOL 1403   Physical Geology
Lecture: Introduction to the study of the materials and processes that have modified and shaped the surface and interior of Earth over time. These processes are described by theories based on experimental data and geologic data gathered from field observations. Lab: Laboratory activities will cover methods used to collect and analyze earth science data. Lab required. Prerequisites: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

GEOL 1404   Historical Geology
Lecture: A comprehensive survey of the history of life and major events in the physical development of Earth as interpreted from rocks and fossils. Lab: Laboratory activities will introduce methods used by scientists to interpret the history of life and major events in the physical development of Earth from rocks and fossils. Lab required. Prerequisite: GEOL 1403. 4 credit hours. (A)

GEOL 1445   Oceanography
A study of the various aspects of the ocean, including origins of the ocean, earth's ocean, plate tectonics, ocean sediments, the chemistry of seawater, oceans and climate, currents, waves, tides, coastal features, oceanic ecosystems, protection of coastal areas, and resources of the oceans. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

GEOL 1447   Introduction to Meteorology
An examination of the Earth's atmosphere, global climate, and associated environmental factors. Includes lab exercises in weather tracking on Weather-Net computer system. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading and Writing; or equivalent. 4 credit hours. (A)

GEOL 2389   Academic Co-op Geology
Integrates on-campus study with practical hands-on work experience in geology. In conjunction with class seminars, the student will set specific goals and objectives in the study of geology. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

GERM 1100   Conversational German I
Intensive practice in spoken German. Prerequisite: GERM 1412 or consent of Instructor or Department Chair. Corequisite: GERM 2311. 1 credit hour. (A)

GERM 1110   Conversational German II
Continuation of GERM 1100. Prerequisite: GERM 1100, or consent of Instructor or Department Chair. Corequisite: GERM 2312. 1 credit hour. (A)

GERM 1411   Beginning German I
Introduction to the basic skills of speaking, reading, writing, and listening; designed for students with little or no previous language training. Includes attention to selected aspects of German civilization. Instruction enhanced by the use of tapes, slides, and video cassettes. Lab required. 4 credit hours. (A)

GERM 1412   Beginning German II
Continuation of GERM 1411 with an emphasis on the reading of elementary texts. Lab required. Prerequisite: GERM 1411 or consent of Instructor or Department Chair. 4 credit hours. (A)

GERM 2311   Intermediate German I
Continued development of the four basic language skills with increased attention to reading and writing. Instruction enhanced by tapes, slides, and other audio-visual aids. Prerequisite: GERM 1412 or consent of Instructor or Department Chair. Corequisite: GERM 1100. 3 credit hours. (A)

GERM 2312   Intermediate German II
Continuation of GERM 2311. Prerequisite: GERM 2311, or consent of Instructor or Department Chair. Corequisite: GERM 1110. 3 credit hours. (A)

GISC 1411   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. 4 credit hours. (W)

GISC 1421   Introduction to Raster-Based Geographic Information Systems (GIS)

Instruction in GIS data sets including raster-based information such as images or photographs, acquisition of such data, and processing and merging with vector data. Prerequisite/Concurrent enrollment: GISC 1311. 4 credit hours. (W)

GISC 2231   Advanced Problems in Geographic Information Systems (GIS)

Seminar/Capstone course designed for the final semester of a degree or certificate in Geographic Information Systems (GIS). Projects will include individual and group studies of GIS applications using the skills acquired in previous courses. The student will produce a professional project and present the results to a panel consisting of peers, instructors, or practicing GIS professionals. Lab required. Prerequisite: GISC 2420. 2 credit hours. (W)

GISC 2281   Cooperative Education-Cartography/GIS

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisite: GISC 2420. 2 credit hours. (W)

GISC 2402   Geographic Information Systems (GIS) Design with Raster Analysis

Raster/remote sensing principles, technologies, and applications. Emphasizes processing raster imagery into useful information to be used in a GIS. Includes georeferencing and image classification. Student final project will be demonstrating raster and remote sensing techniques. Prerequisite: GISC 1421. 4 credit hours. (W)

GISC 2420   Intermediate Geographic Information Systems (GIS)

This course focuses on the study of spatial data structures and the display, manipulation, and analysis of geographic information. Students will study the technical aspects involved in spatial data handling, analysis, and modeling. Instruction will include theories and procedures associated with the implementation and management of GIS projects. A variety of GIS software packages will be used in the laboratory. Lab required. Prerequisite: GISC 1311. 4 credit hours. (W)

GOVT 2107   Federal and Texas Constitutions

A study of the United States and state constitutions with special emphasis on Texas. Prerequisites: By permission only, and meet TSI college-readiness standard for Reading and Writing; or equivalent. Enrollment limited to students who have already completed a minimum of six (6) credit hours of GOVT courses but have not satisfied the statutory requirement for study of the federal and state constitutions. Ensures compliance with TEC 51.301. 1 credit hour. (A)

GOVT 2304   Introduction to Political Science

Introductory survey of the discipline of political science focusing on the scope and methods of the field, and the substantive topics in the discipline including the theoretical foundations of politics, political interaction, political institutions and how political systems function. Prerequisites: Consent of Instructor, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

GOVT 2305   Federal Government (Federal constitution and topics)

Origin and development of the U.S. Constitution, structure and powers of the national government including the legislative, executive, and judicial branches, federalism, political participation, the national election process, public policy, civil liberties and civil rights. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

GOVT 2306   Texas Government (Texas constitution and topics)

Origin and development of the Texas Constitution, structure and powers of the state and local government, federalism and inter-governmental relations, political participation, the election process, public policy and the political culture of Texas. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

GOVT 2311   Mexican-American Politics

This course explores the impact of Mexican-Americans on U.S. politics and political institutions and public policy. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

GOVT 2389   Academic Co-op Government

Integrates on-campus study with practical hands-on work experience in government. In conjunction with class seminars, the student will set specific goals and objectives in the study of government. Contact the Cooperative Work Experience Office. Prerequisites: Consent of Instructor, and meet TSI college-readiness standard for Writing; or equivalent. 3 credit hours. (A)

GRPH 1359   Vector Graphics for Production

A study and use of vector graphics for production. 3 credit hours. (W)

GRPH 1380   Cooperative Education-Pre-Press/Desktop Publishing and Digital Imaging Design

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

HAMG 1313   Front Office Management

Functions of front office operations as they relate to customer service. Includes a study of front office interactions with other departments in the lodging operation. 3 credit hours. (W)

HAMG 1319   Computers in Hospitality

An introduction to the use of computers and their relationship as an information system to the hospitality industry. The course includes an overview of industry-specific software. Lab required. 3 credit hours. (W)

HAMG 1321   Introduction to Hospitality Industry

An exploration of the elements and career opportunities within the multiple segments of the hospitality industry. 3 credit hours. (W)

HAMG 1324   Hospitality Human Resources Management

Principles and procedures of human resource management in the hospitality industry. 3 credit hours. (W)

HAMG 1340   Hospitality Legal Issues

A course in legal and regulatory requirements that impact the hospitality industry. Topics include Occupational Safety and Health Administration (OSHA), labor regulations, tax laws, tip reporting, franchise regulations, and product liability laws. 3 credit hours. (W)

HAMG 1380   Cooperative Education-Hospitality Administration/ Management, General

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

HAMG 2301   Principles of Food and Beverage Operations

An overview of food and beverage management in various hospitality environments. Emphasizes cost controls from procurement to marketing and sales. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

HAMG 2305   Hospitality Management and Leadership

An overview of management and leadership in the hospitality industry with an emphasis on management philosophy, policy formation, communications, motivation, and team building. Prerequisites: HAMG 1313, HAMG 1319, HAMG 1321, HAMG 1324, HAMG 1340, HAMG 2301, HAMG 2307 and HAMG 2337. 3 credit hours. (W)

HAMG 2307   Hospitality Marketing and Sales

Identification of the core principles of marketing and sales and their impact on the hospitality industry. 3 credit hours. (W)

HAMG 2332   Hospitality Financial Management

Methods and applications of financial management within the hospitality industry. Primary emphasis on sales accountability, internal controls, and report analysis. 3 credit hours. (W)

HAMG 2337   Hospitality Facilities Management

Identification of hospitality building systems and facilities; to include sustainability and risk management. 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 1375   Solar Cell and Array Certification Training

Formerly HART 1475

Review of Solar Cell and Array concepts and principles in preparation for sitting for a certification examination administered by an outside organization or agency. The course includes National and Local Electrical Code requirements. Lab required. Prerequisites: CETT 1303 and MATH 1314 equivalent or higher level, or consent of Program Director. 3 credit hours. (W)

HART 2372 Alternative Energy Perspectives, Energy Sources, Energy Storage, and Energy Distribution

Formerly HART 2472

The course covers principles of alternative/renewable energy technologies (e.g. Solar Electrical Energy Generation, Solar Thermal Energy Generation, Wind Energy Generation, and Geo-Thermal Energy Generation). Each alternative is placed in the proper context of the energy equation. Traditional energy sources (e.g. coal, oil, natural gas, hydropower, nuclear) are described and contrasted so that the student sees costs and benefits of both alternative and traditional energy sources. Energy Storage and Energy Distribution is covered as it pertains to each energy technology. Lab required. Prerequisite: MATH 1314 or consent of Program Director. 3 credit hours. (W)

HIST 1301 United States History I

A survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 1302 United States History II

A survey of the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War and post-Cold War eras. Themes that may be addressed in United States History II include: American culture, religion, civil and human rights, technological

change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2301 Texas History

A survey of the political, social, economic, cultural, and intellectual history of Texas from 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. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2311 Western Civilization I

A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from human origins to the 17th century. Themes that should be addressed in Western Civilization I include cultural legacies of Mesopotamia, Egypt, Greece, Rome, Byzantium, Islamic civilizations, and Europe through the Middle Ages, Renaissance, and Reformations. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2312 Western Civilization II

A survey of the social, political, economic, cultural, religious, and intellectual history of Europe and the Mediterranean world from the 17th century to the modern era. Themes that should be addressed in Western Civilization II include absolutism and constitutionalism, growth of nation states, the Enlightenment, revolutions, classical liberalism, industrialization, imperialism, global conflict, the Cold War, and globalism. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2321 World Civilizations I
A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the emergence of human cultures through the 15th century. The course examines major cultural regions of the world in Africa, the Americas, Asia, Europe, and Oceania and their global interactions over time. Themes include the emergence of early societies, the rise of civilizations, the development of political and legal systems, religion and philosophy, economic systems and trans-regional networks of exchange. The course emphasizes the development , interaction and impact of global exchange. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2322 World Civilizations II
A survey of the social, political, economic, cultural, religious, and intellectual history of the world from the 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. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2327 Mexican-American History I
This course is a survey of the political, economic, social and cultural history of Mexicans in North America from the pre-Colombian Era through 1850, with emphasis on the Mexican-American War with the United States. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2328 Mexican-American History II
This course is a survey of the political, economic, social and cultural history of Mexicans in North America from 1850 to present, with emphasis on the Mexican-American cultural identity and the Civil Rights Movement in the United States. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2381 African-American History
Historical, economic, social, and cultural development of minority groups with an emphasis on the experiences of peoples of African descent in the United States from the colonial era to the present. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HIST 2389 Academic Co-op History
Integrates on-campus study with practical hands-on work experience in history. In conjunction with class seminars, the student will set specific goals and objectives in the study of history. Contact the Cooperative Work Experience Office. Prerequisite: Consent of Instructor. 3 credit hours. (A)

HITT 1160 Clinical I - Health Information/Medical Records Technology
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: HITT 1301. 1 credit hour. (W)

HITT 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

Study of medical terms through word origin and structure. Introduction to abbreviations and symbols, surgical and diagnostic procedures, and medical specialties. 3 credit hours. (W)

HITT 1311 Health Information Systems

Introduction to health IT standards, health-related data structures, software applications and enterprise architecture in health care and public health. Lab required. 3 credit hours. (W)

HITT 1341 Coding and Classification Systems

Formerly POFM 1300

Fundamentals of coding rules, conventions, and guidelines using clinical classification systems. The student is recommended to complete BIOL 2404 prior to registering for this course, but not required. Lab required. Prerequisite: HITT 1305. Corequisite: HITT 1301. 3 credit hours. (W)

HITT 1345 Health Care Delivery Systems

Examination of delivery systems including organization, financing, accreditation, licensure, and regulatory agencies. This course covers alternative health care delivery systems. Lab required. 3 credit hours. (W)

HITT 1353 Legal and Ethical Aspects of Health Information

Formerly HPRS 2321

Concepts of privacy, security, confidentiality, ethics, health care legislation, and regulations relating to the maintenance and use of health information. 3 credit hours. (W)

HITT 2245 Coding Certification Exam Review

Review of coding competencies and skills in preparation for a coding certification exam. This course focuses on developing the skills of testing well on the unique course material with the objective of passing the coding credentialing exam. Therefore, the majority of the course involves review and testing. Prerequisite: Consent of Program Director. 2 credit hours. (W)

HITT 2249 RHIT Competency Review

Review of Health Information Technology (HIT) competencies, skills, and knowledge. Prerequisite/Concurrent enrollment: HITT 2361 or consent of Program Director. 2 credit hours. (W)

HITT 2339 Health Information Organization and Supervision

Principles of organization and supervision of human, financial, and physical resources. Also covers health information for electronic records. Lab required. Prerequisites: HITT 1301, HITT 1305 (or SRGT 1301) and HPRS 1271. Major Requirement: AAS - Health Information Management. 3 credit hours. (W)

HITT 2346 Advanced Medical Coding

Advanced concepts of ICD and CPT coding rules, conventions and guidelines in complex case studies. Investigation of government regulations and changes in health care reporting. Electronic encoder use covered and information about ICD-10. Lab required. Prerequisites: BIOL 2404, HITT 1305 and HITT 1341 (or 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)

HITT 2435   Coding and Reimbursement Methodologies

Advanced coding techniques with emphasis on case studies, health records, and federal regulations regarding prospective payment systems and methods of reimbursement. The student is recommended to complete BIOL 2404 prior to registering for this course, but not required. Lab required. Prerequisite: HITT 1341. 4 credit hours. (W)

HITT 2443   Quality Assessment and Performance Improvement

Study of quality standards and methodologies in the health information management environment. Topics include licensing, accreditation, compilation and presentation of data in statistical formats, quality management and performance improvement functions, utilization management, risk management, and medical staff data quality issues. Approaches to assessing patient safety issues and implementation of quality management and reporting through electronic systems. Lab required. Prerequisite: HITT 1301, and meet TSI college-readiness standard for Mathematics; or equivalent. 4 credit hours. (W)

HITT 2471   Pathophysiology and Pharmacology

Study of the pathology and general health management of diseases and injuries across the life span. Topics include etiology, symptoms, and the physical and psychological reactions to diseases and injuries. A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Lab required. 4 credit hours. (W)

HPRS 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 1370   Central Sterile Processing II

This course explores two subsections of the IAHCSMM Certification program: A) Inventory Control-prepares the student with organizational skills needed to control, track and distribute inventory through the use of different techniques in inventory control and distribution, as well as the use of bar codes and radio frequency identification to track inventories. B) Sterile Storage and Distribution-introduces the basic procedures of packaging processes through a comparison of reusable and disposable packaging materials, basic package closure methods, and factors, which affect shelf-life and stock rotation. Lab required. 3 credit hours. (W)

HPRS 1470   Central Sterile Processing I

This course will teach subsections of the IAHCSMM Certification program related to: A) Introduction to Central Service-an introduction to the central service role, surgical supplies, basic and specialty surgical instruments, and packaging and sterilization. B) Infection Control and Occupational Safety-related to the principles and practice of infection control and OSHA guidelines along with common safety and hazards protocols. C) Regulations and Standards-teaches the difference between the regulations and voluntary and regulatory standards, the role and responsibilities of federal agencies that impact Central Services, and the important aspects of the regulations and standards they administer. Lab required. 4 credit hours. (W)

HPRS 1471   Central Sterile Processing III
An exploration of the subsections of the IAHCSMM Certification program: A) Instrument and Instrument Identification-identifying surgical instruments by name and purpose, examination of the process by which surgical instruments are manufactured and prepared for the sterilization process. B) Endoscopic Instruments-proper care, handling and processing of endoscopic instruments. C) Decontamination-describe how reusable equipment, instruments, and supplies are cleaned and decontaminated by means of manual or mechanical cleaning processes and chemical disinfection and the proper use of Personal Protective Equipment (PPE) and Standard Precautions. D) Preparation and Handling-relates to basic principles of various packaging materials and closure methods used for sterilization preparation as they relate to the Association of Advancement of Medical Instrument (AAMI) standards. E) Sterilization-relates sterilization procedures and theory including high and low temperature sterilization, sterilization equipment, types of sterilizers, various cycles, quality assurance concepts, documentation, standards, policies and procedures. Lab required. 4 credit hours. (W)

HPRS 1561   Clinical-Health Services/Allied Health/Health Sciences, General
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This course is an exploration of teamwork and the application of practical principles in the role of Central Sterile Processing Tech through "hands on" experience. 5 credit hours. (W)

HPRS 2232   Health Care Communication
Methods of communication with clients, client support groups, healthcare professionals, and external agencies. 2 credit hours. (W)

HPRS 2300   Pharmacology for Health Professions
A study of drug classifications, actions, therapeutic uses, adverse effects, routes of administration, and calculation of dosages. Prerequisites: SRGT 1260 and SRGT 1409. Corequisites: SRGT 1541 and SRGT 1561. Major Requirement: AAS-Surgical Technology. 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 1302   Human Resource Training and Development
An overview of human resource training and development as related to organizational mission and goals. 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 2304   Employee Relations

An examination of policies, practices, and issues required to build strong employee relations. Topics include communications, employee conduct rules, performance appraisal methods, Title VII, Family Medical Leave Act, Fair Labor Standards Act, and Americans with Disabilities Act updates. 3 credit hours. (W)

HRPO 2307   Organizational Behavior

The analysis and application of organizational theory, group dynamics, motivation theory, leadership concepts, and the integration of interdisciplinary concepts from the behavioral sciences. Prerequisite: BMGT 1327. 3 credit hours. (W)

HRPO 2331   International Human Resource Management

Effects of globalization on human resource management. 3 credit hours. (W)

HRPO 2381   Cooperative Education-Human Resources Management/ Personnel Administration, 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)

HUMA 1301   Introduction to Humanities I

This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create. Additionally, this course provides an overview of cultural traditions and the variety of aesthetic and intellectual works through which they express their values and aspirations. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

HUMA 1302   Introduction to Humanities II

This stand-alone course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create. Additionally, this course specifically pursues a concentrated exploration of particular cultural traditions or persistent cultural concepts or practices through critical engagement with selected aesthetic and intellectual works. 3 credit hours. (A)

HUMA 1305   Introduction to Mexican-American Studies

This interdisciplinary survey examines the different cultural, artistic, economic, historical, political, and social aspects of the Mexican-American/Chicano/a communities. It also covers issues such as dispossession, immigration, transnationalism, and other topics that have shaped the Mexican-American experience. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

IBUS 1305   Introduction to International Business and Trade

The techniques for entering the international marketplace. Emphasis on the impact and dynamics of sociocultural, demographic, economic, technological, and political-legal factors in the foreign trade environment. Topics include patterns of world trade, internationalization of the firm, and operating procedures of the multinational enterprise. 3 credit hours. (W)

IBUS 1351 Multinational Enterprise and Partnerships

The essential relationship between domestic and foreign business and industries engaged in shared services and production. Includes economic development through international co-production agreements with governments, technology transfer, legal, financial, labor and management factors, and practical applications of agreements. 3 credit hours. (W)

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 1380 Cooperative Education- International Business/ Trade/Commerce

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)

IBUS 1391 Special Topics in International 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. 3 credit hours. (W)

Conducting Business with the International Countries

A case-based approach to the study of international countries and its long-term, international economic potential. Students will study aspects of global capitalism represented by premier international suppliers of goods, services, and raw materials, along with their interactions with global organizations from countries outside their own borders and strategies of multinational companies operating in the global business environment.

IBUS 2341 Intercultural Management

Cross-cultural comparisons of management and communications processes. Emphasizes cultural ethnic geographic distinctions and antecedents that affect individual, group, and organizational behavior. May include sociocultural demographics, economics, technology, legal issues, negotiations, and processes of decision making in the international cultural environment. 3 credit hours. (W)

IBUS 2381 Cooperative Education- International Business/Trade/Commerce

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)

IFWA 1310 Nutrition and Menu Planning

Application of principles of nutrition in planning menus for the food service industry. This includes various types of commercial, industrial and institutional food service entities. 3 credit hours. (W)

IFWA 1319 Meat Identifying and Processing

A study of the identification and characteristics of wholesale and retail cuts of meat; hotel, restaurant, and institutional cuts of meat; U.S.D.A quality grades; quality control; and the Federal Meat Inspection Regulation. Lab required. Prerequisites: CHEF 1301, CHEF 1305, and CHEF 2331. 3 credit hours. (W)

IMED 1301   Introduction to Digital Media
A survey of the theories, elements, and hardware/software components of digital media. Emphasis on conceptualizing and producing digital media presentations. The focus of the class is interface design, including: color theory, typography, graphics, layout, and interactive design. 3 credit hours. (W)

IMED 1316   Web Design I
Instruction in web design and related graphic design issues including mark-up languages, web sites and browsers. Lab required. Prerequisite: ARTC 1325 or consent of Instructor. 3 credit hours. (W)

IMED 1341   Interface Design
Skill development in the interface design process including selecting interfaces relative to a project's content and delivery system. Emphasis on aesthetic issues such as iconography, screen composition, colors, and typography. Prerequisite: ITSE 1311 or consent of Instructor or Department Chair. 3 credit hours. (W)

IMED 1345   Interactive Digital Media I
Exploration of the use of graphics and sound to create interactive digital media applications and/or animations using industry standard authoring software. Lab required. Prerequisite: ITSE 1311. 3 credit hours. (W)

IMED 2309   Internet Commerce
An overview of the Internet as a marketing and sales tool with emphasis on developing a prototype for electronic commerce. Lab required. Prerequisite: ITSE 1311 or consent of Instructor or Department Chair. 3 credit hours. (W)

IMED 2311   Portfolio Development
Preparation and enhancement of portfolio to meet professional standards, development of presentation skills, and improvement of job-seeking techniques. This is a capstone course which is to be completed during the last semester of the E-Business Development program. Lab required. 3 credit hours. (W)

IMED 2315   Web Design II
A study of mark-up language advanced layout techniques for creating web pages. Emphasis on identifying the target audience and producing web sites according to accessibility standards, cultural appearance, and legal issues. Lab required. Prerequisite: IMED 1316. 3 credit hours. (W)

IMED 2345   Interactive Digital Media II - Flash II
Instruction in the use of scripting languages to create interactive digital media applications. Advanced use of graphics and sound to create interactive multimedia animations using industry standard authoring software. Prerequisite: IMED 1345 or consent of Instructor or Department Chair. 3 credit hours. (W)

IMED 2359   Interactive Web Elements
Production of projects using current web development tools that may incorporate dynamic data, web graphics, animation, video and audio streaming. Lab required. Prerequisite: IMED 2315 or consent of Instructor. 3 credit hours. (W)

INDS 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)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

INDS 1341 Color Theory and Applications
A study of color theory and its applications to interior design. Actual interior design will be given that will involve applying various color systems, with emphasis on Munsell. The student will learn mixing techniques to gain desired hue; value and chroma (intensities) for solving design color schemes. Color psychology and phenomena will be investigated. The students will be introduced to elements and principles of design and will learn to achieve balance, rhythm, emphases, harmony, and variety through the use of color. Additive and subtractive color mixing, and relationship of light will be examined. Lab required. 3 credit hours. (W)

INDS 1345 Commercial Design I
A study of design principles applied to furniture layout and space planning for commercial interiors. Lab required. Prerequisites: INDS 1371 and INDS 2313. 3 credit hours. (W)

INDS 1351 History of Interiors I
Historical survey of antiquities and European styles and periods of architecture, interiors, and furnishings. With consideration of Egypt, Greece, Italy, Spain, and France. Lab required. 3 credit hours. (W)

INDS 1352 History of Interiors II
A multi-cultural historical survey of design in architecture, interiors, furnishings, and decorative elements from the post-Renaissance period to present time. Lab required. 3 credit hours. (W)

INDS 1371 Introduction to Green Design
A general study of Green Design and sustainable environment. Explore the basic principles of Green/Sustainable Design including passive solar, alternative energy, green water technology, recycling, green building certification outline, and interior air quality in built environment. Lab required. 3 credit hours. (W)

INDS 1372 Computer-Aided Drafting for Interior Designers
An introduction to computer-aided drafting. Emphasis is placed on setup; general knowledge of CAD software; reading basic blueprint; creating and modifying geometry; storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers, coordinating systems; and plot/print to scale; interior furniture layouts. Lab required. 3 credit hours. (W)

INDS 1373 Green Interiors
Course introduces students to Green interior design and built environment. Emphasis is placed on: analyzing Indoor Air Quality, green interior material and finishes, green cleaning materials, and providing plans and solutions for creating a healthier interior environment. Lab required. Prerequisite: INDS 1371. 3 credit hours. (W)

INDS 1375 Green Building Certification Training
The course provides a review of Green Building Certification and the Principles involved in Green Building Certification in preparation for sitting for a certification examination administered by an outside organization or agency. Prerequisites: DFTG 1309 and INDS 1371. 3 credit hours. (W)

INDS 2280 Cooperative Education - Interior Design
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 2 credit hours. (W)

INDS 2313 Residential Design I
The study of residential spaces, including the identification of client needs, programming, standards, space planning, drawings, and presentations. Lab required. Prerequisites: DFTG 1309, INDS 1301, and INDS 1341. 3 credit hours. (W)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

INDS 2315 Lighting for Interior Designer
Fundamentals of lighting design, including lamps, luminaries, lighting techniques, and applications for residential and commercial projects. Lab required. 3 credit hours. (W)

INDS 2330 Interior Design Building Systems
An overview of building materials, mechanical systems, and construction techniques as applied to interior design. Discussion of codes, project sequencing and the interpretation of detailed working drawings. Lab required. Prerequisite: INDS 1345 or consent of Program Director. 3 credit hours. (W)

INDS 2374 Sustainable Living
The course provides an introduction to sustainable thinking toward Green Built Environment. Emphasis is placed on: analyzing the Indoor Environment Quality, the effects of Indoor Air Quality on health and the well being of the occupants. The course strives to evaluate the relationship between humans and natural resources. Lab required. Prerequisites: DFTG 1309, INDS 1371, and INDS 1373. 3 credit hours. (W)

INDS 2380 Cooperative Education - Interior Design
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

INEW 2330 Comprehensive Software Project: Planning and Design
A comprehensive application of skills learned in previous courses in a simulated workplace. Covers the development, testing, and documenting of a complete software and/or hardware solution. This course may be used as a capstone course for a certificate or degree. Prerequisite: Consent of Instructor. 3 credit hours. (W)

INEW 2338 Advanced Java Programming
A continuation of Java programming techniques such as servlets, and advanced graphical functions. Topics cover the Java 2 Platform, Enterprise Edition (J2EE) which defines the standard for developing component-based multi-tier enterprise applications. The focus of this class will be on development of Java Servlets and Java Server Pages (JSPs). Prerequisite: COSC 1337 or ITSE 2317 or consent of Instructor or Department Chair. 3 credit hours. (W)

INEW 2340 Object-Oriented Design
A study of large system analysis and design concepts from the object-oriented perspective. Includes determining required objects and their interfaces. Also covers relationships between objects. Lab required. Prerequisite: COSC 1337 or COSC 1437 or consent of Department Chair. 3 credit hours. (W)

INRW 0315 Integrated Reading/Writing II
Integration of critical reading and academic writing skills. The course fulfills TSI requirements for reading and/or writing. Additionally, this is a combined lecture/lab, performance-based course designed to develop students' critical reading and academic writing skills. The focus of the course will be on applying critical reading skills for organizing, analyzing, and retaining material and developing written work appropriate to the audience, purpose, situation, and length of the assignment. The course integrates preparation in basic academic reading skills with basic skills in writing a variety of academic essays. This is a course with a required lab. Lab required. Prerequisite: INRW 0405 or meet TSI standard for INRW 0315; or equivalent. If you do not meet TSI requirements, check with the instructor to request consent. 3 credit hours. (D)
Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

INRW 0405 Integrated Reading/Writing I

Integration of critical reading and academic writing skills. The course fulfills TSI requirements for reading and/or writing. Additionally, seeks to improve students' academic reading and writing skills through extensive integrated instruction emphasizing skills and techniques related to vocabulary, grammar, comprehension, paragraph elements, essay structure, and critical analysis that apply to both reading and writing. Students will demonstrate comprehension of varied texts through written responses, progressing from advanced paragraphs to short essays. The required lab component will target students' individual skills. Lab required. Prerequisite: Meet TSI standard for INRW 0405; or equivalent. Consult the Testing Center Director if you have questions about TSI. 4 credit hours. (D)

Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.

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 1371 CCNA 1 Cisco - Introduction to Networks

A course introducing the architecture, structure, functions, components, and models of the internet. Describes the use of OSI and TCP layered models to examine the nature and roles of protocols and services at the applications, network, data link, and physical layers. Covers the principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations. Explains IPv6 Network Addresses, Design Considerations for IPv6, Managing IOS Configuration Files, and Integrated Routing Services. Build simple LAN topologies by applying basic principles of cabling; perform basic configurations of network devices, including routers and switches; and implementing IP addressing schemes. Lab required. 3 credit hours. (W)

ITCC 1374 CCNA 2 - Routing and Switching Essentials

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 and OSPF. Recognize and correct common routing issues and problems. Model and analyze routing processes. This course also describes the architecture, components, and operation of switches, and explains the principles of switching, VLANs and Inter-VLAN routing. The essentials of security, address translation and DHCP are also described. Lab required. Prerequisite: ITCC 1371. 3 credit hours. (W)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

ITCC 2354 CCNP Routing - Implementing IP Routing

Formerly ITCC 2454

How to implement, monitor, and maintain routing services in an enterprise network. How to plan, configure, and verify the implementation of complete enterprise LAN and WAN routing solutions using a range of routing protocols in IPv4 and IPv6 environments. Configuration of secure routing solutions to support branch offices and mobile workers. Lab required. Prerequisite: ITCC 2372 or CCNA Certification and consent of Program Director. 3 credit hours. (W)

ITCC 2355 CCNP Switch - Implementing IP Switching

Formerly ITCC 2455

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 2372 or CCNA Certification and consent of Program Director. 3 credit hours. (W)

ITCC 2356 CCNP TSHOOT - Maintaining and Troubleshooting IP Networks

Formerly ITCC 2456

How to monitor and maintain complex, enterprise and switched IP networks. Skills learned include the planning and execution of regular network maintenance, as well as support and troubleshooting using technology-based processes and best practices based on systematic and industry recognized approaches. Lab required. Prerequisites: ITCC 2354 and ITCC 2355 or consent of Program Director. 3 credit hours. (W)

ITCC 2370 Cisco CCNA Security

Formerly ITCC 2470

The Cisco CCNA Security curriculum is taken in preparation for the Implementing Cisco IOS 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. Prerequisites: ITCC 2372 or CCNA Certification and consent of Program Director. 3 credit hours. (W)

ITCC 2371 CCNA 3 - Scaling Networks

This course helps students develop an in-depth understanding of how switches operate and are implemented in the LAN environment for small and large networks, how routers operate and are implemented in the LAN environment for small and large networks. Detailed explanations of LAN switch operations, Rapid Spanning Tree Protocol (RSTP), router operations, DHCP, Link Aggregation, EIGRP, Multi-Area OSPF, and IOS File Management and wireless network operations. Analyze, configure, verify, and troubleshoot RSTP, DHCP, Link Aggregation, EIGRP, Multi-Area OSPF and wireless networks. Lab required. Prerequisite: ITCC 1374. 3 credit hours. (W)

ITCC 2372 CCNA 4 - Connecting Networks

This course explains the principles of traffic control, Borderless Networks, Virtualization, Collaboration, Tunneling, IPSec VPN, Syslog Operation, SNMP Operation and provides an overview of the services and protocols at the data link layer for wide-area access. Describes user access technologies and devices and discover how to implement and configure Point-to-Point Protocol (PPP), Point-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 2371. 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 2301   Windows Server 2008 Network Infrastructure Configuration

Formerly ITMT 2401

A course in Windows Server 2008 networking infrastructure to include installation, configuration, and troubleshooting of Internet Protocol (IP) addressing, network services and security. (MS 70-642). Lab required. Prerequisite: ITCC 1371 or ITNW 1358. 3 credit hours. (W)

ITMT 2302   Windows Server 2008 Active Directory Configuration

Formerly ITMT 2402

A study of Active Directory Service on Windows Server 2008. Concepts of resource management within an enterprise network environment. (MS 70-640). Lab required. Prerequisite: ITMT 2301. 3 credit hours. (W)

ITMT 2322   Windows Server 2008 Applications Infrastructure Configuration

Formerly ITMT 2422

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 2301. 3 credit hours. (W)

ITMT 2351   Windows Server 2008: Server Administrator

Formerly ITMT 2451

Knowledge and skills 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 2301. 3 credit hours. (W)

ITMT 2356   Windows Server 2008: Enterprise Administrator

Formerly ITMT 2456

A capstone course in the design of Windows Server 2008 Enterprise Network Infrastructure that meets business and technical IT requirements for network services. (MS 70-647). Lab required. Prerequisite: ITMT 2301. 3 credit hours. (W)

ITNW 1358   Network+

Assists individuals in preparing for Computing Technology Industry Association (CompTIA) Network+ certification exam and career as a network professional. Prepares individuals for a career as a Network Engineer in the Information Technology support industry. Includes the various responsibilities and tasks required for service engineer to successfully perform in a specific environment. Lab required. 3 credit hours. (W)

ITNW 1370   Cloud+ Computing Essentials

A study of the main cloud computing principles, concepts, and architecture from a technical and an enterprise perspective in terms of moving to and governing the three types of cloud environments (private, public and hybrid). Lab required. Prerequisite: ITCC 1371 or ITNW 1358. 3 credit hours. (W)

ITNW 2373   Information Storage Management (EMC)

Formerly ITNW 2473

The Information Storage Management course teaches the skills required in designing Storage Systems using Storage Networking Technologies and Virtualization concepts, Business Continuity approaches, and Storage Security and Management strategies. Lab required. Prerequisites: ITMT 1370 and ITNW 1358. 3 credit hours. (W)

ITNW 2374   Advanced Computer Networking Case Study

Formerly ITNW 2474

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. Prerequisites: ITCC 2372 or CCNA Certification and consent of Program Director. 3 credit hours. (W)

ITNW 2375   VMware vSphere: Installation, Configuration, and Management

Formerly ITNW 2475

A study of Virtualization in computer network technology. The course covers the installation, configuration, and management of VMware vSphere, which consists of VMware vSphere ESXi and VMware vCenter Server. Lab required. Prerequisites: ITCC 1374 and ITMT 2301, or consent of Program Director. 3 credit hours. (W)

ITNW 2380   Cooperative Education - Computer Systems Networking and Telecommunications

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

ITSC 1305   Introduction to PC Operating Systems

Introduction to personal computer operating systems including installation, configuration, file management, memory and storage management, control of peripheral devices, and use of utilities. The Windows operating system will be compared to that of the Mac OS and a popular Linux distribution from the end-user perspective. Hands-on lab experience for each operating system is provided. 3 credit hours. (W)

ITSC 1309   Integrated Software Applications I-MS Office

Introduction to business productivity software suites using word processing, spreadsheets, databases, and/or presentation software. Prerequisite: POFT 1127 or POFT 1329 or POFT 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

ITSC 1316   Linux Installation and Configuration

Introduction to Linux operating system. Includes Linux installation, basic administration, utilities and commands, upgrading, networking, security, and application installation. Emphasizes hands-on setup, administration, and management of Linux. Lab required. Prerequisite: ITNW 1358 or consent of Instructor or Program Director. 3 credit hours. (W)

ITSC 2339   Personal Computer Help Desk Support

Diagnosis and solution of user hardware and software related problems with on-the-job and/or simulated projects. Lab required. Prerequisites: ITNW 1358 and ITSC 1305, or consent of Instructor. 3 credit hours. (W)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

ITSC 2380 Cooperative Education-Computer and Information Sciences, General

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

ITSE 1301 Web Design Tools – Graphics

Designing and publishing Web documents according to World Wide Web Consortium (W3C) standards. Emphasis on optimization of graphics and images and exploration of the tools available for creating and editing Web documents. Includes in-depth technical investigation of digital imaging on the computer using image editing and/or image creation software. Manipulation, creation, and editing of digital images for a wide assortment of output. Will explore use of industry standard web editing and graphics software packages such as Adobe Photoshop and Adobe Dreamweaver. 3 credit hours. (W)

ITSE 1306 PHP Programming

Introduction to PHP, including the design of web-based applications, arrays, strings, regular expressions, file input/output, e-mail and database interfaces, stream and network programming, debugging, and security. Emphasizes hands-on programming skills necessary to develop secure and reliable PHP based web applications. Lab required. Prerequisites: COSC 1315 and ITSE 1311 or consent of Instructor or Department Chair. 3 credit hours. (W)

ITSE 1311 Beginning Web Programming

Skill development in web programming including mark-up and scripting languages. May include use of XHTML, CGI, JavaScript, and/or ASP. Introduction to structure and object oriented programming design. Students use Cascading Style Sheets (CSS), XHTML, and JavaScript to design and implement interactive web pages. Hands-on labs allow student to experience each topic discussed. 3 credit hours. (W)

ITSE 1330 Introduction to C# Programming

A study of C# syntax including data types, control structures, functions, syntax, and semantics of the language, classes, class relationships, and exception handling. Prerequisite: COSC 1315 or COSC 1436 or consent of Instructor or Department Chair. 3 credit hours. (W)

ITSE 1332 Introduction to Visual Basic.NET Programming

A study of Visual Basic.NET (VB.NET) syntax including: data types, control structures, functions, syntax, and semantics of the language, classes, class relationships, and exception handling. An introduction to programming using the Visual Basic.NET language. 3 credit hours. (W)

ITSE 1347 Programming with Visual Basic.NET

Designing and developing enterprise applications using Microsoft Visual Basic.NET in the Microsoft.NET Framework. Includes reference types, class relationships, polymorphism, operators overloading, and creating and handling exceptions. An introduction to Object Oriented Programming techniques. Prerequisite: ITSE 1332. 3 credit hours. (W)

ITSE 1356 Extensible Markup Language (XML)

Introduction of skills and practices related to Extensible Markup Language (XML). Includes Document Type Definition (DTD), well-formed and valid XML documents, XML schemes, and Extensible Style Language (XSL). Prerequisite: ITSE 1311 or consent of Instructor or Department Chair. 3 credit hours. (W)

ITSE 1359 Introduction to Scripting Languages - AJAX/jQuery

Introduction to scripting languages including: basic data types, control structures, regular expressions, input/output, and textual analysis. Students will learn how to design and implement programming solutions using JavaScript, Cascading Style Sheets, and XML. Course includes introduction to AJAX (Asynchronous JavaScript) and related technologies. Prerequisite: ITSE 2302 or consent of Instructor. 3 credit hours. (W)

ITSE 1370 Introduction to iOS Mobile Development

Course explores developing applications for iOS based devices such as iPhone, iPod Touch and iPad. Course will provide an overview of iOS development from use of current iOS SDK, to design of applications and industry business practices. Lab required. Prerequisite: COSC 1315 or COSC 1436 or consent of Instructor or Department Chair. 3 credit hours. (W)

ITSE 1371 iPhone (iOS) Programming I- Objective C

This course is intended to prepare the student for development of iOS devices, including iPhone, iPod Touch and iPad. Objective-C is the native language for iOS development, and the course will cover the basics of the language and the use of development tools for mobile device programming. Topics to be covered will include basic data types, classes and objects, looping structures, decision making, inheritance and memory management. Course will also provide an introduction to the Cocoa Touch toolkit. Prerequisite: COSC 1315 or COSC 1436 or consent of Instructor or Department Chair. 3 credit hours. (W)

ITSE 1372 Windows Mobile Programming I

Course explores developing applications for Windows Phone-based devices. Course will provide an overview of Windows Phone development for use of current SDK, to design of applications and industry business practices. Prior programming experience in either C#, Visual Basic, or an Object-Oriented Programming language is recommended for this course. Lab required. Prerequisite: ITSE 1330 or ITSE 1332 or consent of Instructor or Department Chair. 3 credit hours. (W)

ITSE 1373 Android Mobile Programming I

This course introduces mobile application development for the Android platform. Students will learn how to design, develop, test, and debug mobile Android applications. Topics include the Android Software Development Kit (SDK), design principles, application structure, and current issues in programming mobile devices. Prerequisite: COSC 1337 or consent of Instructor or Department Chair. 3 credit hours. (W)

ITSE 1374 Mobile Web
Course explores creating mobile web sites using HTML, CSS and JavaScript. Course will focus on mobile web development for smartphones. Course may provide a general overview of multiple mobile devices, or concentrate on a specific mobile device such as iPhone, Android, Blackberry or Windows mobile. Prerequisite: ITSE 2302 or consent of Instructor or Department Chair. 3 credit hours. (W)

ITSE 1380 Cooperative Education - Computer Programming/ Programmer, General
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

ITSE 1392 Special Topics in Computer Programming
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. Lab required. 3 credit hours. (W)
  Introduction to iPhone Programming
  Course explores developing applications for the iPhone, iPod Touch and iPad. Course will provide an overview of iPhone development. Will focus on developing with the iPhone SDK along with current issues in programming for the iPhone. Prerequisite: COSC 1315 or COSC 1436 or consent of Instructor or Department Chair.
  Objective-C for iPhone Development
  Course explores developing applications for the iPhone, iPod Touch and iPad using Objective-C programming language. The course will focus on the Objective-C programming language and

the Cocoa toolkit used in iPhone and iPad development. Prerequisite: COSC 1315 or COSC 1436 or consent of Instructor or Department Chair.

ITSE 1393 Special Topics in Computer Systems Analysis
Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. This course was designed to be repeated multiple times to improve student proficiency. Lab required. 3 credit hours. (W)
  Business Intelligence
  An introduction to Business Intelligence analysis and reporting. The topics of study will include creating a data source, dimensional model, dimensions and measures, attribute relationships and user-defined hierarchies, calculated members, aggregations, and analysis reports using Excel. Prerequisites: ITSE 2309 and ITSW 1304 or consent of Instructor or Department Chair.

ITSE 2302 Intermediate Web Programming
Techniques for web development. Includes server-side and client-side scripting. Topics may include Perl, HTML, Java applets, JavaScript, and/or ASP. Students design and implement fully interactive web sites using Dynamic HTML (DHTML) techniques that combine XHTML with CSS and JavaScript. Hands-on labs allow students to experience each of the topics discussed. Prerequisite: ITSE 1311 or consent of Instructor or Department Chair. 3 credit hours. (W)

ITSE 2304 Visual Basic.NET Database Development with ADO.NET
Visual Basic.NET applications to access data from a database. Emphasizes Object-Oriented Programming (OOP) and database programming with ADO.NET. Prerequisites: ITSE 1332 and either ITSE 2309 or ITSW 1307. 3 credit hours. (W)

ITSE 2309 Database Programming – SQL
Database development using database programming techniques emphasizing database structures, modeling, and database access. 3 credit hours. (W)

ITSE 2313 Web Authoring-Dreamweaver
Instruction in designing and developing web pages that incorporate text, graphics, and other supporting elements using current technologies and authoring tools. Prerequisite: ITSE 1311 or consent of Instructor or Department Chair. 3 credit hours. (W)

ITSE 2334 Advanced Visual Basic.NET
Programming with ASP.NET
Continuation of Visual Basic.NET programming using advanced features. Windows Forms, ADO.NET, XML, Data Bound Controls, DataSet, Assemblies, Attributes, Reflection, Marshalling and Remoting, Threads and Synchronization, Streams, Deployment, Generics, Partial Classes, Application Blocks, and data encryption. Emphasizes using the more advanced features of the .NET Framework Class Library and web programming with ASP.NET. Prerequisites: ITSE 1311 and ITSE 1347. 3 credit hours. (W)

ITSE 2338 C# Database Development with
ADO.NET and LINQ
C# applications to access data from a database. Emphasizes Object-Oriented Programming (OOP) and database programming with ADO.NET. Prerequisite: ITSE 1330 or consent of Instructor or Department Chair. 3 credit hours. (W)

ITSE 2353 Advanced C# Programming
with ASP.NET
Continuation of C# programming using advanced features of the .NET Framework Class Library. Windows Forms, ADO.NET, XML, Data Bound Controls, DataSet, Assemblies, Attributes, Reflection, Marshalling and Remoting, Threads and Synchronization, Streams, Deployment, Generics, Partial Classes, Application Blocks, and data encryption. Emphasizes using the more

advanced features of the .NET Framework Class Library and web programming with ASP.NET. Prerequisite: ITSE 1330 or consent of Department Chair. 3 credit hours. (W)

ITSE 2354 Advanced Oracle PL/SQL
A continuation of Oracle SQL. Topics include hierarchical queries, set based subqueries, correlated subqueries, scripting, and scripting generation. Emphasizes stored procedures PL/SQL objects, large objects, data structures and processing for aggregated data, and Business Intelligence Query and Analysis. Lab required. Prerequisite: ITSE 2309. 3 credit hours. (W)

ITSE 2371 iPhone (iOS) Programming II
Course explores developing applications for iOS devices (iPhone, iPod Touch and iPad). The course will focus on data management, network connectivity, and other advanced iOS programming topics. Prerequisites: ITSE 1370 and ITSE 1371 or consent of Instructor or Department Chair. 3 credit hours. (W)

ITSE 2372 Windows Mobile Programming
II
This course continues to explore mobile application development for the Windows Phone platform. Students will design, develop, test, and debug more advanced Windows Phone applications. Course will focus on more advanced topics related to programming mobile devices. Lab required. Prerequisite: ITSE 1372 or consent of Instructor or Department Chair. 3 credit hours. (W)

ITSE 2373 Android Mobile Programming
II
This course continues to explore mobile application development for the Android platform. Students will design, develop, test, and debug more advanced mobile Android applications. Course will focus on more advanced topics related to programming mobile devices. Prerequisite: ITSE 1373 or consent of Instructor or Department Chair. 3 credit hours. (W)

ITSE 2380 Cooperative Education-Computer Programming/Programmer, General

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

ITSW 1304 Introduction to Spreadsheets-Excel

Instruction in the concepts, procedures, and application of electronic spreadsheets. 3 credit hours. (W)

ITSW 1307 Introduction to Database-Access

Introduction to database theory and the practical applications of a database. Emphasis on database design, custom reports, file management, and application creation. 3 credit hours. (W)

ITSW 1380 Cooperative Education-Data Processing and Data Processing Technology/Technician

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

ITSW 2380 Cooperative Education-Data Processing and Data Processing Technology/Technician

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. Prerequisite: ITSW 1380 or consent of Department Chair. 3 credit hours. (W)

ITSY 1300 Fundamentals of Information Security (Security +)

Formerly ITSY 1400

An introduction to information security including vocabulary and terminology, ethics, the legal environment, and risk management. Identification of exposures and vulnerabilities and appropriate countermeasures are addressed. The importance of appropriate planning, policies and controls is also discussed. Lab required. Prerequisite: ITNW 1358. 3 credit hours. (W)

ITSY 2300 Operating System Security

Safeguard computer operating systems by demonstrating server support skills and designing and implementing a security system. Identify security threats and monitor network security implementations. Use best practices to configure operating systems to industry security standards. Lab required. Prerequisite: Any ITCC, ITMC, ITMT or ITNW course, or consent of 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 2572 Certified Information Systems Security Professional (CISSP) Common Body of Knowledge Domain Instruction

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 1300 and ITSY 2300, or equivalent experience and consent of Program Director. 5 credit hours. (W)

ITSY 2575 Certified Information Security Manager (CISM)

An in depth study of the five domains covered on the ISACA* - CISM professional certification exam. Each domain (Information Security Governance, Information Risk Management, Information Security Program Development, Information Security Program Management, and Incident Management and Response) covers the knowledge and tasks that cybersecurity professionals are expected to know how to perform in the workplace. *Previously known as Information Systems Audit and Control Association. Prerequisite: ITSY 1300 or ITSY 2300 or equivalent experience and consent of Program Director. 5 credit hours. (W)

JAPN 1411 Beginning Japanese I

Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of Japanese culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, and video cassettes. Lab required. 4 credit hours. (A)

JAPN 1412 Beginning Japanese II

A continuation of JAPN 1411. Lab required. Prerequisite: JAPN 1411 or consent of Instructor or 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 legal research techniques emphasizing the paralegal's role. 3 credit hours. (W)

LGLA 1305   Legal Writing
Fundamentals of legal writing techniques including case and fact analysis, citation, formats, and legal writing styles emphasizing the paralegal's role in legal writing. Prerequisite: LGLA 1303. 3 credit hours. (W)

LGLA 1307   Introduction to Law and the Legal Professions
Overview of the law and the legal professions including legal concepts, systems, and terminology; substantive areas of law and the federal and state judicial systems; ethical obligations and regulations; professional trends and issues with emphasis on the paralegal's role. 3 credit hours. (W)

LGLA 1323   Employment Law
Presents the fundamental concepts of employment law, including employment contracts, at-will employment, governmental regulations, and discrimination issues, emphasizing the paralegal's role in employment law. Prerequisite: LGLA 1307 or consent of department. 3 credit hours. (W)

LGLA 1342   Federal Civil Litigation
Fundamental concepts and procedures of federal civil litigation including pretrial, trial, and post-trial phases of litigation emphasizing the paralegal's role in the federal civil litigation process. 3 credit hours. (W)

LGLA 1343   Bankruptcy
Fundamental concepts of bankruptcy law and procedure are presented including individual and business liquidation and reorganization with emphasis on the paralegal's role. 3 credit hours. (W)

LGLA 1344   Texas Civil Litigation
Fundamental concepts and procedures of Texas civil litigation including pretrial, trial, and post-trial phases of litigation emphasizing the paralegal's role in the Texas civil litigation process. Prerequisites: LGLA 1303, LGLA 1342, and LGLA 2303, or consent of Instructor or Department Faculty Contact. 3 credit hours. (W)

LGLA 1351   Contracts
Presents fundamental concepts of contract law including formation, performance, and enforcement of contracts under the common law and the Uniform Commercial Code with emphasis on the paralegal's role in contract law. 3 credit hours. (W)

LGLA 1353   Wills, Trusts, and Probate Administration
Fundamental concepts of the law of wills, trusts, and probate administration emphasizing the paralegal's role. 3 credit hours. (W)

LGLA 1355   Family Law
Fundamental concepts of family law including formal and informal marriages, divorce, annulment, marital property, and the parent-child relationship with emphasis on the paralegal's role in family law. 3 credit hours. (W)

LGLA 1380 Cooperative Education-Legal Assistant/Paralegal

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

LGLA 2303 Torts and Personal Injury Law

Fundamental concepts of tort and personal injury law including intentional torts, negligence, and strict liability are presented with emphasis on the paralegal's role in tort and personal injury law. 3 credit hours. (W)

LGLA 2307 Law Office Management

Fundamental principles and structure of management, administration, and substantive systems in the law office including law practice technology as applied to paralegals. 3 credit hours. (W)

LGLA 2309 Real Property

Presents fundamental concepts of real property law including the nature of real property, rights and duties of ownership, land use, voluntary and involuntary conveyances, and the recording of and searching for real estate documents emphasizing the paralegal's role in real property law. 3 credit hours. (W)

LGLA 2311 Business Organizations

Basic concepts of business organizations including law of agency, sole proprietorships, partnerships, corporations, and other emerging business entities with emphasis on the paralegal's role. Prerequisite: LGLA 1307 or LGLA 2333 or consent of Instructor or Department Faculty Contact. 3 credit hours. (W)

LGLA 2313 Criminal Law and Procedure

Fundamental concepts of criminal law and procedure from arrest to final disposition including principles of federal and state law emphasizing the role of the paralegal in the criminal justice system. 3 credit hours. (W)

LGLA 2323 Intellectual Property

Presents the fundamentals of intellectual property law, including creation, procurement, preparation, and filing documents related to patents, copyrights, trademarks, and the processes of intellectual property litigation. Emphasizes the paralegal's role in intellectual property law. 3 credit hours. (W)

LGLA 2333 Advanced Legal Document Preparation

Use of office technology skills in preparation of legal documents by paralegals based on hypothetical situations drawn from various areas of law. 3 credit hours. (W)

LGLA 2339 Certified Paralegal Exam Review

A review of the mandatory and optional topics covered in the Certified Paralegal Examination administered by the National Association of Legal Assistants. Prerequisites: LGLA 1305 and LGLA 1342. 3 credit hours. (W)

MATH 0302 Pre-algebra

With an emphasis on developing critical thinking skills, a study of arithmetic operations with rational numbers, an introduction to algebraic expressions, geometric properties, and basic linear equations. Lab required. Prerequisite: Meet TSI standard for MATH 0302; or equivalent. 3 credit hours. (D)
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.

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

MATH 0305   Beginning Algebra
With an emphasis on developing critical thinking skills, a study of algebraic vocabulary, concepts, and notation, functions, linear equations, systems of linear equations, polynomial expressions, and quadratic expressions and equations. Lab required. Prerequisite: MATH 0302, or meet TSI standard for MATH 0305; or equivalent. 3 credit hours. (D)
Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.

MATH 0310   Intermediate Algebra
A study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational), with a special emphasis on linear and quadratic expressions and equations. Lab required. Prerequisite: MATH 0305 or MATH 0406, or meet TSI standard for MATH 0310; or equivalent. 3 credit hours. (D)
Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.

MATH 0406   Introductory Algebra
With an emphasis on developing critical thinking skills, a study of arithmetic operations with rational numbers, an introduction to algebraic vocabulary, concepts, and notation, and geometric properties, functions, linear equations, systems of linear equations, polynomial expressions, and quadratic expressions and equations. Lab required. Prerequisite: Meet TSI standard for MATH 0406; or equivalent. 4 credit hours. (D)
Note: May not be used to satisfy the requirements of an associate degree. Developmental courses may be taken for a combined total of no more than 27 credit hours. In addition, you may repeat this course only once after receiving a grade, including "W". If you drop this course before census day, it will not count against you.

MATH 1314   College Algebra
In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. Graphing calculator required. Lab required. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)
Note: Students may take either MATH 1314 or MATH 1414 but not both.

MATH 1316   Plane Trigonometry
In-depth study and applications of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included. Graphing calculator required. Prerequisite: MATH 1314 or MATH 1414; or equivalent. 3 credit hours. (A)

MATH 1324   Mathematics for Business and Social Sciences
The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value. Graphing calculator required. Lab required. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)

MATH 1325   Calculus for Business and Social Sciences
This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with emphasis on applications in business, economics, and social sciences. This course is not a substitute for MATH 2413, Calculus I. Graphing calculator required. Lab required. Prerequisite: MATH 1314, or MATH 1324, or MATH 1414; or equivalent. 3 credit hours. (A)

MATH 1332   Math for Liberal Arts I
Topics include logic, sets, graphs and applications of functions, mathematics of finance, probability, and statistics. Other topics may include voting theory, sequences, geometry, graph theory, and mathematical systems. This course is NOT intended to prepare students for calculus, business, or engineering courses. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)

MATH 1342   Elementary Statistical Methods
Collection, analysis, presentation and interpretation of data and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended. Graphing calculator required. Lab required. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 3 credit hours. (A)

MATH 1350   Fundamentals of Mathematics I
Concepts of sets, functions, numeration systems, number theory, proportions, percents and properties of the natural numbers, integers, rational and real number systems with an emphasis on problem solving and critical thinking. Prerequisite: MATH 1314 or MATH 1414; or equivalent. 3 credit hours. (A)
Note: This course is a required part of the approved field of study curriculum for middle grades (4 through 8) teacher certification and is also appropriate for early childhood (EC through 4) education majors

MATH 1351   Fundamentals of Mathematics II
Concepts of geometry, probability and statistics, as well as applications of the algebraic properties of real numbers to concepts of measurement with an emphasis on problem solving and critical thinking. Prerequisite: MATH 1314, MATH 1350, or MATH 1414; or equivalent. 3 credit hours. (A)
Note: This course is a required part of the approved field of study curriculum for middle grades (4 through 8) teacher certification and is also appropriate for early childhood (EC through 4) education majors.

MATH 1376   Calculus for Business and Economics II
Continuation of MATH 1325. In this course, application of differential equations, functions of several variables, Lagrange Multipliers, Least Squares Modeling, multiple integrals and infinite series will be covered. Basic concepts are related to multivariable calculus. Graphing calculator required. Lab required. Prerequisite: MATH 1325. 3 credit hours. (A)
Note: This academic course has limited transferability at this time. Check with an advisor at your transfer institution.

MATH 1414   College Algebra
In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. Graphing calculator required. Prerequisite: Meet TSI college-readiness standard for Mathematics; or equivalent. 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. Prerequisite: MATH 1316; or equivalent. 3 credit hours. (A)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

MATH 2318   Linear Algebra
Introduces and provides models for application of
the concepts of vector algebra. Topics include
finite dimensional vector spaces and their
geometric significance; representing and solving
systems of linear equations using multiple
methods, including Gaussian elimination and
matrix inversion; matrices; determinants; linear
transformations; quadratic forms; eigenvalues and
eigenvector; and applications in science and
engineering. Graphing calculator required.
Prerequisite: MATH 2414 or MATH 2419. 3
credit hours. (A)

MATH 2320   Differential Equations
Ordinary differential equations, including linear
equations, systems of equations, equations with
variable coefficients, existence and uniqueness of
solutions, series solutions, singular points,
transform methods, and boundary value problems;
application of differential equations to real-world
problems. Graphing calculator required.
Prerequisite: MATH 2414 or MATH 2419. 3 credit
hours. (A)

MATH 2373   Matrices, Vectors, and Linear
Programming
Not for science majors. A study of matrices,
vectors, determinants, inverses, system of linear
equations, and linear programming with
applications. Scientific calculator required.
Prerequisite: MATH 1314 or MATH 1414; or
equivalent. 3 credit hours. (A)
Note: This academic course has limited transferability at
this time. Check with an advisor at your transfer
institution.

MATH 2413   Calculus I
Limits and continuity; the Fundamental Theorem
of Calculus; definition of the derivative of a
function and techniques of differentiation;
applications of the derivative to maximizing or
minimizing a function; the chain rule, mean value
theorem, and rate of change problems; curve
sketching; definite and indefinite integration of
algebraic, trigonometic, and transcendental
functions, with an application to calculation of
area. Graphing calculator required. Lab included.
Prerequisite: MATH 2312; or equivalent. 4 credit
hours. (A)
Note: Students may take either MATH 2413 or MATH
2417 but not both.
Note: This course is also offered through the Center for
Advanced Study in Mathematics and Natural Sciences
(CASMNS). Contact the Mathematics Department for
further information.

MATH 2414   Calculus II
Differentiation and integration of transcendental
functions; parametric equations and polar
coordinates; techniques of integration; sequences
and series; improper integrals. Graphing calculator
required. Lab included. Prerequisite: MATH
2413. 4 credit hours. (A)
Note: This course is also offered through the Center for
Advanced Study in Mathematics and Natural Sciences
(CASMNS). Contact the Mathematics Department for
further information.
Note: Students may take either MATH 2414 or MATH
2419 but not both.

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. Prerequisite: MATH 2312; or equivalent. 4 credit hours. (A)
Note: Students may take either MATH 2413 or MATH 2417 but not both.
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Mathematics Department for further information.

MATH 2419   Accelerated Calculus II
A study of infinite series, parametric equations and polar functions, vectors in two and three dimensions, vector-valued functions, functions of several variables, cylindrical and spherical coordinates, partial derivatives, multiple integrals and their applications. Graphing calculator required. Lab included. Prerequisite: MATH 2414 or MATH 2417. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Mathematics Department for further information.
Note: Students may take either MATH 2414 or MATH 2419 but not both.

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)

MRKG 1301   Customer Relationship Management
General principles of customer relationship management including skills, knowledge, attitudes, and behaviors. 3 credit hours. (W)

MRKG 1302   Principles of Retailing
Introduction to the retailing environment, types of retailers, current trends, the employment of retailing techniques and factors that influence retailing. 3 credit hours. (W)

MRKG 1311   Principles of Marketing
Introduction to the marketing mix functions and process. Includes identification of consumer and organizational needs and explanation of environmental issues. 3 credit hours. (W)

MRKG 1380   Cooperative Education-Marketing/Marketing Management, General
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

MRKG 2312   e-Commerce Marketing
Explore electronic tools utilized in marketing, focus on marketing communications in developing customer relationships. 3 credit hours. (W)

MRKG 2333   Principles of Selling
Overview of the selling process. Identification of the elements of the communication process between buyers and sellers. Examination of the legal and ethical issues of organizations which affect salespeople. 3 credit hours. (W)

MRKG 2348   Marketing Research and Strategies
Practical experiences in analyzing marketing studies using data-driven decision-making processes. Includes interrelationships among marketing mix. 3 credit hours. (W)

MRKG 2349 Advertising and Sales Promotion

Integrated marketing communications. Includes advertising principles and practices. Emphasizes multi-media of persuasive communication including buyer behavior, budgeting, and regulatory constraints. 3 credit hours. (W)

MRKG 2381 Cooperative Education-Marketing/Marketing Management, General

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

MUAP 1101 – 1191 Secondary Applied Music

Private instruction in the area of the student's concentration, consisting of one 25-minute lesson per week. Students must remain enrolled in 1 credit hour of a MUEN course, attend weekly Departmental recitals for the semester, and participate in a jury. Contact Music Department for permission prior to registering. Prerequisite: Audition. 1 credit hour. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-MUAP 2295.

MUAP 1101 Violin
MUAP 1105 Viola
MUAP 1109 Cello
MUAP 1113 Double Bass
MUAP 1115 Electric Bass
MUAP 1117 Flute
MUAP 1121 Oboe
MUAP 1125 Bassoon
MUAP 1129 Clarinet
MUAP 1133 Saxophone
MUAP 1137 Trumpet
MUAP 1141 French Horn
MUAP 1145 Trombone
MUAP 1149 Baritone
MUAP 1153 Tuba
MUAP 1157 Percussion
MUAP 1158 Drum Set
MUAP 1161 Guitar
MUAP 1162 Jazz Guitar
MUAP 1163 Steel String Guitar
MUAP 1165 Organ
MUAP 1169 Piano
MUAP 1170 Jazz Piano
MUAP 1177 Harp
MUAP 1181 Voice
MUAP 1187 Composition
MUAP 1188 Electroacoustic Composition
MUAP 1189 Songwriting
MUAP 1190 Arranging
MUAP 1191 Conducting

MUAP 1195 Secondary-Vocal Performance for Actors

For Theater Students. Private instruction in voice concentrating on the development of the dramatic, vocal, musical and artistic skills necessary for professional performance on the contemporary musical theatrical stage. Consists of one 25-minute lesson per week. Students are required to appear in three vocal performances per semester and perform a final jury before a panel of vocal and dramatic judges. Must contact the Department of Theater for an audition and obtain a permit from the instructor prior to registering. Prerequisite: Audition and permission of Instructor. Corequisite: At least one course from the following: any DRAM course, MUEN 1152, MUSI 1183 or MUSI 1184. 1 credit hour. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2295.

MUAP 2201 - 2291   Concentration Applied Music

For full-time Music majors only. Private instruction in the area of the student's concentration, consisting of one 50-minute lesson per week. Students must remain enrolled in 1 (one) credit hour of a MUEN course and at least 4 (four) credit hours to be selected from MUSI, MUEN, MUSB, or MUSC courses. All MUAP students must attend weekly Departmental recitals for the semester (in addition to their weekly lesson), perform in 1 (one) Departmental recital, and participate in a jury at the end of the semester. Contact Music Department for permission prior to registering. Prerequisite: Audition. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2295.

MUAP 2201   Violin
MUAP 2205   Viola
MUAP 2209   Cello
MUAP 2213   Double Bass
MUAP 2215   Electric Bass
MUAP 2217   Flute
MUAP 2221   Oboe
MUAP 2225   Bassoon
MUAP 2229   Clarinet
MUAP 2233   Saxophone
MUAP 2237   Trumpet
MUAP 2241   French Horn
MUAP 2245   Trombone
MUAP 2249   Baritone
MUAP 2253   Tuba
MUAP 2257   Percussion
MUAP 2258   Drum Set
MUAP 2261   Guitar
MUAP 2262   Jazz Guitar
MUAP 2263   Steel String Guitar
MUAP 2265   Organ
MUAP 2269   Piano
MUAP 2270   Jazz Piano
MUAP 2277   Harp
MUAP 2281   Voice

MUAP 2287   Composition
MUAP 2288   Electroacoustic Composition
MUAP 2289   Songwriting
MUAP 2290   Arranging
MUAP 2291   Conducting

MUAP 2295   Concentration-Vocal Performance for Actors

For Theater Students. Private instruction in voice concentrating on the development of the dramatic, vocal, musical and artistic skills necessary for professional performance on the contemporary musical theatrical stage. Consists of one 50-minute lesson per week. Students are required to appear in three vocal performances per semester and perform a final jury before a panel of vocal and dramatic judges. Must contact the Department of Theater for an audition and obtain a permit from the instructor prior to registering. Prerequisite: Audition and permission of Instructor. Corequisite: At least one course from the following: any DRAM course, MUEN 1152, MUSI 1183 or MUSI 1184. 2 credit hours. (A)

Note: Students may receive credit for up to 20 credit hours of any combination of MUAP courses. This includes MUAP 1101-2295.

MUEN 1121   Jazz Lab Band

Participation in a large band concentrating on jazz and commercial music performance styles. Consisting of 16-21 instrumentalists and one vocalist, the band performs both traditional and contemporary jazz literature. A number of performances both on and off campus are given each semester. Prerequisite: Audition. 1 credit hour. (A)

Note: Students may take MUEN 1121, MUEN 1122, and MUEN 1123 for a combined total of no more than 8 credit hours.

MUEN 1122   Symphonic Wind Ensemble

Study and performance of traditional and contemporary symphonic wind literature. Students participate in weekly rehearsals and perform on scheduled concerts. Basic instrumental proficiency is required. Lab required. Prerequisite: Audition. 1 credit hour. (A)

MUEN 1131   New Music Ensemble

Performs experimental, avant garde, electronic, and contemporary music for mixed media ensemble. Prerequisite: Audition. 1 credit hour. (A)
Note: Students may take MUEN 1131, MUEN 1132, ,MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1132   Keyboard Ensemble

Traditional piano literature for multiple performers and arrangements for electronic keyboard ensemble. Several performances each semester. Prerequisite: Audition. 1 credit hour. (A)
Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1133   Woodwind Ensemble

A small group of woodwinds performs traditional classical repertoire. Prerequisite: Audition. 1 credit hour. (A)
Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1134   Brass Ensemble

A small group of brass players performs traditional classical repertoire. Prerequisite: Audition. 1 credit hour. (A)
Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1135   Expressions Combo

Expressions Combo is a small ensemble (4-6) of musicians who serve as the rhythm section for the Expressions Vocal Jazz ensemble. In addition to rehearsing and performing with Expressions, the combo also prepares its own arrangements and performs as an independent ensemble. Typical repertoire includes bebop, Latin, and fusion standards. This ensemble may have several performances each semester. This group may have an annual tour. Prerequisite: Audition. 1 credit hour. (A)
Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138,   MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1137   Guitar Ensemble

A small group of guitarists performs traditional classical repertoire. Prerequisite: Audition. 1 credit hour. (A)
Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1138   Percussion Ensemble

A small group of percussion players performs jazz and traditional repertoire. Prerequisite: Audition. 1 credit hour. (A)
Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1139   String Ensemble

A small group of string players performs traditional classical repertoire. Prerequisite: Audition. 1 credit hour. (A)
Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

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MUEN 1140   Jazz Combo
Participation in a small jazz ensemble concentrating on jazz and commercial music performance styles. Ensemble consists of 4-9 instrumental/vocal members. Repertoire includes instrumental and vocal music typical of small jazz groups. A number of performances both on and off campus are given each semester. Prerequisite: Audition or consent of Instructor. 1 credit hour. (A)
Note: Students may take MUEN 1131, MUEN 1132, MUEN 1133, MUEN 1134, MUEN 1135, MUEN 1136, MUEN 1137, MUEN 1138, MUEN 1139, and MUEN 1140 for a combined total of no more than 8 credit hours.

MUEN 1141   Collin Chorale
Open to all interested students. This mixed choral ensemble studies and performs a wide variety of music representing the choral literature. This ensemble may have several performances each semester. This group may have an annual tour. Prerequisite: Consent of Instructor. 1 credit hour. (A)
Note: Student may take MUEN 1141 and MUEN 1142 for a combined total of no more than 8 credit hours.

MUEN 1142   Expressions Vocal Jazz Ensemble
This group works on a wide variety of jazz styles throughout the year. They also work in conjunction with a jazz combo allowing them to experience solo jazz singing. This select ensemble of 10-16 singers has several performances each semester. This group may have an annual tour. Prerequisite: Audition. 1 credit hour. (A)
Note: Student may take MUEN 1141 and MUEN 1142 for a combined total of no more than 8 credit hours.

MUEN 1151   Chamber Singers
A select audition-only vocal ensemble. Repertoire includes madrigals and choral literature appropriate for the smaller ensemble. There may be several performances on and off campus each semester. This group may have an annual tour. Prerequisite: Audition. 1 credit hour. (A)
Note: Student may take MUEN 1151, MUEN 1152 and MUEN 1153 for a combined total of no more than 8 credit hours.

MUEN 1152   Musical Theatre Ensemble
Musical Theater Ensemble is a mixed vocal ensemble consisting of approximately 10 to 15 acting singers with experience in Musical Theater performance. Repertoire will include ensemble singing from contrasting periods of the 20th and 21st Century including classic Musical Theater from the 1940's to the 1960's, musical theater literature from the 1970's to the 1990's and contemporary Musical Theater compositions. Students also study the differences in vocal and musical styles associated with each period and the technical production appropriate to sing these styles. In addition, they will experience solo singing appropriate to differing periods in Musical Theater, work on staging ensemble numbers and perform a final showcase. The group may present several performances during the semester. Prerequisite: Audition. 1 credit hour. (A)
Note: Students may take MUEN 1151, MUEN 1152, and MUEN 1153 for a combined total of no more than 8 credit hours.

MUEN 1153   Chamber Choir
A select audition-only choir devoted to performance of an eclectic repertory of choral literature for mixed voices (S.A.T.B.). This course will focus on the development of vocal technique, performance practices, and will culminate with several performances throughout the year both on and off campus. This group may have an annual tour. Repertoire consists of advanced collegiate music. Prerequisite: Consent of Instructor. 1 credit hour. (A)
Note: Students may take MUEN 1151, MUEN 1152 and MUEN 1153 for a combined total of no more than 8 credit hours.

MUSB 1305   Survey of the Music Business
An overview of the music industry including songwriting, live performance, the record industry, music merchandising, contracts and licenses, and career opportunities. 3 credit hours. (W)

MUSB 1341   Concert Promotion and Venue Management

Concert promotion and venue management. Includes considerations in purchasing a club, concert promotion and advertising, talent buying, city codes, insurance, Texas Alcoholic Beverage Commission Regulation, performance rights organization licenses, personnel management and concert production and administration. Lab required. Prerequisite: MUSB 1305. 3 credit hours. (W)

MUSB 2301   Music Marketing

Methods of music distribution, retailing, and wholesaling. Includes identifying a target market, image building, distribution (brick and mortar vs. digital delivery), pricing, advertising, and marketing mix. 3 credit hours. (W)

MUSB 2345   Live Music and Talent Management

An examination of the role, scope, and activities of the talent manager including establishing the artist/manager relationship; planning the artist's career; and developing goals, strategies, and tactics with an overall view of the live music business. Prerequisite: MUSB 1305. 3 credit hours. (W)

MUSB 2350   Commercial Music Project

The primary objective of this course is to apply the skills learned in other Commercial Music courses. This is a hands-on project oriented course aimed at helping students create a portfolio of their work. Artists and their music will be the focus. Each student must design and complete his/her own project with instructor approval. Lab required. Prerequisite: Consent of Department Chair. 3 credit hours. (W)

MUSB 2355   Legal Aspects of the Entertainment Industry

Copyright law and the various agreements used in the entertainment industry. Emphasizes contracts used by music publishers, record companies, artist managers, record producers, film and television producers, and booking agencies. Prerequisite: MUSB 1305. 3 credit hours. (W)

MUSB 2380   Cooperative Education-Music Management

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

MUSC 1209   Conducting Class

Introduction to the art of conducting including regular and irregular beat patterns, subdivision, and beat pattern varieties applied to musical literature and practical experiences. Lab required. 2 credit hours. (W)

MUSC 1313   Commercial Music Theory I

Introduction to chord progressions, song forms, and harmonic techniques used in commercial music. Topics include modern chord notation and chord voicings. Prerequisite: MUSI 1303 (or MUSI 1301). 3 credit hours. (W)

MUSC 1321   Songwriting I

Introduction to the techniques of writing marketable songs including the writing of lyrics and melodies, setting lyrics to music, developing lyrical and musical "hooks," analyzing the marketplace, and developing a production plan for a song demo. 3 credit hours. (W)

MUSC 1323   Audio Electronics

Basic concepts in electricity, Ohm's Law, circuit analysis and troubleshooting. Includes soldering techniques, and equipment maintenance. Lab required. 3 credit hours. (W)

MUSC 1327   Audio Engineering I

Overview of the recording studio. Includes basic studio electronics and acoustic principles, waveform properties, microphone concepts and placement techniques, studio set up and signal flow, console theory, signal processing concepts, multi-track principles and operation, and an overview of mixing and editing. Lab required. 3 credit hours. (W)

MUSC 1331   MIDI I
Exploration of the history and evolution of Musical Instrument Digital Interface (MIDI) systems and applications. Includes the MIDI language and applications in the studio environment using software-based sequencing programs. Lab required. 3 credit hours. (W)

MUSC 1333   Synthesis I
An exploration of sound synthesis. Includes additive, subtractive, and FM synthesizers. Lab required. 3 credit hours. (W)

MUSC 1405   Live Sound I
An overview of the field of live sound. Includes principles of live sound and the theory and interconnection of the components of a sound reinforcement system. Lab required. Prerequisite: MUSC 1327. 4 credit hours. (W)

MUSC 2313   Commercial Music Theory II
Continuation of Commercial Music Theory I. Emphasizes harmonic and melodic analysis, extended chord theory, and modal and altered scales. Prerequisite: MUSC 1313 or consent of Instructor. 3 credit hours. (W)

MUSC 2314   Improvisation Theory I
Chordal structures of commercial music genres. Emphasizes extemporaneous performance. 3 credit hours. (W)

MUSC 2330   Commercial Music Arranging and Composition
Presentation of arranging and composition for projects in industry recognized genres including songwriting, show writing, video, and film. Class covers popular nomenclature/theory, discovering music sources, common orchestration, writing for rhythm section and manuscript for individual parts. Lab required. 3 credit hours. (W)

MUSC 2345   Synthesis II
Advanced sound synthesis. Includes hybrid synthesis and digital sampling. Lab required. Prerequisite: MUSC 1333. 3 credit hours. (W)

MUSC 2351   Audio for Video
Advanced audio techniques for video production. Includes synchronization, automated mixdown, audio post production for video, and editing techniques. Lab required. Prerequisite: ARTV 1343 or MUSC 1327. 3 credit hours. (W)

MUSC 2355   MIDI II
Advanced MIDI concepts and techniques. Includes synchronizing MIDI and audio devices and advanced sequencer operation. Lab required. Prerequisite: MUSC 1331. 3 credit hours. (W)

MUSC 2356   Songwriting II
Continuation in the development of techniques for writing marketable songs including the writing of lyrics and melodies, setting lyrics to music, developing lyrical and musical "hooks," analyzing the marketplace, and developing a production plan for a song demo. Prerequisite: MUSC 1321, or consent of Instructor. 3 credit hours. (W)

MUSC 2403   Live Sound II
Overview of stage monitor systems. Includes monitor systems set-up and operation and stage management. Also covers interactivity between sound management, performance quality, and audience experience. Lab required. Prerequisite: MUSC 1405. 4 credit hours. (W)

MUSC 2427   Audio Engineering II
Implementation of the recording process, microphones, audio console, multi-track recorder, and signal processing devices. Lab required. Prerequisite: MUSC 1327 with a grade of "B" or better; or consent of Instructor. 4 credit hours. (W)

MUSC 2447   Audio Engineering III
Advanced practice of procedures and techniques in recording and manipulating audio. Includes digital audio editing, advanced recording techniques, and advanced engineering projects. Lab required. Prerequisite: MUSC 2427 with a grade of "B" or better; or consent of Instructor. 4 credit hours. (W)

MUSC 2448   Audio Engineering IV
Advanced recording, mixing, arranging, and editing. Includes the role of the producer in session planning, communication, budgeting, business aspects, technical considerations, and music markets. Lab required. Prerequisite: MUSC 2447 with a grade of "B" or better; or consent of Instructor. 4 credit hours. (W)

MUSC 2453   Live Sound III
Advanced concepts of live sound engineering for front-of-house mix. Includes techniques required to build and maintain a live sound mix for an audience. Lab required. Prerequisite: MUSC 2403. 4 credit hours. (W)

MUSI 1114   Piano Class for Music Majors I
Class piano instruction for music majors with an emphasis on the practical application of music theory involving harmonization, transposition and related keyboard skills. For music majors only. Prerequisite: MUSI 1303. 1 credit hour. (A)
Note: Students may take MUSI 1114, MUSI 1115, MUSI 2114 and MUSI 2115 for a combined total of no more than 4 credit hours.

MUSI 1115   Piano Class for Music Majors II
Continuation of MUSI 1114. Development of two octave minor scales, arpeggios, diatonic chord progressions, and piano repertoire. For music majors only. Prerequisite: MUSI 1114. 1 credit hour. (A)
Note: Students may take MUSI 1114, MUSI 1115, MUSI 2114 and MUSI 2115 for a combined total of no more than 4 credit hours.

MUSI 1116   Aural Skills I
Skills developed include sight-singing, solmization, and melodic and harmonic dictation. Lab required. Prerequisite: MUSI 1303 (or MUSI 1301). 1 credit hour. (A)
Note: Student may take MUSI 1116 and MUSI 1117 for a combined total of no more than 6 credit hours.

MUSI 1117   Aural Skills II
Further emphasis on diatonic sight-singing and dictation. Lab required. Prerequisite: MUSI 1116. 1 credit hour. (A)
Note: Student may take MUSI 1116 and MUSI 1117 for a combined total of no more than 6 credit hours.

MUSI 1161   English Diction
Presents the phonetic sounds of the English language, the principles of which will be applied to required vocal repertoire for transfer music majors. Required for voice majors, but open to all students with consent of Instructor. Prerequisite: MUSI 1303 (or MUSI 1301). 1 credit hour. (A)

MUSI 1183   Class Voice I
Class instruction in the fundamentals of singing including posture, breath support, vocal production, and diction. For the non-vocal major. Lab required. 1 credit hour. (A)
Note: Student may take MUSI 1183, MUSI 1184, MUSI 2183, and MUSI 2184 for a combined total of no more than 4 credit hours.

MUSI 1184   Class Voice II
A continuation of MUSI 1183 with further emphasis on proper technique and vocal literature. May be repeated for up to 3 credit hours. Lab required. Prerequisite: MUSI 1183. 1 credit hour. (A)
Note: Student may take MUSI 1183, MUSI 1184, MUSI 2183, and MUSI 2184 for a combined total of no more than 4 credit hours.

MUSI 1192   Class Guitar I
Class instruction in the fundamentals of beginning guitar. For the non-guitar major. Lab required. 1 credit hour. (A)
Note: Student may take MUSI 1192, MUSI 1193, MUSI 2192, and MUSI 2193 for a combined total of no more than 4 credit hours.

MUSI 1193   Class Guitar II
Continuation of MUSI 1192 employing advanced reading skills, chord structures, and techniques. Lab required. Prerequisite: MUSI 1192. 1 credit hour. (A)
Note: Student may take MUSI 1192, MUSI 1193, MUSI 2192, and MUSI 2193 for a combined total of no more than 4 credit hours.

MUSI 1303   Fundamentals of Music
Introduces the elements of music theory scales, intervals, keys, triads, elementary ear training, keyboard harmony, notation, meter, and rhythm. 3 credit hours. (A)

MUSI 1304   Foundations of Music: Teaching Elementary Piano
Study of the fundamentals of music for prospective classroom teachers with an introduction to melodic, rhythmic, and harmonic elements. Emphasis on participation in singing and reading music. Additional emphasis on examining various methods, materials, theories, and techniques used in the instruction of keyboarding from preschool through intermediate levels, in both individual and group situations. A thorough investigation will be made of current teaching materials and repertoire representing different levels of development. Prerequisite: Consent of Instructor. 3 credit hours. (A)

MUSI 1306   Music Appreciation
Understanding music through the study of cultural periods, major composers, and musical elements. This course conducts an overview of music history that includes the study of Western art music-the six majors eras, composers, their works and musical styles. Emphasis is given to vocabulary and critical listening skills needed to develop an eclectic taste in music. For non-music majors only. Music majors must take MUSI 1307. Prerequisite: Meet TSI standard for INRW 0315; or equivalent. 3 credit hours. (A)

MUSI 1307   Introduction to Music Literature
Study of selected works in music literature chosen from the six major eras of Western art music history. Includes musical styles, forms, and composers from the Medieval period to the present. Critical listening skills and technical musical terms are emphasized in this course. Required for all music majors. Prerequisite: MUSI 1303 (or MUSI 1301). 3 credit hours. (A)

MUSI 1310   American Music
General survey of various styles of music in America. Topics may include jazz, ragtime, folk, rock, and contemporary art music. 3 credit hours. (A)

MUSI 1311   Music Theory I
Investigation of music modes, transposition, cadences and non-harmonic tones, phrase structure, musical textures, and four-part voice leading. Prerequisite: MUSI 1303 (or MUSI 1301) or consent of Instructor. 3 credit hours. (A)

MUSI 1312   Music Theory II
Development of melody harmonization through the understanding of harmonic progression, usage of 7th chord, elementary modulation, secondary harmonies, and large formal divisions. Prerequisite: MUSI 1311. 3 credit hours. (A)

MUSI 1386   Introduction to Composition
Fundamentals of music composition including structural and formal composition techniques, computer-based musical notation, and basic MIDI sequencing. Prerequisite: MUSI 1303 (or MUSI 1301). 3 credit hours. (A)

MUSI   2114   Piano Class for Music
                  Majors III
Continuation of MUSI 1115. Development of
three octave scales and arpeggios, accompaniment
patterns, intermediate and 20th century piano
repertoire, advanced sight reading skills. For
music majors only. Prerequisite: MUSI 1115. 1
credit hour. (A)
*Note: Students may take MUSI 1114, MUSI 1115, MUSI
2114 and MUSI 2115 for a combined total of no more
than 4 credit hours.*

MUSI   2115   Piano Class for Music
                  Majors IV
Continuation of MUSI 2114. Culmination of skills
including scales and arpeggios four octaves hands
together, advanced chord progressions, repertoire,
and sight reading. Prepares music majors for piano
barrier exams. For music majors only.
Prerequisite: MUSI 2114. 1 credit hour. (A)
*Note: Students may take MUSI 1114, MUSI 1115, MUSI
2114 and MUSI 2115 for a combined total of no more
than 4 credit hours.*

MUSI   2116   Aural Skills III
Continuation of MUSI 1117. Aural study of
superimposition, singing modulations to closely
related keys, melodic and harmonic modulations,
and compound intervals. Lab required.
Prerequisite: MUSI 1117. 1 credit hour. (A)
*Note: Student may take MUSI 2116 and MUSI 2117 for a
combined total of no more than 4 credit hours.*

MUSI   2117   Aural Skills IV
Final course in Aural Skills sequence. Singing
remote modulations and difficult melodies: aural
study of unusual and mixed meters: altered chords:
9th, 11th, and 13th chords. Lab required.
Prerequisite: MUSI 2116. 1 credit hour. (A)
*Note: Student may take MUSI 2116 and MUSI 2117 for a
combined total of no more than 4 credit hours.*

MUSI   2183   Class Voice III
A continuation of the study of the voice
concentrating on correct vocal principles in the
execution of advanced Dramatic literature. Lab
required. Prerequisite: MUSI 1184 or consent of
Instructor. 1 credit hour. (A)
*Note: Student may take MUSI 1183, MUSI 1184, MUSI
2183, and MUSI 2184 for a combined total of no more
than 4 credit hours.*

MUSI   2184   Class Voice IV
An advanced continuation of the study of the voice
concentrating on correct vocal principles in the
execution of Musical Comedy and/or Opera
Buffa/Comique. Lab required. Prerequisite: MUSI
2183 or consent of Instructor. 1 credit hour. (A)
*Note: Student may take MUSI 1183, MUSI 1184, MUSI
2183, and MUSI 2184 for a combined total of no more
than 4 credit hours.*

MUSI   2192   Class Guitar III
Continuation of MUSI 1193. Development of two
and three octave scales, intermediate guitar
repertoire from Renaissance to 20th century music.
Lab required. Prerequisite: MUSI 1193. 1 credit
hour. (A)
*Note: Student may take MUSI 1192, MUSI 1193, MUSI
2192, and MUSI 2193 for a combined total of no more
than 4 credit hours.*

MUSI   2193   Class Guitar IV
Final course in sequence of guitar classes.
Culmination of skills including completion of
major and melodic minor scales, more difficult
guitar repertoire, and competency in sight-reading.
Lab required. Prerequisite: MUSI 2192. 1 credit
hour. (A)
*Note: Student may take MUSI 1192, MUSI 1193, MUSI
2192, and MUSI 2193 for a combined total of no more
than 4 credit hours.*

MUSI   2311   Music Theory III
Study of music theory from late Renaissance
polyphony through Baroque counterpoint and
continuing with the chromatic harmonies of the
Classic period as found within Sonata Allegro and
Rondo formal structures. Prerequisite: MUSI
1312. 3 credit hours. (A)

MUSI   2312   Music Theory IV
Music theory beginning with the extended
harmonies of the Romantic era and continuing
through 20th century formal processes and
techniques. Prerequisite: MUSI 2311. 3 credit
hours. (A)

MUSI   2389   Academic Co-op Music
Integrates on-campus study with practical hands-on
work experience in music. In conjunction with
class seminars, the student will set specific goals
and objectives in the study of music. Contact the
Cooperative Work Experience Office. 3 credit
hours. (A)

MUSP   1104   Applied Commercial Music:
Bass Guitar
Private instruction in the bass guitar, with goals
related to commercial music. Consists of one 100-
minute lesson per week. Students must remain
enrolled in three or more credit hours of Music
courses (MUSB, MUSC, MUSI, MUSP) as well as
one ensemble course. Students must also attend
weekly Departmental recitals for the semester, and
perform for a jury at the end of the semester.
Prerequisite: Audition and consent of Instructor. 1
credit hour. (W)

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)

MUSP   1110   Applied Commercial Music:
Piano
Private instruction in piano, with goals related to
commercial music. Consists of one 100-minute
lesson per week. Students must remain enrolled in
three or more credit hours of Music courses

(MUSB, MUSC, MUSI, MUSP) as well as one
ensemble course. Students must also attend
weekly Departmental recitals for the semester, and
perform for a jury at the end of the semester.
Prerequisite: Audition and consent of Instructor. 1
credit hour. (W)

MUSP   1113   Introductory Group Piano I
Fundamentals of playing various accompaniment
patterns with chords. Includes reading standard
notation, basic scales, and learning introductory
improvisational skills. Lab required. 1 credit
hours. (W)

MUSP   1114   Introductory Group Piano II
Continuation of playing various accompaniment
patterns with chords. Includes reading standard
notation, scales, and learning improvisational
skills. Lab required. Prerequisite: MUSP 1113 or
consent of Instructor. 1 credit hour. (W)

MUSP   1117   Applied Commercial Music:
Percussion
Private instruction in percussion, with goals related
to commercial music. Consists of one 100-minute
lesson per week. Students must remain enrolled in
three or more credit hours of Music courses
(MUSB, MUSC, MUSI, MUSP) as well as one
ensemble course. Students must also attend
weekly Departmental recitals for the semester, and
perform for a jury at the end of the semester.
Prerequisite: Audition and consent of Instructor. 1
credit hour. (W)

MUSP   1127   Applied Commercial Music:
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)

MUSP 1151   Small Commercial Music Ensemble: Recording

Participation in a small recording ensemble concentrating on commercial music performance styles. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

MUSP 1153   Small Commercial Music Ensemble: Rock

Participation in a rock ensemble concentrating on commercial music performance styles. Prerequisite: Audition and consent of Instructor. 1 credit hour. (W)

MUSP 1202   Introductory Group Voice

Introduction to Speech Level Singing philosophy and technique with goals related to commercial voice. Emphasizes sight singing and harmony singing applicable to commercial background singing. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

MUSP 2230   Advanced Applied Commercial Music: Voice

Advanced private instruction in voice, with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

MUSP 2233   Advanced Applied Commercial Music: Bass Guitar

Advanced private instruction in bass guitar, with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

MUSP 2235   Advanced Applied Commercial Music: Piano

Advanced private instruction in piano, with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

MUSP 2237   Advanced Applied Commercial Music: Commercial Guitar

Advanced private instruction in commercial guitar, with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

MUSP 2249   Advanced Applied Commercial Music: Percussion

Advanced private instruction in percussion, with goals related to commercial music. Consists of one 150-minute lesson per week. Students must remain enrolled in three or more credit hours of music courses (MUSB, MUSC, MUSI, MUSP) as well as one ensemble course. Students must also attend weekly Departmental recitals for the semester, and perform for a jury at the end of the semester. Lab required. Prerequisite: Audition and consent of Instructor. 2 credit hours. (W)

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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.

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PHED 1114   Volleyball
Individual skills and techniques, application of rules and an introduction to offensive and defensive strategies are stressed. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1115   Archery
Investigates the basic techniques, rules and scoring as well as the history and terminology of archery. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1116   Badminton
History, rules, basic strokes and strategies in singles and doubles play are emphasized through intra-class competition. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1117   Beginning Tennis
Stresses rules, scoring and fundamental techniques for beginners. Participation by skill level for singles and doubles play is made to ensure vigorous activity for cardiovascular fitness. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1118   Intermediate Tennis
Develops and improves each skill level in serving, forehand and backhand drives, lobs and volleys. Performance strategies for both singles and doubles are drilled. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1120   Beginning Racquetball
Instruction in rules and basic skills; develops the fundamental techniques of court play for beginners. Participation by skill level assures vigorous activity for cardiovascular fitness. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1121   Intermediate Racquetball
Drills in serving, forehand and backhand drives, kill shots, Z shots and lobs help develop strategies for singles and doubles play. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1123   Beginning Golf
Stresses basic skills, history, terminology and scoring of golf. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1125   Bowling
Teaches ball selection, stance, four-step approach, rules, and scoring procedures. Emphasis on game situations. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1126   Self-Defense
Basic understanding and practical application of fundamental self-defense techniques through physical conditioning. Includes balance, focus, breath control, block and counter, avoiding attack, striking, thrusting and kicking. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

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PHED 1127   Beginning Karate
Introduction to basic techniques, formal exercises, and sparring techniques for the beginner. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1129   Introduction to Hatha Yoga
Practice of yogic postures, or "asana," defined as the physical positioning that coordinates breathing with moving and holding still for the purpose of both stretching and strengthening parts of the body. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1130   Intermediate Hatha Yoga
The refinement of the asanas (postures) covered in PHED 1129, with emphasis on breath work. Introduces more advanced asanas; emphasis on integrating yoga into daily routines at home and work. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1131   Beginning Swimming
Non-swimmers and beginners are taught basic swimming skills and strokes. Emphasizes personal safety skills and confidence in the water. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1136   Water Aerobics
Fitness level is improved through exercises in the water. A non-impact style of exercises that utilizes water resistance for increasing muscular strength, endurance, and cardiovascular fitness. Swimming skills are not necessary. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1137   Swimming Conditioning
Fitness level is improved through swimming strokes and water exercises. Different swimming programs enhance muscular strength, endurance and cardiovascular fitness. Prerequisite: Consent of Instructor. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1140   Beginning Aerobic Dance
Aerobic exercise and step training incorporating light weights. Includes interval training, which adds a new variation to aerobic endurance and flexibility. 1 credit hour. (A)
Note: A student may receive up to 4 credit hours of any combination of PHED course numbers in the 1100-1148 range; however, the same course cannot be taken more than twice.

PHED 1142   Varsity Condition I
Presentation of current scientific and technical information related to a particular activity with emphasis on developing health and skill related fitness, as well as fundamental skills. 1 credit hour. (A)

PHED 1144   Varsity Sports I
This course offers development of skills and personal potential for student athletes interested in improving their performance or preparing for further competition at the upper collegiate level. 1 credit hour. (A)

**PHED 1147   Beginning Aerobic
                   Kickboxing/Karate**
Cardiovascular and body conditioning are acquired
through the use of karate and martial arts
techniques set to music and integrating punching
bags. 1 credit hour. (A)
*Note: A student may receive up to 4 credit hours of any
combination of PHED course numbers in the 1100-1148
range; however, the same course cannot be taken more
than twice.*

PHED 1148   Introduction to Team Sports
Develops the basic skills and strategies through the
knowledge of the history, rules, and terminology.
Students will participate in game situations. Three
of the following activities will be elected for
instruction: Basketball, Flag Football, Soccer,
Softball, or Volleyball. 1 credit hour. (A)
*Note: A student may receive up to 4 credit hours of any
combination of PHED course numbers in the 1100-1148
range; however, the same course cannot be taken more
than twice.*

**PHED 1301   Foundations of Sport and
                   Physical Activity**
Historical foundations, principles and philosophical
aspects of sport and physical activity are studied.
Investigates teacher qualifications, career
opportunities, and leaders affecting the discipline
in the United States. 3 credit hours. (A)

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)

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 Heart
Association certification. 3 credit hours. (A)

**PHED 1336   Introduction to Sports
                   Management**
The course will introduce basic principles of
administration, marketing, management, and
operations in relation to the various careers in
sports management. An overview of the sports
industry will be introduced. 3 credit hours. (A)

**PHED 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)

**PHED 1338   Concepts of Physical Fitness
                   and Wellness**
Introduces basic concepts of fitness, nutrition,
health promotion, and disease prevention. Gain
knowledge to make intelligent choices that
contribute to a healthy lifestyle. Incorporates both
lecture and physical activity laboratories. Lab
required. 3 credit hours. (A)

PHED 2142   Varsity Condition II
Presentation of current scientific and technical
information related to a particular activity with
emphasis on developing advanced health and skill
related fitness, as well as fundamental skills.
Prerequisite: PHED 1142. 1 credit hour. (A)

PHED 2144   Varsity Sports II
This course offers advanced development of skills
and personal potential for student athletes
interested in improving their performance or
preparing for further competition at the upper
collegiate level. Prerequisite: PHED 1144. 1
credit hour. (A)

PHED 2156   Taping and Bandaging
This course provides the fundamental taping and
bandaging techniques used in the prevention and
care of athletic related injuries. 1 credit hour. (A)

PHED 2356 Care and Prevention of Athletic Injuries

Prevention and care of athletic injuries with emphasis on qualities of a good athletic trainer, avoiding accidents and injuries, recognizing signs and symptoms of specific sports injuries and conditions, intermediate and long-term care of injuries, and administration procedures in athletic training. 3 credit hours. (A)

PHIL 1301 Introduction to Philosophy

A study of major issues in philosophy and/or the work of major philosophical figures in philosophy. Topics in philosophy may include theories of reality, theories of knowledge, theories of value, and their practical applications. Additionally, texts studied will be from ancient, medieval, and modern sources. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PHIL 1304 Introduction to World Religions

A comparative study of world religions, including but not limited to Hinduism, Buddhism, Judaism, Christianity, and Islam. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PHIL 2303 Introduction to Formal Logic

The purpose of the course is to introduce the student to symbolic logic, including syllogisms, propositional and predicate logic, and logical proofs in a system of rules. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PHIL 2306 Introduction to Ethics

The systematic evaluation of classical and/or contemporary ethical theories concerning the good life, human conduct in society, morals, and standards of value. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PHIL 2307 Introduction to Social & Political Philosophy

A study of major issues in social and political theory and/or the work of major philosophical figures in this area. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PHIL 2321 Philosophy of Religion

A study of the major issues in the philosophy of religion such as the existence and nature of God, the relationships between faith and reason, the nature of religious language, religious experience, and the problem of evil. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 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)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

PHYS 1401   College Physics I
Lecture: Fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; with emphasis on problem solving. Lab: Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton's Laws of Motion, and gravitation and other fundamental forces; emphasis will be on problem solving. Lab required. Prerequisites: MATH 1314, and either MATH 1316 or MATH 2312. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

PHYS 1402   College Physics II
Lecture: Fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Lab: Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electrostatics, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Lab required. Prerequisite: PHYS 1401. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information

PHYS 1403   Stars and Galaxies
Introduction to stars and galaxies; basic tools and concepts in astronomy and physics are discussed. Subjects studied include stellar evolution, supernovae, black holes, neutron stars, galaxies, and quasars. Laboratory exercises, night observations, planetarium and observatory visits combine to enhance lecture material. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

PHYS 1404   Solar System
Introduction to the solar system; basic tools and concepts in astronomy and physics are discussed. Subjects studied include planets, moons, asteroids, comets, solar system formation, and solar system exploration. Laboratory exercises, night observations, planetarium and observatory visits combine to enhance lecture material. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

PHYS 1405   Conceptual Physics
This course presents concepts of classical and modern physics with application to biology and health sciences. What students should bring to this course is curiosity about how the world works. Intended for liberal arts, health science, or any majors. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

PHYS 1415   Physical Science I
Investigation of everyday phenomena of the physical world, which helps students to achieve a well-grounded understanding of selected science concepts as well as the skills that enable and encourage rational independent thinking. Lab required. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

PHYS 1417   Physical Science II
Investigation of topics in physics, chemistry, geology, and meteorology in the context of a 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. Prerequisite: Meet TSI standard for MATH 0310, and TSI college-readiness standard for Reading; or equivalent. 4 credit hours. (A)

PHYS 2389   Academic Co-op Physics
Integrates on-campus study with practical hands-on work experience in physics. In conjunction with class seminars, the student will set specific goals and objectives in the study of physics. Contact the Cooperative Work Experience Office. 3 credit hours. (A)

PHYS 2425   University Physics I
Lecture: Fundamental principles of physics, using calculus for science, computer science, and engineering majors; the principles and applications of classical and modern mechanics, including harmonic motion and physical systems, and the laws of thermodynamics; and emphasis on problem solving. Lab: Basic laboratory experiments supporting theoretical principles presented in the lecture section involving the principles and applications of classical mechanics, including harmonic motion and physical systems; experimental design, data collection and analysis, and preparation of laboratory reports. Lab required. Prerequisite: MATH 2413 equivalent within the last five years with a grade of "C" or better. Prerequisite/Concurrent enrollment: MATH 2414 equivalent. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

PHYS 2426   University Physics II
Lecture: Principles of physics for science, computer science, and engineering majors, using calculus, involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics, and modern physics. Lab: Laboratory experiments supporting theoretical principles presented in the lecture section involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics; experimental design, data collection and analysis, and preparation of laboratory reports. Lab required. Prerequisites: MATH 2414 equivalent, and PHYS 2425 within the last five years with a grade of "C" or better. 4 credit hours. (A)
Note: This course is also offered through the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS). Contact the Natural Sciences Department for further information.

PLAB 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 2301 Word Processing-MS Word
Word processing software focusing on business applications. Prerequisite: POFT 1329 or POFT 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

POFI 2331 Desktop Publishing for the Office-MS Office
In-depth coverage of desktop publishing terminology, text editing, and use of design principles. Emphasis on layout techniques, graphics, multiple page displays, and business applications. Prerequisite: POFI 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

POFT 1127 Introduction to Keyboarding
Skill development in keyboarding techniques. Emphasis on the development of acceptable speed and accuracy. 1 credit hour. (W)

POFT 1307 Proofreading and Editing
Instruction in proofreading and editing skills necessary to assure accuracy in business documents. Prerequisite: POFT 1127 or POFT 1329 or POFT 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

POFT 1319 Records and Information Management I
Introduction to basic records information management filing systems including manual and electronic filing. Prerequisite: POFT 1127 or POFT 1329 or POFT 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

POFT 1329 Beginning Keyboarding
Skill development of keyboarding techniques. Emphasis on development of acceptable speed and accuracy levels and formatting basic documents. 3 credit hours. (W)

POFT 1349 Administrative Office Procedures II
In-depth coverage of office procedures with emphasis on decision making, goal setting, management theories, and critical thinking. To be completed during the last semester of the Office Systems Technology degree or certificate. Prerequisites: ITSC 1309, POFI 2301, POFT 1307, POFT 1319, and POFT 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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 2301 Intermediate Keyboarding
A continuation of keyboarding skills emphasizing acceptable speed and accuracy levels and formatting documents. Prerequisite: POFT 1329 or consent of Department Faculty Contact. 3 credit hours. (W)

POFT 2303 Speed and Accuracy Building
Review, correct, and improve keyboarding techniques for the purpose of increasing speed and improving accuracy. Prerequisite: POFT 1127 or POFT 1329 or POFT 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

POFT 2312 Business Correspondence and Communication
Development of writing and presentation skills to produce effective business communications. Lab required. Prerequisite: POFI 2301 or POFT 1329 or POFT 2301 or consent of Department Faculty Contact. 3 credit hours. (W)

POFT 2380 Cooperative 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 I-Polysomnography
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Admitted to the Certificate - Polysomnographic Technology Program. Corequisite: PSGT 1400. Major Requirement: Certificate - Polysomnographic Technology. 2 credit hours. (W)

PSGT 1310 Neuroanatomy and Physiology
Basic neuroanatomy and physiology. Includes neurologic history, neurologic exam, and diagnostic tools applied to the study of various neurologic disorders. Lab required. Major Requirement: AAS or Certificate - Polysomnographic Technology. 3 credit hours. (W)

PSGT 1340 Sleep Disorders
Disorders that affect sleep. Includes insomnia, circadian rhythm disorders, narcolepsy, sleep disordered breathing, REM Behavior, movement and neuromuscular disorders, medical, and psychiatric. Prerequisite: PSGT 1310. Major Requirement: AAS or Certificate - Polysomnographic Technology. 3 credit hours. (W)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

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 1573   Polysomnographic Anatomy
**   and Physiology**
Basic anatomy and physiology of the neurological,
cardiovascular, and pulmonary systems in relation
to the field of polysomnography. Major
requirement: Certificate - Polysomnographic
Technology. 5 credit hours. (W)

PSGT 2205   Sleep Scoring and Staging
Development of skills for sleep scoring, staging,
and record preparation. Lab required.
Prerequisite: PSGT 1400. Major Requirement:
AAS or Certificate - Polysomnographic
Technology. 2 credit hours. (W)

PSGT 2250   Infant and Pediatric
**   Polysomnography**
Sleep physiology and the normal sleep patterns of
the infant and pediatric population. Includes
opportunities to perform a pediatric study. Lab
required. Prerequisite: PSGT 1400. Major
Requirement: AAS or Certificate -
Polysomnographic Technology. 2 credit hours.
(W)

PSGT 2260   Certificate Clinical II –
**   Polysomnography**
A health-related work-based learning experience
that enables the student to apply specialized
occupational theory, skills, and concepts. Direct
supervision is provided by the clinical professional.
Prerequisite: PSGT 1260. Major Requirement:
Certificate - Polysomnographic Technology. 2
credit hours. (W)

PSGT 2271   Pharmacology for
**   Polysomnography**
Discusses the basic principles of pharmacology and
the clinical and pharmacological treatment of sleep
disorders. Addresses the use of sleep medication in
children, adolescents, and the elderly. Examines
the administration, mode of action, and the
physiological effects of pharmacological agents on
sleep. Prerequisite: PSGT 1205. Major
Requirement: AAS 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   AAS Clinical II –
**   Polysomnography**
A health-related work-based learning experience
that enables the student to apply specialized
occupational theory, skills, and concepts. Direct
supervision is provided by the clinical professional.
Prerequisite: PSGT 1360. Major Requirement:
AAS Polysomnographic Technology. 3 credit
hours. (W)

PSGT 2361 AAS Clinical III – Polysomnography
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: PSGT 2360. Major Requirement: AAS Polysomnographic Technology. 3 credit hours. (W)

PSGT 2411 Polysomnography II
Current practices in polysomnography. Includes the use of specialized equipment used to record and monitor various physiological parameters involved with sleep testing. Emphasizes sleep disorders, theory of testing and treatment procedures, and analysis of polysomnography data. Lab required. Prerequisite: PSGT 1400. Major Requirement: AAS or Certificate - Polysomnographic Technology. 4 credit hours. (W)

PSTR 1301 Fundamentals of Baking
Fundamentals of baking including dough, quick breads, pies, cakes, cookies, and tarts. Instruction in flours, fillings, and ingredients. Topics include baking terminology, tool and equipment use, formula conversions, functions of ingredients, and the evaluation of baked products. Professional chef uniform and kitchen tools required. Lab required. Prerequisite: Mandatory Culinary / Pastry Arts Orientation. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 1305 Breads and Rolls
Concentration on fundamentals of chemically and yeast raised breads and rolls. Instruction on commercial preparation of a wide variety of products. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of "C" or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 1306 Cake Decorating I
Introduction to skills, concepts and techniques of cake decorating. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of "C" or better. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 1310 Pies, Tarts, Teacakes, and Cookies
Focus on preparation of American and European style pie and tart fillings and dough, cookies, teacakes, custard and batters. Instruction 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, Danish and a variety of pate a choux products and donuts. Fillings and finishing techniques included. Professional chef uniform and kitchen tools required. Lab required. 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.

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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 2301 Chocolates and Confections

Production and decoration of traditional truffles, marzipan, molded and hand-dipped chocolate, caramels, nougats, and pate de fruit. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: CHEF 1305 with a grade of "C" or better and PSTR 1301 with a grade of "C" or better. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 2307 Cake Decorating II

A course in decoration of specialized and seasonal products. Professional chef uniform and kitchen tools required. Lab required. Prerequisite: PSTR 1306 with a grade of "C" or better. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 2331 Advanced Pastry Shop

A study of classical desserts, French and international pastries, hot and cold desserts, ice creams and ices, chocolate work, and decorations. Emphasis on advanced techniques. Professional chef uniform and kitchen tools required. Lab required. Prerequisites: PSTR 1305, PSTR 1306, PSTR 1310, PSTR 2301 and PSTR 2307. 3 credit hours. (W)

Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

PSTR 2380 Cooperative Education-Baking and Pastry Arts/Baker/Pastry Chef

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Prerequisites: CHEF 1305 with a grade of "C" or better, PSTR 1301 with a grade of "C" or better, and completion of 9 credit hours in the major core of PSTR. 3 credit hours. (W)

PSYC 1100   Learning Framework
A study of the 1) research and theory in the psychology of learning, cognition, and motivation, 2) factors that impact learning, and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. Lab required. 1 credit hour. (A)
Note: Students may only take one of the following: EDUC 1200, PSYC 1100 or PSYC 1300.

PSYC 1300   Learning Framework
A study of the 1) research and theory in the psychology of learning, cognition, and motivation, 2) factors that impact learning, and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g. learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned. 3 credit hours. (A)
Note: Students may only take one of the following: EDUC 1200, PSYC 1100 or PSYC 1300.

PSYC 2301   General Psychology
General Psychology is a survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PSYC 2306   Human Sexuality
This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives - biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her own decision-making on sexual issues outside of the classroom. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)
Note: Students may take either PSYC 2306 or SOCI 2306 but not both.

PSYC 2314   Life-Span Growth and Development
Life-Span Growth and Development is a study of social, emotional, cognitive and physical factors and influences of a developing human from conception to death. Prerequisites: PSYC 2301, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PSYC 2315   Psychology of Adjustment
Gives students deeper insight into their lives and those around them. Includes enhancing self awareness, stress coping, healthy relationships and dealing with loss. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PSYC 2316   Psychology of Personality
In-depth study of theories of personality with practical application of each. Methods of personality measurement and assessment are also included. Prerequisites: PSYC 2301, and meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

PSYC 2319   Social Psychology
Research and theory regarding social factors that influence human behavior. Focuses on attitudes, interpersonal attraction, aggression, conformity, communication, values, roles and group processes. These principles will be applied to the human experience. Prerequisite: Meet TSI college-readiness standard for Writing; or equivalent. 3 credit hours. (A)

PSYC 2389   Academic Co-op Psychology
Integrates on-campus study with practical hands-on work experience in psychology. In conjunction with class seminars, the student will set specific goals and objectives in the study of psychology. Contact the Cooperative Work Experience Office. Prerequisites: Consent of Instructor, and meet TSI college-readiness standard for Writing; or equivalent. 3 credit hours. (A)

RBTC 1305   Robotic Fundamentals
An introduction to flexible automation. Topics include installation, repair, maintenance, and development of flexible robotic manufacturing systems. 3 credit hours. (W)

RELE 1300   Contract Forms and Addenda
Promulgated Contract Forms, which shall include, but is not limited to, unauthorized practice of law, broker-lawyer committee, current promulgated forms, commission rules governing use of forms and case studies involving use of forms. Prerequisite: RELE 1311. 3 credit hours. (W)

RELE 1301   Principles of Real Estate I
A beginning overview of licensing as a real estate broker or salesperson. Includes ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing discrimination, housing credit discrimination, and community reinvestment. Fulfills at least 30 of 60 hours of required instruction for salesperson license. 3 credit hours. (W)

RELE 1303   Real Estate Appraisal
The central purposes and functions of an appraisal, social and economic determinants of value, appraisal case studies, cost, market data and income approaches to value estimates, final correlations, and reporting. 3 credit hours. (W)

RELE 1307   Real Estate Investments
Characteristics of real estate investments. Includes techniques of investment analysis, time-valued money, discounted and nondiscounted investment criteria, leverage, tax shelters, depreciation, and applications to property tax. 3 credit hours. (W)

RELE 1311   Law of Contracts
Elements of a contract, offer and acceptance, statute of frauds, specific performance and remedies for breach, unauthorized practice of law, commission rules relating to use of adopted forms and owner disclosure requirements. 3 credit hours. (W)

RELE 1315   Property Management
The role of the property manager, landlord policies, operational guidelines, leases, lease negotiations, tenant relations, maintenance, reports, habitability laws, and the Fair Housing Act. 3 credit hours. (W)

RELE 1319   Real Estate Finance
Monetary systems, primary and secondary money markets, sources of mortgage loans, federal government programs, loan applications, processes and procedures, closing costs, alternative financial instruments, equal credit opportunity laws affecting mortgage lending, Community Reinvestment Act, and the state housing agency. 3 credit hours. (W)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

RELE 1321   Real Estate Marketing
Real estate professionalism and ethics; characteristics of successful salespersons; time management; psychology of marketing; listing procedures; advertising; negotiation and closing financing; and the Deceptive Trade Practices-Consumer Protection Act. 3 credit hours. (W)

RELE 1325   Real Estate Mathematics
Basic arithmetic skills. Includes mathematical logic, percentages, interest, time value of money, depreciation, amortization, proration, and estimation of closing statements. 3 credit hours. (W)

RELE 1338   Principles of Real Estate II
A continuing overview of licensing as a broker or salesperson. Includes ethics of practice as a license holder, titles to and conveyance of real estate, legal descriptions, deeds, encumbrances and liens, distinctions between personal and real property, appraisal, finance and regulations, closing procedures, and real estate mathematics. Covers at least three hours of classroom instruction on federal, state, and local laws relating to housing, discrimination, housing credit discrimination, and community reinvestment. Fulfills at least 30 of 60 hours of required instruction for salesperson license. 3 credit hours. (W)

RELE 1380   Cooperative Education - Real Estate
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

RELE 2301   Law of Agency
Law of agency including principal-agent and master-servant relationships, the authority of an agent, the termination of an agent's authority, the fiduciary and other duties of an agent, employment law, deceptive trade practices, listing or buying

representation procedures, and the disclosure of an agency. 3 credit hours. (W)

RELE 2331   Real Estate Brokerage
A study of law of agency, planning and organization, operational policies and procedures, recruiting, selection and training of personnel, records and control, and real estate firm analysis and expansion criteria. 3 credit hours. (W)

RELE 2381   Cooperative Education - Real Estate
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

RNSG 1161   Clinical I-Nursing-Registered Nurse Training
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on understanding and application of the nursing process, therapeutic communication, the development of critical thinking, patient/client advocacy, and safety to give comprehensive, quality patient-centered care using evidence based outcomes to culturally and socially diverse patient/client systems and documentation of care. Development of teaching/learning plans to address patient/client health care needs. Collaborate with the interdisciplinary health care team to promote, maintain and restore optimal health status of patient/client systems. Prerequisite: Admissions to the Associate Degree Nursing Grant Program. Corequisites: RNSG 1170, RNSG 1171, RNSG 1271 and RNSG 1471, or consent of Program Director. Major Requirement: AAS - Nursing. 1 credit hour. (A)

RNSG 1163   Clinical-Nursing Transition from LVN/Paramedic

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on critical thinking and implementation of the nursing process to plan safe, comprehensive, care for patient/client systems with common physical and mental health needs; development and implementation of teaching/learning plans evidence based data to address health promotion, maintenance, and restoration. Care includes measures to reduce risks and coordinate health resources in collaboration with a multi-disciplinary health care team to improve patient/client outcomes. Requires communication/documentation skills, patient/client advocacy, and development of clinical reasoning. Prerequisite: Admission to the Associate Degree Nursing Grant (LVN/Paramedic Bridge) Program. Corequisites: RNSG 1170, RNSG 1172 and RNSG 2371. Major Requirement: AAS - Nursing. 1 credit hour. (A)

RNSG 1170   Introduction to Nursing Concepts

An introduction to concept-based learning with emphasis on selected pathophysiological concepts with nursing application. Concepts include acid-base balance, fluid and electrolytes, immunity, gas exchange, perfusion, metabolism, coping, and tissue integrity. Prerequisite: Admission to the Associate Degree Nursing Grant Program, or consent of Program Director. Major Requirement: AAS - Nursing. 1 credit hour. (W)

RNSG 1171   Professional Nursing Concepts I

Introduction to professional nursing concepts and exemplars within the professional nursing roles: Member of Profession, Provider of Patient-Centered Care, Patient Safety Advocate, and Member of the Health Care Team. Content includes clinical judgment, communication, ethical-legal, evidence-based practice, health promotion, informatics, patient-centered care, patient education, professionalism, safety, and team/collaboration. Emphasizes role development of the professional nurse. This course lends itself to a concept-based approach. Prerequisite: Admission to the Associate Degree Nursing Grant Program. Corequisites: RNSG 1161, RNSG 1170, RNSG 1271 and RNSG 1471, or consent of Program Director. Major Requirement: AAS - Nursing. 1 credit hour. (W)

RNSG 1172   Professional Nursing Competencies

Development of professional nursing competencies in the care of diverse patients throughout the lifespan. Emphasizes psychomotor skills and clinical reasoning in the performance of nursing procedures related to the concepts of: clinical judgment, comfort, elimination, fluid and electrolytes, nutrition, gas exchange, safety, functional ability, immunity, metabolism, mobility, tissue integrity, thermoregulation, communication, patient education, professionalism, and ethical and legal precepts. Includes health assessment and medication administration. This course lends itself to a concept-based approach. Prerequisite: Admission to the Associate Degree Nursing Grant (LVN/Paramedic Bridge) Program. Major Requirement: AAS - Nursing. 1 credit hour. (W)

RNSG 1219   Integrated Nursing Skills I
Study of the concepts and principles necessary to perform safe, basic nursing skills for patient-centered care of culturally and socially diverse patients/clients across the life span; demonstrate competence in the quality performance of nursing procedures. Content includes knowledge, judgment, critical thinking skills, and professional values including accountability, within a legal/ethical framework. Focus on required training to competently, safely perform nursing skills and procedures; ability to communicate/document procedures performed; develop/implement appropriate patient/client teaching/learning plans related to skills/procedures; self-analysis/reflection to improve patient/client care outcomes and skill performance. Lab required. Prerequisite: Admission to the Associate Degree Nursing Program. Corequisites: RNSG 1360 and RNSG 1523, or consent of Program Director. 2 credit hours. (A)

RNSG 1227   Transition to Professional Nursing
Content includes health promotion, expanded assessment, analysis and coordination of information, critical thinking/clinical reasoning skills and utilization of the nursing process, a systematic problem solving process, pharmacology, interdisciplinary teamwork, communication/documentation skills, and applicable roles/competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework throughout the life span. Prerequisite: Consent of Program Director. Major Requirement: AAS-Nursing. 2 credit hours. (W)

RNSG 1229   Integrated Nursing Skills II
Study of the concepts and principles necessary to perform intermediate or advanced nursing skills for care of diverse patients/clients across the life span. Content includes knowledge, judgment, clinical reasoning skills, and professional values within a legal/ethical framework. Focus on concepts, principles and training required to competently, safely perform intermediate nursing skills for culturally and socially diverse patient/client systems across the life span. Requires ability to communicate/document procedures performed; develop/implement appropriate patient-centered teaching plans related to procedures to improve patient care outcomes. Lab required. Prerequisites: RNSG 1219, RNSG 1360, and RNSG 1523, or consent of Program Director. Corequisites: RNSG 1461 and RNSG 2504, or consent of Program Director. Major Requirement: AAS-Nursing. 2 credit hours. (A)

RNSG 1271   Professional Nursing Competencies
Development of professional nursing competencies in the care of diverse patients throughout the lifespan. Emphasizes psychomotor skills and clinical reasoning in the performance of nursing procedures related to the concepts of; clinicial judgment, comfort, elimination, fluid and electrolytes, nutrition, gas exchange, safety, functional ability, immunity, metabolism, mobility, tissue integrity, thermoregulation, communication, patient education, professionalism, and ethical and legal precepts. Includes health assessment and medication administration. This course lends itself to a concept-based approach. Prerequisite: Admission to the Associate Degree Nursing Grant Program. Corequisites: RNSG 1161, RNSG 1170, RNSG 1171 and RNSG 1471, or consent of Program Director. Major Requirement: AAS - Nursing. 2 credit hours. (W)

RNSG 1360   Clinical I-Nursing-Registered Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on understanding and application of the nursing process, therapeutic communication, the development of critical thinking, patient/client advocacy, and safety to give comprehensive, quality patient-centered care using evidence based outcomes to culturally and socially diverse patient/client systems and documentation of care. Development of teaching/learning plans to address patient/client health care needs. Collaborate with the interdisciplinary health care team to promote, maintain and restore optimal health status of patient/client systems. Prerequisite: Admission to the Associate Degree Nursing Program. Corequisites: RNSG 1219 and RNSG 1523 or consent of Program Director. Major Requirement: AAS-Nursing. 3 credit hours. (A)

RNSG 1461   Clinical II-Nursing-Registered Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on critical thinking skills and implementation of the nursing process to plan safe, comprehensive, care for patient/client systems with common physical and mental health needs; development and implementation of teaching/learning plans evidence based data to address health promotion, maintenance, and restoration. Care includes measures to reduce risks and coordinate health resources in collaboration with a multi-disciplinary health care team to improve patient/client outcomes. Requires communication/documentation skills, patient/client advocacy, and development of clinical reasoning. Prerequisites: RNSG 1219, RNSG 1360 and RNSG 1523, or consent of Program Director. Corequisites: RNSG 1229 and RNSG 2504, or consent of Program Director. Major Requirement: AAS-Nursing. 4 credit hours. (A)

RNSG 1471   Health Care Concepts I

In-depth coverage of foundational health care concepts with application through selected exemplars. Concepts include comfort, diversity, elimination, functional ability, human development, mobility, nutrition, sensory perception, sleep, thermoregulation, end-of-life, grief, and tissue integrity. Emphasizes development of clinical judgment skills in the beginning nurse. This course lends itself to a concept-based approach. Prerequisite: Admission to the Associate Degree Nursing Grant Program. Corequisites: RNSG 1161, RNSG 1170, RNSG 1171 and RNSG 1271, or consent of Program Director. Major Requirement: AAS - Nursing. 4 credit hours. (W)

RNSG 1523   Introduction to Professional Nursing for Integrated Programs

Introduction to the profession of nursing including the roles/competencies of the professional nurse as provider of patient-centered care, patient safety advocate, member of health care team, and member of the profession with emphasis on health promotion and primary disease prevention across the life span; essential components of the nursing health assessment; identification of deviations from expected health patterns; application of the nursing process, a systematic, problem-solving process to provide basic safe, comprehensive evidence based nursing care to culturally and socially diverse patients/clients across the life span; and applicable competencies in knowledge, judgment, clinical reasoning skills, and professional values within a legal/ethical framework. Prerequisite: Admission to the Associate Degree Nursing Program. Corequisites: RNSG 1219 and RNSG 1360, or consent of Program Director. Major Requirement: AAS-Nursing. 5 credit hours. (A)

RNSG 2172 Professional Nursing Concepts II
Expanding professional nursing concepts and exemplars within the professional nursing roles. Applying concepts of clinical judgment, communication, ethical-legal, evidence-based practice, patient-centered care, professionalism, safety, and team/collaboration through exemplars presented in the HCC course. Introduces concept of leadership and management. Emphasizes role development of the professional nurse. This course lends itself to a concept-based approach. Prerequisites: RNSG 1161, RNSG 1170, RNSG 1171, RNSG 1271 and RNSG 1471, or consent of Program Director. Corequisites: RNSG 2361 and RNSG 2572, or consent of Program Director. Major Requirement: AAS - Nursing. 1 credit hour. (W)

RNSG 2173 Professional Nursing Concepts III
Application of professional nursing concepts and exemplars within the professional nursing roles. Utilizes concepts of clinical judgment, ethical-legal, evidence-based practice, patient-centered care, professionalism, safety, and team/collaboration. Introduces the concept of quality improvement and health care organizations. Incorporates concepts into role development of the professional nurse. This course lends itself to a concept-based approach. Prerequisites: RNSG 2172, RNSG 2361 and RNSG 2572, or consent of Program Director. Corequisites: RNSG 2362 and RNSG 2573, or consent of Program Director. Major Requirement: AAS - Nursing. 1 credit hour. (W)

RNSG 2174 Professional Nursing Concepts IV
Integration of professional nursing concepts and exemplars within the professional nursing roles. Synthesizes concepts of clinical judgment, ethical-legal, evidence-based practice, leadership and management, patient-centered care, professionalism, safety, and team/collaboration through exemplars presented in the HCC course. Emphasizes concept of quality improvement and introduces health policy. Incorporates concepts into role development of the professional nurse. This course lends itself to a concept-based approach. Prerequisites: RNSG 2173, RNSG 2362 and RNSG 2573, or consent of Program Director. Corequisites: RNSG 2363 and RNSG 2574, or consent of Program Director. Major Requirement: AAS - Nursing. 1 credit hour. (W)

RNSG 2207 Adaptation to Role of Professional Nurse
Selected concepts related to the role of the professional nurse as a provider of care, accountable for the quality of comprehensive, evidence-based nursing care, coordinator of patient-centered care, responsible for continued competence through self-analysis, life-long learning, and member of the profession. Review of trends and issues impacting nursing and health care today and in the future. Content includes knowledge, judgment, skill, and professional values within a legal/ethical framework. Focus on multifaceted factors impacting nursing care, primary, secondary, and tertiary health outcomes for culturally and socially diverse patient/client systems in a variety of health care and community settings and the changing health care environment. Prerequisites: RNSG 1219, RNSG 1229, RNSG 1360, RNSG 1461, RNSG 1523, RNSG 2460, RNSG 2504, and RNSG 2514. Corequisites: RNSG 2535 and RNSG 2561, or consent of Program Director. Major Requirement: AAS-Nursing. 2 credit hours. (W)

RNSG 2361   Clinical II-Nursing-Registered Nurse Training

A health-related, work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on critical thinking and implementation of the nursing process to plan safe, comprehensive, care for patient/client systems with common physical and mental health needs; development and implementation of teaching/learning plans evidence based data to address health promotion, maintenance, and restoration. Care includes measures to reduce risks and coordinate health resources in collaboration with multi-disciplinary health care team to improve patient/client outcomes. Requires communication/documentation skills, patient/client advocacy, and development of clinical reasoning. Prerequisites: RNSG 1161, RNSG 1170, RNSG 1171, RNSG 1271 and RNSG 1471, or consent of Program Director. Corequisites: RNSG 2172 and RNSG 2572, or consent of Program Director. Major Requirement: AAS - Nursing. 3 credit hours. (A)

RNSG 2362   Clinical III-Nursing-Registered Nurse Training

A health-based work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on application of critical reasoning and implementation of the nursing process to plan patient-centered care for patient/client systems with complex physiologic and psychosocial health needs/problems using evidence based interventions. Care will include measures to meet patient/client systems teaching/learning needs to promote and maintain optimal health status for the patient/client and their families. Course requires communication/documentation care given; clinical reasoning to manage and coordinate quality, comprehensive patient-centered care and access to health care resources. Prerequisites: RNSG 2172, RNSG 2361 and RNSG 2572, or consent of Program Director. Corequisites: RNSG 2173 and RNSG 2573, or consent of Program Director. Major Requirement: AAS - Nursing. 3 credit hours. (A)

RNSG 2363   Clinical IV-Nursing-Registered Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, clinical reasoning, and concepts. Direct supervision is provided by the clinical professional. Course focuses on transition from student nurse to the roles/competencies and responsibilities of the professional nurse utilizing the nursing process to meet the advanced and integrated health needs of the patient/client systems within hospital and community. Promotion of healthy lifestyles with consideration for preferences of culturally and socially diverse patient/client systems in collaboration with the interdisciplinary health care team to promote and maintain optimal health status. Prerequisites: RNSG 2173, RNSG 2362 and RNSG 2573, or consent of Program Director. Corequisites: RNSG 2174 and RNSG 2574, or consent of Program Director. Major Requirement: AAS - Nursing. 3 credit hours. (A)

RNSG 2371   Concept-Based Transition to Professional Nursing Practice

Integration of previous health care knowledge and skills into the role development of the professional nurse as a provider of patient-centered care, patient safety advocate, member of health care team, and member of the profession. Emphasis is on clinical decision-making for patients and their families. Review of selected health care and professional nursing concepts with application through exemplars. Health care concepts include comfort, diversity, elimination, functional ability, human development, mobility, nutrition, sensory perception, sleep, coping, thermoregulation, tissue integrity, acid-based balance, clotting, cognition, fluid and electrolyte balance, gas exchange, immunity, metabolism, nutrition, end-of-life, grief, and perfusion. Professional nursing concepts include clinical judgment, communication, ethical-legal, evidence-based practice, health promotion, informatics, patient-centered care, patient

education, professionalism, safety, and team/collaboration. Introduces concept of leadership and management. This course lends itself to a concept-based approach. Prerequisite: Admission to the Associate Degree Nursing Grant (LVN/Paramedic Bridge) Program, or consent of Program Director. Major Requirement: AAS - Nursing. 3 credit hours. (W)

RNSG 2460   Clinical III-Nursing-Registered Nurse Training

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Course focuses on application of critical reasoning and implementation of the nursing process to plan patient-centered care for patient/client systems with complex physiologic and psychosocial health needs/problems using evidence based interventions. Care will include measures to meet patient/client systems teaching/learning needs to promote and maintain optimal health status for the patient/client and their families. Course requires communication/documentation care given; clinical reasoning to manage and coordinate quality, comprehensive patient-centered care and access to health care resources. Prerequisites: RNSG 1219, RNSG 1229, RNSG 1360, RNSG 1461, RNSG 1523, and RNSG 2504. Corequisite: RNSG 2514 or consent of Program Director. Major Requirement: AAS-Nursing. 4 credit hours. (A)

**RNSG 2504   Integrated Care of the Patient
with Common Health Care
Needs**

Application of the nursing process, a systematic problem-solving process, critical thinking skills and concepts to provide safe, competent nursing care to culturally and socially diverse patients/clients and families across the life span with common health care needs including, but not limited to, common childhood/adolescent diseases, uncomplicated perinatal care, mental health concepts, perioperative care, frequently occurring adult health problems and health issues related to aging. Emphasis on secondary disease prevention and collaboration/communication with members of the interdisciplinary health care team. Content includes roles/competencies of the professional nurse and applicable competencies in knowledge, judgment, clinical reasoning skills, and professional values within a legal/ethical framework. Prerequisites: RNSG 1219, RNSG 1360, and RNSG 1523. Corequisites: RNSG 1229 and RNSG 1461, or consent of Program Director. Major Requirement: AAS-Nursing. 5 credit hours. (A)

**RNSG 2514   Integrated Care of the Patient
with Complex Health Care
Needs**

Application of the nursing process, a systematic problem-solving process, critical thinking skills and concepts to provide patient-centered comprehensive nursing care to culturally and socially diverse patients/clients systems across the life span with complex health care needs including, but not limited to, complex childhood/adolescent diseases, complicated perinatal care, acute mental illness, complex perioperative care, serious adult health problems and health issues related to aging. Emphasis on tertiary disease prevention, health maintenance/restoration and collaboration with members of the interdisciplinary health care team. Content includes the roles/competencies of the professional nurse in knowledge, judgment, skills,

and professional values including safety and advocacy within a legal/ethical framework. Prerequisites: RNSG 1219, RNSG 1229, RNSG 1360, RNSG 1461, RNSG 1523, and RNSG 2504. Corequisite: RNSG 2460, or consent of Program Director. Major Requirement: AAS-Nursing. 5 credit hours. (W)

**RNSG 2535   Integrated Patient Care
Management**

Application of independent nursing interventions and critical thinking to deliver safe, patient-centered care for culturally and socially diverse patient/client systems throughout the life span whose health care needs may be difficult to predict. Emphasis on collaborative clinical reasoning, nursing leadership skills, and patient advocacy and management through coordination of health information and resources for multiple patient/client systems. Content includes the significance of professional development via a commitment to lifelong learning; self-analysis and incorporation of trends in nursing and health care. Use of applicable evidence-based knowledge, judgment, skills, and professional values, such as accountability for professional actions, within a legal/ethical framework. Prerequisites: RNSG 1219, RNSG 1229, RNSG 1360, RNSG 1461, RNSG 1523, RNSG 2461, RNSG 2504, and RNSG 2514. Corequisites: RNSG 2207 and RNSG 2561, or consent of Program Director. Major Requirement: AAS-Nursing. 5 credit hours. (W)

RNSG 2561 Clinical IV-Nursing-Registered Nurse Training
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, clinical reasoning, and concepts. Direct supervision is provided by the clinical professional. Course focuses on transition from student nurse to the roles/competencies and responsibilities of the professional nurse utilizing the nursing process to meet the advanced and integrated health needs of the patient/client systems within hospital and community. Promotion of healthy lifestyles with consideration for preferences of culturally and socially diverse patient/client systems in collaboration with the interdisciplinary health care team to promote and maintain optimal health status. Prerequisites: RNSG 1360, RNSG 1461, RNSG 2460 and RNSG 2514. Corequisites: RNSG 2207 and RNSG 2535 or consent of Program Director. Major Requirement: AAS-Nursing. 5 credit hours. (A)

RNSG 2572 Health Care Concepts II
In-depth coverage of health care concepts with application through selected exemplars. Concepts include acid-base balance, coping, clotting, cognition, fluid and electrolytes, gas exchange, immunity, metabolism, nutrition, comfort, and perfusion. Provides continuing opportunities for development of clinical judgment skills. The course lends itself to a concept-based approach. Prerequisites: RNSG 1161, RNSG 1170, RNSG 1171, RNSG 1271 and RNSG 1471, or consent of Program Director. Corequisites: RNSG 2172 and RNSG 2361, or consent of Program Director. Major Requirement: AAS - Nursing. 5 credit hours. (W)

RNSG 2573 Health Care Concepts III
In-depth coverage of health care concepts with nursing application through selected exemplars. Concepts include cellular regulation, end-of-life, immunity, interpersonal relationships, human development, intracranial regulation, mood/affect, comfort, sexuality, mobility, and reproduction. Provides continuing opportunities for development for clinical judgment skills. The course lends itself

to a concept-based approach. Prerequisites: RNSG 2172, RNSG 2361 and RNSG 2572, or consent of Program Director. Corequisites: RNSG 2173 and RNSG 2362, or consent of Program Director. Major Requirement: AAS - Nursing. 5 credit hours. (W)

RNSG 2574 Health Care Concepts IV
In-depth coverage of advanced health care concepts with nursing application through selected exemplars. Concepts include cognition, immunity, clotting, fluid and electrolyte balance, gas exchange, metabolism, nutrition, perfusion, coping, tissue integrity, and interpersonal relationships. Continuing development of clinical judgment with integration of all program concepts. The course lends itself to a concept-based approach. Prerequisites: RNSG 2173, RNSG 2362 and RNSG 2573, or consent of Program Director. Corequisites: RNSG 2174 and RNSG 2363, or consent of Program Director. Major Requirement: AAS - Nursing. 5 credit hours. (W)

RSPT 1160 Clinical I-Respiratory Care Therapist
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Consent of Program Director. Corequisite: Consent of Program Director. Major Requirement: AAS-Respiratory Care. 1 credit hour. (W)

RSPT 1201 Introduction to Respiratory Care
An introduction to the field of respiratory care. Lab required. Prerequisite: Admission to the Respiratory Care Program. Corequisites: RSPT 1307 and RSPT 1410. Major Requirement: AAS-Respiratory Care. 2 credit hours. (W)

RSPT 1207 Cardiopulmonary Anatomy and Physiology
Anatomy and physiology of the cardiovascular and pulmonary systems. Lab required. Prerequisite: Admission to the Polysomnographic Technology Program. 2 credit hours. (W)

RSPT   1237   Basic Dysrhythmia Interpretation
A study of the electrophysiology of the heart and characteristics cardiac dysrhythmias. 2 credit hours. (W)

RSPT   1307   Cardiopulmonary Anatomy and Physiology
Anatomy and physiology of the cardiovascular and pulmonary systems. Lab required. Prerequisite: Admission to the Respiratory Care Program. 3 credit hours. (W)

RSPT   1361   Clinical II-Respiratory Care Therapist
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 1160. Major Requirement: AAS-Respiratory Care. 3 credit hours. (W)

RSPT   1362   Clinical III-Respiratory Care Therapist
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 1361. Major Requirement: AAS-Respiratory Care. 3 credit hours. (W)

RSPT   1410   Respiratory Care Procedures I
Essential knowledge of the equipment and techniques used in the treatment of cardiopulmonary disease. Lab required. Prerequisite: Admission to the Respiratory Care Program. Major Requirement: AAS-Respiratory Care. 4 credit hours. (W)

RSPT   1411   Respiratory Care Procedures II
Develops essential knowledge and skills of airway care and mechanical ventilation. Lab required. Prerequisite: RSPT 1410. Major Requirement: AAS-Respiratory Care. 4 credit hours. (W)

RSPT   2130   Respiratory Care Examination Preparation
Comprehensive review to optimize respiratory care credentialing exam success. Lab required. Prerequisites: RSPT 2255, RSPT 2353, and RSPT 2360. Corequisites: RSPT 2139, RSPT 2231, RSPT 2247, and RSPT 2361. Major Requirement: AAS-Respiratory Care. 1 credit hour. (W)

RSPT   2139   Advanced Cardiac Life Support
Advanced Cardiac Life Support (ACLS) with an emphasis on airway management. Designed to develop skills for resuscitation of the adult. Includes strategies for managing and stabilizing the cardiopulmonary arrested patient. May include certification. Prerequisites: RSPT 2255 and RSPT 2471. Corequisites: RSPT 2130, RSPT 2231, RSPT 2247, and RSPT 2361. Major Requirement: AAS-Respiratory Care. 1 credit hour. (W)

RSPT   2217   Respiratory Care Pharmacology
A study of drugs that affect cardiopulmonary systems. Emphasis on classifications, route of administration, dosages and calculations, and physiological interactions. Prerequisites: RSPT 1160, RSPT 1201, RSPT 1307, and RSPT 1410. Corequisites: RSPT 1361, RSPT 1411, and RSPT 2310. Major Requirement: AAS-Respiratory Care. 2 credit hours. (W)

RSPT   2231   Simulations in Respiratory Care
Theory and history of clinical simulation examinations. Includes construction types, scoring, and mechanics of taking the computerized simulation examination. Lab required. Prerequisite: RSPT 2255. Major Requirement: AAS-Respiratory Care. 2 credit hours. (W)

RSPT 2247 Specialties in Respiratory Care
Emerging and specialty practices in respiratory care. An introduction to areas of interest in which the Respiratory Therapist may find application and/or employment. The depth of instruction will provide the indications, expected outcomes, hazards and methods for hyperbaric oxygen (HBO), extracorporeal membrane oxygenation (ECMO), nitric oxide (NO), sleep studies, nutritional assessment, metabolic monitoring, exercise/stress testing, and electroencephalograms. Also includes home care/rehabilitation, and fluid and electrolyte balance. Prerequisite: RSPT 2353. Major Requirement: AAS-Respiratory Care. 2 credit hours. (W)

RSPT 2255 Critical Care Monitoring
Advanced monitoring techniques used clinically to assess a patient in the critical care setting. Lab required. Prerequisites: RSPT 1362 and RSPT 2471. Corequisites: RSPT 2353 and RSPT 2360. Major Requirements: AAS-Respiratory Care. 2 credit hours. (W)

RSPT 2310 Cardiopulmonary Disease
Etiology, pathogenesis, pathology, diagnosis, history, prognosis, manifestations, treatment, and detection of cardiopulmonary diseases. Lab required. Prerequisites: RSPT 1307 and RSPT 1410. Corequisites: RSPT 1361, RSPT 1411, and RSPT 2217. Major Requirement: AAS-Respiratory Care. 3 credit hours. (W)

RSPT 2353 Neonatal/Pediatric Cardiopulmonary Care
A study of neonatal/pediatric cardiopulmonary care. Lab required. Prerequisites: RSPT 1362 and RSPT 2471. Corequisites: RSPT 2255 and RSPT 2360. Major Requirement: AAS-Respiratory Care. 3 credit hours. (W)

RSPT 2360 Clinical IV-Respiratory Care Therapist
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 1362. Major Requirement: AAS-Respiratory Care. 3 credit hours. (W)

RSPT 2361 Clinical V-Respiratory Care Therapist
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: RSPT 2360. Major Requirement: AAS-Respiratory Care. 3 credit hours. (W)

RSPT 2471 Respiratory Care Procedures III
Provides essential knowledge of advanced mechanical ventilation concepts, critical care assessment, quality control, and basic neonatal/pediatric assessment. Advanced mechanical ventilation concepts include: methods of weaning, advanced modes, and methods of non-invasive ventilation. Critical care assessment includes: basic ECG interpretation and chest tube drainage systems. Quality control includes: maintenance of ABG analyzers.
Neonatal/Pediatric assessment includes: APGAR scoring, gestational age assessment, Silverman score, vital signs, and pediatric assessment methods. Lab required. Prerequisite: RSPT 1411. Corequisite: RSPT 1362. Major Requirement: AAS-Respiratory Care. 4 credit hours. (W)

RSTO 1304 Dining Room Service
Introduces the principles, concepts, and systems of professional table service. Topics include dining room organization, scheduling, and management of food service personnel. Lab required. Prerequisite/Concurrent enrollment: CHEF 1314. 3 credit hours. (W)
Note: Culinary lab classes require extended periods of time standing in place, lifting heavy weights (up to 60 pounds), reaching, bending, and working around open flames and with cleaning chemicals.

RSTO 1325 Purchasing for Hospitality Operations
Study of purchasing and inventory management of foods and other supplies to include development of purchase specifications, determination of order quantities, formal and informal price comparisons, proper receiving procedures, storage management, and issue procedures. Emphasis on product cost analysis, yields, pricing formulas, controls, and record keeping at each stage of the purchasing cycle. Lab required. 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. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (W)

RUSS 1411 Beginning Russian I
Introduction to the basic skills of speaking, reading, writing, and listening with attention to selected aspects of Russian culture; designed for students with little or no previous language training. Instruction is enhanced by the use of tapes, slides, computer software, and video cassettes. Lab required. 4 credit hours. (A)

RUSS 1412 Beginning Russian II
Continuation of RUSS 1411. Lab required. Prerequisite: RUSS 1411 or consent of Instructor or Department Chair. 4 credit hours. (A)

RUSS 2311 Intermediate Russian I
Intensive review of Russian grammar followed by continued development of speaking, listening, reading and writing skills. Instruction enhanced by slides, tapes, and other audio-visual aids. Prerequisite: RUSS 1412 or consent of Instructor or Department Chair. 3 credit hours. (A)

RUSS 2312 Intermediate Russian II
Continuation of RUSS 2311. Instruction enhanced by slides, tapes, and other audio-visual aids. Prerequisite: RUSS 2311 or consent of Instructor or Department Chair. 3 credit hours. (A)

SGNL 1401 Beginning American Sign Language I
Introduction to American Sign Language, Deaf culture, and to a brief history of sign and culture. Includes development of expressive and receptive sign skills, together with the learning of numbers, sign vocabulary, and the manual alphabet. Class is conducted primarily without voice. Lab required. 4 credit hours. (A)

SGNL 1402 Beginning American Sign Language II
Study of sign vocabulary, numbers, fingerspelling and Deaf culture. Emphasizes further development of receptive skills, expressive skills, application of rudimentary syntactical and grammatical structures, and an understanding of Deaf and Hearing cultures. Class is conducted primarily without voice. Lab required. Prerequisite: SGNL 1401 or credit by exam. 4 credit hours. (A)

SGNL 2301 Intermediate American Sign Language I
Introduction to the intermediate skills needed in the production and comprehension of American Sign Language used in everyday communication. The course gives students an overview of the history, values, and social norms of the Deaf community in the United States. This course integrates and refines expressive and receptive skills in American Sign Language, including recognition of sociolinguistic variations. Class is conducted primarily without voice. Lab required. Prerequisite: SGNL 1402 with a grade of "C" or better. 3 credit hours. (A)

SGNL 2302 Intermediate American Sign Language II

A continuation of SGNL 2301, American Sign Language Intermediate II provides a review and application of conversational skills in American Sign Language and provides intensive practice in interpreting from signing to voice as well as from voice to signing, while increasing vocabulary. The course provides an introduction to American Sign Language literature and folklore. (The course includes grammar and vocabularies used in "real life" situations.) Lab required. Prerequisite: SGNL 2301 with a grade of "C" or better. 3 credit hours. (A)

SLNG 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: SGNL 2301. 3 credit hours. (W)

SLNG 1347 Deaf Culture

Historical and contemporary perspective of American Deaf culture using a socio-cultural model. Includes cultural identity and awareness, values, group norms, communication, language, and significant contributions made by D/deaf people to the world. 3 credit hours. (W)

SLNG 2266 Practicum - Sign Language Interpretation and Translation

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: SLNG 2301. 2 credit hours. (W)

SLNG 2301 Interpreting I

An overview of the interpreting process and models of interpretation. Introduces the skills necessary to achieve dynamic message equivalence in interpreting American Sign Language (ASL) to English and English to ASL. Lab required. Prerequisite: SLNG 1321. 3 credit hours. (W)

SLNG 2302 Interpreting II

Continued development of discourse analysis and interpreting skills for increasingly complex tasks. Utilization of consecutive and simultaneous interpreting scenarios including monologues and dialogues. Emphasizes skill development, self-analysis, and peer evaluation. Lab required. Prerequisite/Concurrent enrollment: SLNG 2301. 3 credit hours. (W)

SLNG 2331 Interpreting III

A practice-oriented course to develop skills in the integration and application of interpreting using complex source materials. Continued exposure to simulated interpreting/transliterating experiences. Lab required. Prerequisite: SLNG 2302 or state or national interpreter certification. 3 credit hours. (W)

SLNG 2403 Transliterating

A practice-oriented course designed to develop skills necessary for rendering spoken English to a signed English format and signed English to spoken English. Lab required. Prerequisites: ENGL 1302, SGNL 2301 and SLNG 2301. 4 credit hours. (W)

SMFT 1343 Semiconductor Manufacturing Technology

A study of the processes, materials, and equipment used in the manufacturing of semiconductors, including an overview of the semiconductor industry, related terminology, and standard safety practice. Lab required. 3 credit hours. (W)

SMFT 1371 Fundamentals of Solar Cell Engineering

Formerly SMFT 1471

The chemistry, device physics, and materials science of Photovoltaic Solar Cell technology which results in the production of electricity from sunlight is covered. An overview of the process flows used to manufacture solar cells, the resulting device characteristics, the variety of solar cell structures and the solid state electronics characterization of the structures is presented. The course is taught from an engineering perspective using an appropriate level of mathematics for the engineering models presented. Lab required. Prerequisite: MATH 1314 or consent of Program Director. 3 credit hours. (W)

SMFT 1373 Fundamentals of Solar Cell Manufacturing

Formerly SMFT 1473

The course covers the fundamentals of Photovoltaic Solar Cell fabrication from ingot to the final solar cell array. The basic chemistry, physics, and materials science of the fabrication process is presented. The course is taught from an engineering perspective using an appropriate level of mathematics for the engineering models presented. Lab required. Prerequisite: MATH 1314 or consent of Program Director. 3 credit hours. (W)

SMFT 1375 Materials Technology, Measurement Technology and Characterization Methods Used in Semiconductor Solar Cell Manufacturing

Formerly SMFT 1475

The course will include an in-depth coverage of materials measurement techniques, statistical process control/capability analysis, six sigma process characterization, and FEMA from the perspective of Photovoltaic Solar Cell materials characterization, electrical characterization and optical characterization technology and techniques. The course is taught from an engineering perspective using an appropriate level of mathematics for the engineering models presented. Lab required. Prerequisites: SMFT 1371 and SMFT 1373 or consent of Program Director. 3 credit hours. (W)

SOCI 1301 Introduction to Sociology

The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SOCI 1306 Social Problems

Application of sociological principles and theoretical perspectives to major social problems in contemporary society such as inequality, crime and violence, substance abuse, environmental issues, deviance, or family problems. Prerequisite: Meet TSI college-readiness standard for Writing; or equivalent. 3 credit hours. (A)

SOCI 2301 Marriage and the Family
Sociological and theoretical analysis of the structures and functions of the family, the varied cultural patterns of the American family, and the relationships that exist among the individuals within the family, as well as the relationships that exist between the family and other institutions in society. Prerequisite: Meet TSI college-readiness standard for Writing; or equivalent. 3 credit hours. (A)

SOCI 2306 Human Sexuality
This course will provide an overview of the broad field of human sexuality. Topics will be covered from various perspectives - biological, sociological, anthropological, etc., but will focus primarily on the psychological perspective. The goal is for each student to learn factual, scientifically-based information that will provoke thought and contribute to his/her decision-making on sexual issues outside of the classroom. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)
Note: Student may take either PSYC 2306 or SOCI 2306 but not both.

SOCI 2319 Minority Studies
This course studies minority-majority group relations, addressing their historical, cultural, social, economic, and institutional development in the United States. Both sociological and social psychological levels of analysis will be employed to discuss issues including experiences of minority groups within the context of their cultural heritage and tradition, as well as that of the dominant culture. Core concepts to be examined include (but are not limited to) social inequality, dominance / subordination, prejudice, and discrimination. Particular minority groups discussed may include those based on poverty, race / ethnicity, gender, sexual orientation, age, disability, or religion. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SOCI 2340 Drug Use and Abuse
Study of the use and abuse of drugs in today's society with emphasis on the physiological, psychological, and sociological factors that contribute to this behavior. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SOCI 2389 Academic Co-op Sociology
Integrates on-campus study with practical hands-on work experience in sociology. In conjunction with class seminars, the student will set specific goals and objectives in the study of sociology. Contact the Cooperative Work Experience Office. Prerequisites: Consent of Instructor, and meet TSI college-readiness standard for Writing; or equivalent. Prerequisite: Consent of Instructor. 3 credit hours. (A)

SOCW 2361 Introduction to Social Work
An overview of the history, fields, skills, and values of social work practice in the United States. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SOCW 2362 Social Welfare
This course provides an overview of contemporary social welfare including income support services, mental health services and services for children and families. It includes an examination of social welfare policy and programs. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. Prerequisite/Concurrent enrollment: SOCW 2361. 3 credit hours. (A)

SPAN 1411 Beginning Spanish I
Basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the beginner level. Lab required. 4 credit hours. (A)

SPAN 1412 Beginning Spanish II
Continued development of basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the high beginner to low intermediate level. Lab required. Prerequisite: SPAN 1411 or consent of Instructor or Department Chair. 4 credit hours. (A)

SPAN 2311 Intermediate Spanish I
The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading, and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 1412 or consent of Instructor or Department Chair. 3 credit hours. (A)

SPAN 2312 Intermediate Spanish II
The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading, and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 2311 or consent of Instructor or Department Chair. 3 credit hours. (A)

SPAN 2313 Spanish for Native/Heritage Speakers I
Builds upon existing oral proficiencies of heritage speakers of Spanish. Enhances proficiencies in the home-based language by developing a full range of registers including public speaking and formal written discourse. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 1412 or consent of Instructor or Department Chair. 3 credit hours. (A)

SPAN 2315 Spanish for Native/Heritage Speakers II
Builds upon existing oral proficiencies of heritage speakers of Spanish. Enhances proficiencies in the home-based language by developing a full range of registers including public speaking and formal written discourse. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world. Prerequisite: SPAN 2313 or consent of Instructor or Department Chair. 3 credit hours. (A)

SPCH 1144 Forensic Activities I
This course consists of laboratory/practicum experience for students who participate in the preparation of forensic activities. 1 credit hour. (A)

SPCH 1311 Introduction to Speech Communication
Introduces basic human communication principles and theories embedded in a variety of contexts including interpersonal, small group, and public speaking. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SPCH 1315 Public Speaking
Application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students' speaking abilities, as well as ability to effectively evaluate oral presentations. Additionally, it includes student evaluation of speakers and speeches. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SPCH 1318 Interpersonal Communication
Application of communication theory to interpersonal relationship development, maintenance, and termination in relationship contexts including friendships, romantic partners, families, and relationships with co-workers and supervisors. Additionally, this course focuses on interpersonal contexts such as gender communication, conflict, intercultural communication, and listening. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

Please refer to http://www.collin.edu/academics/programs/index.html for the most current information.

SPCH 1321 Business and Professional Communication
Study and application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams, and technologically mediated formats. Additionally, it includes the relationship of communication to organizational conflict, management and international business; practice in conducting and participating in business interviews and presentations. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SPCH 2335 Argumentation and Debate
This course introduces the students to various argumentation techniques. The student will learn basic research skills and methods of cataloging evidence. The student will learn to organize and present ideas in effective communication paradigms. Individual debate and team formats will be demonstrated. 3 credit hours. (A)

SPCH 2389 Academic Co-op Speech
Integrates on-campus study with practical hands-on work experience in speech. In conjunction with class seminars, the student will set specific goals and objectives in the study of speech. Contact the Cooperative Work Experience Office. Prerequisite: Meet TSI college-readiness standard for Reading and Writing; or equivalent. 3 credit hours. (A)

SRGT 1171 Transition to Practice for the Surgical Technologist
This course provides surgical technology students with information and skills to assist in transition from the role of student to the role of a practicing surgical technologist. Information gained about high performance work teams is applied to the surgical setting. Service quality management and diversity concepts are applied to surgical settings. Lab required. Prerequisites: HPRS 2300, SRGT 1541 and SRGT 1561. Corequisites: SRGT 2130 and SRGT 2561, or consent of Program Director. Major Requirement: AAS-Surgical Technology. 1 credit hour. (W)

SRGT 1260 Clinical-Surgical Technology I
A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Admission to the Surgical Technology Program. Corequisite: SRGT 1409 or consent of the Program Director. Major Requirement: AAS-Surgical Technology. 2 credit hours. (W)

SRGT 1409 Fundamentals of Peri-operative Concepts and Techniques
In-depth coverage of peri-operative concepts such as aseptic/sterile principles and practices, infectious processes, wound healing, and creation and maintenance of the sterile field. In addition, peri-operative, intra-operative and post operative patient care concepts, the role of the surgical technologist on the surgical team, development of a surgical conscience; critical thinking; ethical and legal aspects and basic concepts of workplace management are reviewed. Lab required. Prerequisite: Admission to the Surgical Technology Program. Corequisite: SRGT 1260 or consent of Program Director. Major Requirement: AAS-Surgical Technology. 4 credit hours. (W)

SRGT 1541 Surgical Procedures I
Introduction to surgical procedures and related pathologies. Emphasis on surgical procedures related to the general, obstetrics/gynecology, genitourinary, otorhinolaryngology, and orthopedic surgical specialties incorporating instruments, equipment, and supplies. Lab required. Prerequisites: SRGT 1260 and SRGT 1409. Corequisites: HPRS 2300 and SRGT 1561, or consent of Program Director. Major Requirement: AAS-Surgical Technology. 5 credit hours. (W)

SRGT 1542   Surgical Procedures II
Introduction to surgical procedures and related
pathologies with emphasis on surgical procedures
related to the thoracic, peripheral vascular,
plastic/reconstructive, ophthalmology, cardiac, and
neurological surgical specialties incorporating
instruments, equipment, and supplies. Lab
required. Prerequisites: HPRS 2300, SRGT 1541
and SRGT 1561. Corequisite: SRGT 1171, SRGT
2130 and SRGT 2561, or consent of Program
Director. Major Requirement: AAS-Surgical
Technology. 5 credit hours. (W)

SRGT 1561   Clinical-Surgical Technology II
A health-related work-based learning experience
that enables the student to apply specialized
occupational theory, skills, and concepts. Direct
supervision is provided by the clinical professional.
The student is allowed to participate as a member
of the surgical team under the supervision of the
affiliate hospital staff or a clinical instructor in an
aseptic environment. Case assignments will be
assigned according to specific clinical rotations.
Prerequisites: SRGT 1260 and SRGT 1409.
Corequisites: HPRS 2300 and SRGT 1541, or
consent of Program Director. Major Requirement:
AAS-Surgical Technology. 5 credit hours. (W)

SRGT 2130   Professional Readiness
Overview of professional readiness for
employment, attaining certification, and
maintaining certification status. Prerequisites:
HPRS 2300, SRGT 1541 and SRGT 1561.
Corequisites: SRGT 1171, SRGT 1542 and SRGT
2561, or consent of Program Director. Major
Requirement: AAS-Surgical Technology. 1 credit
hour. (W)

**SRGT 2561   Clinical-Surgical Technology
III**
A health-related work-based learning experience
that enables the student to apply specialized
occupational theory, skills, and concepts. Direct
supervision is provided by the clinical professional.
Corequisites: SRGT 1171, SRGT 1542 and SRGT
2130, or consent of Program Director.

Prerequisites: HPRS 2300, SRGT 1541 and SRGT
1561. Major Requirement: AAS-Surgical
Technology. 5 credit hours. (W)

**TECA 1303   Families, 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. Prerequisite: Meet TSI
standard for INRW 0315; or equivalent. 3 credit
hours. (A)

TECA 1311   Educating Young Children
An introduction to the education of the young
child, including developmentally appropriate
practices and programs, theoretical and historical
perspectives, ethical and professional
responsibilities and current issues. Lab required.
Prerequisite: Meet TSI standard for INRW 0315; or
equivalent. 3 credit hours. (A)

TECA 1318   Wellness of the Young Child
A study of the factors that impact the well-being of
the young child including healthy behavior, food
nutrition, fitness, and safety practices. Focus on
local and national standards and legal implications
of relevant policies and regulations. Lab required.
Prerequisite: Meet TSI standard for INRW 0315; or
equivalent. 3 credit hours. (A)

**TECA 1354   Child Growth and
Development**
A study of the physical, emotional, social and
cognitive factors of growth and development of
children birth through adolescence. Prerequisite:
Meet TSI standard for INRW 0315; or equivalent.
3 credit hours. (A)

TRVM 1323   Group Tour Operations
A study of the role of the group planner, selling to
groups, and planning itineraries, including
components of a tour package, tour costing,
advertising and promotion, group dynamics, and
tour guide qualifications. 3 credit hours. (W)

TRVM 1327   Special Events Design
The development of a special event from the conceptual stage through completion. Emphasis on industry terminology, factors to consider when planning a special event, and contingency plans. 3 credit hours. (W)

**TRVM 1380   Cooperative Education-
                 Tourism and Travel Service
                 Management**
Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Under the supervision of the college and the employer, the student combines classroom learning with work experience. Includes a lecture component. Contact the Cooperative Work Experience Office. 3 credit hours. (W)

**TRVM 2301   Introduction to
                 Convention/Meeting
                 Management**
Overview of the meetings and convention industry and the various aspects and skills involved in planning and managing meeting, conventions, and expositions. Emphasis on types of meetings, meeting markets, industry suppliers, budget and program planning, site selection and contract negotiations, registration and housing, food and beverage requirements, function and meeting room setup, and audiovisual requirements. 3 credit hours. (W)

**TRVM 2333   Applied Convention/Meetings
                 Management**
Practical application of meetings and exposition skills through a case study or participation in a conference/meeting. Includes integration of meeting planning tools that compare and discriminate between key areas of program development and convention objectives. Prerequisites: TRVM 1323, TRVM 1327, TRVM 2301, TRVM 2341 and TRVM 2355. 3 credit hours. (W)

**TRVM 2341   International Convention/
                 Meeting Management**
Apply the principles of convention/meeting management in an international setting. Compare the differences in planning a domestic versus an international meeting; including contract negotiation, foreign currency, customs and laws, marketing, shipping, languages, cultures, and how foreign policy affects the meeting planning process. Identify resources to assist planner in development of an international meeting. 3 credit hours. (W)

**TRVM 2355   Exposition and Trade Show
                 Operations**
An overview of trade shows and exhibitions operations. 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)

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