



# 2022-2024 COURSE CATALOG

*It's about community!*

**State Fair**  
Community College



## Table of Contents

### General Information

Welcome .....	1
Governance .....	1
Accreditation .....	1
Program Outcomes .....	1
Locations and Extended Sites.....	1
2020 – 2022 Academic Calendar.....	2
President's Message.....	4
Board of Trustees, Administration and Division Chairs .....	5
Mission.....	6
Institutional Learning Outcomes.....	6
Policies and Regulations Notice.....	7
Non-Discrimination Notice.....	7
Accessibility and Accommodations Notice.....	7
SFCC is Tobacco and Smoke Free Notice .....	7

### Admission and Enrollment

Admission Requirements .....	7
Admission Student Types	
First-time Freshman .....	8
International Students .....	8
Non-Degree Seeking Students .....	9
Returning Students .....	9
Transfer Students .....	9
Visiting Students .....	9
Dual Credit Students.....	9
Other Student Types	
Dual Enrollment .....	9
Early College Admissions .....	10
Noncitizen students who are in the United States Legally .....	10
Persons with a Felony Conviction .....	10
Articulation Credit.....	10
Auditing a Course .....	10
Waiver of the Placement Testing Requirement.....	11
Enrollment.....	11
Residency	
Residency Classification .....	11
Change of Residency Status.....	13
Tuition, Fees and Books .....	14
Financial Aid .....	14

### Academic Policies and Regulations

Academic Forgiveness.....	15
Attendance.....	16
Developmental Courses.....	16
Credit for Prior Learning (CPL) .....	16
Credit by Examination.....	17
Advanced Placement.....	17
Departmental Exams .....	17
Credit for the Armed Service Experience.....	16
Credit for Work Experience .....	17
Credit for Other Nontraditional Education .....	17

Degree Program Statue of Limitations .....	17
Grade Reports .....	17
Grading Systems	
Grading Scale .....	17
Change of Grade .....	18
Grade Appeals .....	18
Graduation Requirements	
For a Degree.....	18
For a Certificate .....	19
Automatic Awarding of Degrees.....	19
Requirements for Honors Graduation .....	19
Requirements for Participating in Commencement.....	19
Honors List.....	20
Military Withdrawal.....	20
Repeating Courses .....	21
Schedule Changes.....	21
Student Academic Progress.....	22
Student Classification .....	24
Student Course Load .....	24
Transcripts .....	24
Transfer Credit .....	24
<b>Student Policies and Regulations</b>	
Prohibited Conduct and Disciplinary Action .....	25
Academic Honesty Policy.....	28
Children in the Classroom/Library.....	28
Copyright.....	29
Drug, Alcohol and Tobacco Products.....	29
Firearms and Weapons.....	29
Retaliatory Harassment .....	30
Campus Safety and Security.....	30
Complaint Process.....	30
Confidentiality .....	30
Crime Reporting.....	31
Communicable Diseases .....	31
Family Educational Rights and Privacy Act (FERPA) .....	31
Grievance and Appellate Process.....	33
Intellectual Property .....	37
Reporting and Records Keeping .....	37
Searches by College Personnel and/or Law Enforcement.....	38
Students with Disabilities .....	38
Students with Disabilities –Testing Accommodations .....	38
<b>Programs of Study</b>	
General Education Goals.....	42
<b>Transfer Programs</b>	
Associate of Arts .....	46
Associate of Fine Arts	
Art .....	48
Music .....	50
Theatre.....	52
Musical Theatre .....	54
Associate of Arts in Teaching.....	56

Associate of Science	
Chemistry.....	58
Engineering.....	59
<b>Career and Technical Programs</b>	
Associate of Applied Science General Education Requirements.....	60
<b>Agriculture</b>	
Professional Certificate - Agribusiness .....	61
Associate of Applied Science - Agribusiness .....	62
Associate of Applied Science - Agronomy .....	63
Associate of Applied Science – Animal Science .....	64
Associate of Applied Science - Horticulture .....	65
<b>Automotive Technology</b>	
Professional Certificate – Automotive Technology.....	66
Associate of Applied Science – Automotive Technology .....	67
<b>Business Management</b>	
Skills Certificate – First Line Supervision in Office Support.....	68
Skills Certificate – First Line Supervision in Production .....	69
Skills Certificate – First Line Supervision in Retail .....	70
Associate of Applied Science – Business Management with Management Specialty.....	71
<b>Computer and Network Administration</b>	
Skills Certificate – Enterprise Server Administration .....	72
Skills Certificate – Information Security.....	73
Skills Certificate – Storage and Virtualization .....	74
Professional Certificate – IT Essentials Skills .....	75
Associate of Applied Science – Computer and Network Administration .....	76
<b>Computer Information Systems</b>	
Associate of Applied Science – CIS Accounting .....	77
Skills Certificate – Computer User Support.....	78
Skills Certificate – Programming .....	79
Associate of Applied Science – CIS Programming .....	80
Professional Certificate – Web Design Applications .....	81
Associate of Applied Science – CIS Web Development .....	82
<b>Construction Management Technology</b>	
Professional Certificate – Construction Management Technology.....	83
Associate of Applied Science – Construction Management Technology .....	84
<b>Criminal Justice</b>	
Associate of Applied Science – Criminal Justice.....	85
<b>Digital Media Communications</b>	
Skills Certificate – Digital Media Communications .....	86
Associate of Applied Science – Digital Media Communications.....	87
<b>Early Childhood Development</b>	
Skills Certificate – Early Childhood Development .....	88
Professional Certificate – Early Childhood Development.....	89
Associate of Applied Science – Early Childhood Development.....	90
<b>Engineering Design Technology</b>	
Skills Certificate – Architectural Design .....	91
Skills Certificate – Mechanical Design .....	92
Professional Certificate – Engineering Design Technology .....	93
Associate of Applied Science – Engineering Design Technology .....	94
<b>Fire Science</b>	
Professional Certificate – Fire Science .....	95
Associate of Applied Science – Fire Science .....	96

**Industrial Technology**

Skills Certificate – Electro-Mechanical Technology.....	97
Professional Certificate – Manufacturing Production Technician .....	98
Professional Certificate – Millwright Technician .....	99
Professional Certificate – Robotics and Automation Technician .....	100
Professional Certificate – Total Productive Maintenance.....	101
Associate of Applied Science – IT Electrical Maintenance.....	102

**Manufacturing Technology**

Skills Certificate – Machinist Level I .....	104
Professional Certificate – Machine Tool Technology .....	105
Associate of Applied Science – Precision Machining Technology .....	106
Skills Certificate – Structural Welding .....	107
Professional Certificate – Pipe Welding .....	108
Professional Certificate – Welding Technology.....	109
Associate of Applied Science – Welding Technology .....	110

**Marine Technology**

Associate of Applied Science – Marine Technology .....	111
--	-----

**Health Sciences Programs****Behavioral Health Support**

Associate of Applied Science –Behavioral Health Support .....	113
---	-----

**Dental Hygiene**

Associate of Applied Science – Dental Hygiene .....	114
---	-----

**Diagnostic Medical Sonography**

Associate of Applied Science – Diagnostic Medical Sonography.....	116
---	-----

**Health Care Specialist**

Skills Certificate – Nurse Aide.....	118
Professional Certificate – Nurse Aide .....	119
Associate of Applied Science – Nurse Aide .....	120
Skills Certificate – Pharmacy Technician .....	121
Professional Certificate – Pharmacy Technician.....	122
Associate of Applied Science – Pharmacy Technician .....	123

**Health Information Technology**

Professional Certificate – Medical Coding.....	124
Associate of Applied Science – Health Information Technology .....	125

**Medical Assisting**

Skills Certificate – Medical Assisting.....	128
Professional Certificate – Medical Assisting.....	129
Associate of Applied Science – Medical Assisting .....	130

**Medical Laboratory Technician**

Associate of Applied Science – Medical Laboratory Technician .....	131
--	-----

**Nursing**

Professional Certificate – Practical Nursing .....	133
Associate of Applied Science – Nursing .....	134

**Occupational Therapy Assistant**

Associate of Applied Science – Occupational Therapy Assistant .....	135
---	-----

**Radiologic Technology**

Associate of Applied Science – Radiologic Technology.....	137
---	-----

**Course Descriptions**

Accounting (ACCT) .....	139
Agriculture (AGRI).....	139
Art (ART).....	141
Autism (ATSM).....	144

Automotive (AUTO).....	144
Behavioral Health Support (BHS) .....	146
Biological Science (BIO) .....	147
Business Administration (BADM) .....	149
Business Management (BSMT) .....	149
Certified Production Technician (CPT).....	150
Chemistry (CHEM) .....	150
Communications (COMM).....	151
Computer Applications (CAPP).....	152
Computer Information Systems (CIS) .....	152
Construction Technology (CNST) .....	154
Criminal Justice (CJ).....	155
Dance (DANC) .....	156
Dental Hygiene (DH).....	157
Diagnostic Medical Sonography (DMS) .....	158
Early Childhood Development (ECD).....	161
Earth Science (EASC) .....	162
Economics (ECON).....	163
Education (EDUC) .....	163
Engineering Design Technology (EDT).....	165
English (ENGL) .....	166
Fire Science (FIRE) .....	167
French (FREN).....	168
Geography (GEOG) .....	168
German (GERM).....	168
Health (HLTH).....	168
Health Information Technology (HIT) .....	169
Health Occupations (HEOC) .....	170
History (HIST) .....	171
Industrial Technology (INDT) .....	172
Industrial Electrical Maintenance (IEM).....	172
Literature (LIT) .....	174
Machine Tool (MACH) .....	174
Marine Technology (MRN) .....	176
Mathematics (MATH) .....	177
Medical Assisting (MEA) .....	179
Medical Laboratory Technician (MLT).....	180
Music (MUS) .....	181
Networking (NET) .....	186
Nursing (NURS).....	188
Occupational Safety Health Administration (OSHA) .....	192
Occupational Therapy (OTA) .....	192
Office Administration (OADM) .....	194
Pharmacy Technology (PHRM) .....	194
Philosophy (PHIL).....	196
Physical Education – Activity (PEAC) .....	196
Physical Education – Professional (PPRO).....	196
Physical Science (PHYS).....	196
Political Science (POLS).....	197
Psychology (PSY) .....	197
Radiologic Technology (RAD).....	198
Service Education (SRVE).....	200

Sociology (SOC) .....	200
Spanish (SPAN).....	201
Steam Explorations (STEM).....	201
Student Success (SS).....	202
Theatre (THEA).....	202
TRiO Skills (TSKL).....	203
Web Development (WEB).....	204
Welding (WELD) .....	205
Wellness (WELL) .....	206

## Welcome to State Fair Community College

This catalog is designed to help with planning your educational program. It contains information about admission, enrollment and programs. Descriptions of all active courses that are part of the regular curriculum are included, as well as the courses required for general education credits for the Associate of Arts, Associate of Fine Arts, Associate of Arts in Teaching, Associate of Science, and Associate of Applied Science degrees awarded by the college and career courses that apply to the Professional Certificates and Skill Certificates. The catalog is a publication of the Academic Records and Registrar office at State Fair Community College. Every effort has been made to provide accurate information at the time of publication. This catalog is not intended to be a contract between students and State Fair Community College. The college reserves the right to make changes to the calendar, the curricula, the faculty, the fees, and to otherwise alter policies and regulations without notice.

## Governance

State Fair Community College is a publicly supported comprehensive community college dedicated to offering educational opportunities to the communities it serves. The taxing district is comprised of the school districts of Benton and Pettis counties and the R-VI School District of Cooper County, Missouri. The college's service area includes 14 counties: Benton, Camden, Carroll, Cole, Cooper, Henry, Hickory, Johnson, Miller, Moniteau, Morgan, Pettis, Saline, and St. Clair. The college is governed by a six-member Board of Trustees. Members are elected from the taxing district for six-year terms with two members elected each even-numbered year. The board meets each month. Meetings are open to the public. (*Referenced to Policy 0410*)

## Accreditation

SFCC has been affiliated with the North Central Association (NCA) of Colleges and Schools, 30 North LaSalle Street, Suite 2400, Chicago, Illinois, 60602-2504, (800) 621-7440, since it was founded. Correspondence status was granted in 1968. Full accreditation was granted in 1976 and reaffirmed in 1981, 1988, 1999, 2005, and 2019.

## Program Outcomes

Pursuant to Missouri HB 1606 (2018), information regarding program lengths, costs, and students' median time-to-degree, as well as employment and wage outcomes, can be found at <https://jobs.mo.gov/jobseeker/training-and-education>. Employment and wage outcomes are limited to completers found employed in Missouri. Students not found as employed may also be working out-of-state, self-employed, or enrolled in continuing education. Additional information on programs and program outcomes may be found by searching at <https://scorecard.mo.gov/Search>.

## Locations and Extended Sites

### Boonville

701 Third St.  
Boonville, MO 65233  
(660) 882-3090  
[www.sfccmo.edu/boonville](http://www.sfccmo.edu/boonville)

### Clinton

1701 N. 2nd St.  
Clinton, MO 64735  
(660) 383-1600  
[www.sfccmo.edu/clinton](http://www.sfccmo.edu/clinton)

### Eldon

113 S. Pine  
Eldon, MO 65026  
(573) 693-9013  
[www.sfccmo.edu/eldon](http://www.sfccmo.edu/eldon)

### Lake of the Ozarks

3797 Osage Beach Parkway  
Osage Beach, MO 65065  
(573) 348-0888  
[www.sfccmo.edu/lake](http://www.sfccmo.edu/lake)

### Sedalia

3201 W. 16th St.  
Sedalia, MO 65301  
(660) 530-5800  
[www.sfccmo.edu](http://www.sfccmo.edu)

### Warsaw

Warsaw High School  
20363 Lane of Champions  
Warsaw, MO 65355  
(660) 438-7149

### Whiteman Air Force Base

511 Spirit Blvd., Room 246  
Whiteman AFB, MO 65305  
(660) 563-3358  
[www.sfccmo.edu/wafb](http://www.sfccmo.edu/wafb)

## Fall 2022

August 11, 2022	Campus Closes at Noon
August 17, 2022	All Staff Meeting – Offices Closed 8:00AM – 11:00AM
August 22, 2022	Semester Starts
September 5, 2022	Labor Day – CLOSED
November 11, 2022	Veterans Day – CLOSED
November 23 – 25, 2022	Thanksgiving Break – CLOSED
December 12 – 16, 2022	Day and Evening Finals
December 16, 2022	Term Ends
December 21, 2022	Campus Closes at Noon until January 3, 2023

## Spring 2023

January 3, 2023	Campus Reopens after Christmas Break
January 12, 2023	All Staff Meeting – Offices Closed 8:00AM – 11:00AM
January 16, 2023	Martin Luther King Jr. Day – CLOSED
January 17, 2023	Semester Starts
February 20, 2023	President's Day – CLOSED
March 7, 2023	Professional Development Day – No Classes
March 20 – 24, 2023	Spring Break – CLOSED
April 7, 2023	Spring Holiday – CLOSED
May 15 – 19, 2023	Day and Evening Finals
May 19, 2023	Term Ends
May 19, 2023	Commencement

## Summer 2023

May 29, 2023	Memorial Day – CLOSED
June 6, 2023	Term Starts
June 19, 2023	Juneteenth - CLOSED
July 4, 2023	Independence Day – CLOSED
August 1-2, 2023	Day and Evening Finals
August 2, 2023	Term Ends

**Fall 2023**

August 10, 2023	Campus Closes at Noon
August 16, 2023	All Staff Meeting – Offices Closed 8:00AM – 11:00AM
August 21, 2023	Semester Starts
September 4, 2023	Labor Day – CLOSED
November 10, 2023	Veterans Day – CLOSED
November 22 – 24, 2023	Thanksgiving Break – CLOSED
December 11 – 15, 2023	Day and Evening Finals
Friday, December 15, 2023	Term Ends
December 20, 2023	Campus Closes at Noon until January 2, 2024

**Spring 2024**

January 2, 2024	Campus Reopens after Christmas Break
January 11, 2024	All Staff Meeting – Offices Closed 8:00AM – 11:00AM
January 15, 2024	Martin Luther King Jr. Day – CLOSED
January 16, 2024	Semester Starts
February 19, 2024	President's Day – CLOSED
March 5, 2024	Professional Development Day – No Classes
March 18 – 22, 2024	Spring Break – CLOSED
March 29, 2024	Spring Holiday – CLOSED
May 13 – 17, 2024	Day and Evening Finals
May 17, 2024	Term Ends
May 17, 2024	Commencement

**Summer 2024**

May 27, 2024	Memorial Day – CLOSED
June 4, 2024	Term Starts
June 19, 2024	Juneteenth – CLOSED
July 4, 2024	Independence Day – CLOSED
July 30-31, 2024	Day and Evening Finals
July 31, 2024	Term Ends



Dear Students, Prospective Students and Parents,

Thank you for including State Fair Community College (SFCC) in your educational plans. We look forward to visiting with you personally and helping you achieve your educational and career goals. Your success is our number one goal!

SFCC's mission is to provide relevant and responsive learning experiences that empower our students and communities to prosper. In today's world of rapidly changing technologies and global competition for skilled and well-educated employees, this mission statement is especially important. SFCC is here for you today and will be here for you as you continue to pursue a lifetime of learning.

SFCC's educational programs are designed to meet a variety of academic, career and personal educational goals for students of all ages and educational backgrounds. Programs and services are offered on the Sedalia campus, online, and at extended campus locations in Boonville, Clinton, Eldon, Lake of the Ozarks, Warsaw, and Whiteman Air Force Base.

Educational and training programs are provided in the following areas: general education and transfer—the Associate of Arts, Associate of Fine Arts, Associate of Science, and Associate of Arts in Teaching degrees; career programs in technical, vocational and professional fields—the Associate of Applied Science degrees, Professional Certificates and Skills Certificates; college-readiness classes; and a variety of noncredit courses, workshops and training that includes continuing education and personal enrichment classes; high school equivalency test preparation and ELL classes; and customized training for business and industry. Many programs and courses are offered on-ground or online; some are offered as a hybrid, which combines on-ground and online instruction.

SFCC also delivers dual credit courses to more than 900 high school juniors and seniors at 40 locations throughout the college's 14-county service area. Additionally, the State Fair Career and Technology Center (CTC) is located on the SFCC campus. The CTC offers training to high school juniors and seniors in eight technical program areas.

SFCC has a long history of knowing our students personally both in and out of the classroom; we like to call it the "personal touch." It is what you will experience at SFCC! All students quickly become a member of our SFCC extended family. Students are our first priority and serving our communities is our second priority. Every employee is committed to providing quality services and programs for all students. We look forward to serving you!

With warmest regards,

Joanna Anderson, Ed.D.  
President

## Board of Trustees



Randall D. Eaton, President



Patricia Wood, Vice President



Justin Hubbs, Treasurer



Nick La Strada, Secretary



Richard Parker, Trustee



Tim Carr, Trustee

## Administration

**Dr. Joanna Anderson**, President

**Dr. Brent Bates**, Vice President for Educational and Student Support Services

**Keith Acuff**, Vice President for Finance and Administration

**James Cunningham**, Dean of Academic Affairs

**Dr. Rhonda Hutton Gann**, Dean of Health Sciences

**Michael Rogg**, Dean of Technical Education and Workforce Innovation

**Daniel Avegalio**, Dean of Student and Academic Support Services

## Division Chairs

**Cara Barth-Fagan**, Fine and Performing Arts and Humanities and Social Sciences

**Amanda Stoecklein**, Business and Technology

**Kaley Hobbs**, Communication Studies and Wellness

**Kim Miller**, Math, Science and Agriculture

## Our Mission

State Fair Community College provides relevant and responsive learning experiences that empower our students and communities to prosper.

In support of this mission, SFCC will:

- ❖ Prepare our students to accomplish their goals in college transfer, career development, skill attainment, or life-long learning through exemplary education and support services.
- ❖ Deliver educational programs that are accessible, affordable, and applicable to current and future career pathways.
- ❖ Provide a college experience that is student-centered and responsive to the needs of a diverse student body.
- ❖ Anticipate workforce development needs with forward-thinking solutions and innovative technology that meet and exceed industry standards.
- ❖ Collaborate with education, government, and business partners to advance the prosperity of individuals and communities in our region.
- ❖ Strengthen and enrich the intellectual, economic, and cultural vitality of the communities we serve.

## Institutional Learning Outcomes

State Fair Community College students, regardless of their status or particular program of study, will, upon the completion of their general and specialized studies, be able to:

### Think critically

- Gather information by listening to and reading from varied sources
- Evaluate information as a guide to belief and action
- Apply information to the solving of problems and decision making
- Broaden awareness and formulate new ideas

### Communicate effectively

- Apply standard English in speaking and writing to clearly express ideas
- Use language with clarity, coherence and persuasiveness
- Recognize the role of nonverbal signals in communication

### Behave responsibly

- Demonstrate personal and professional integrity and ethics
- Understand the importance and benefits of service
- Exhibit responsible citizenship

### Value others

- Work cooperatively as part of a team
- Appreciate cultural diversity and its benefits
- Cultivate tolerance, civility and respect for others

### Develop life skills

- Manage time and finances effectively
- Value lifelong learning
- Utilize workforce readiness skills
- Incorporate principles of a healthy lifestyle into daily activities

### Utilize technology

- Demonstrate ability to adapt available technology to workplace or personal life

### Investigate world processes

- Distinguish qualities and characteristics of social, economic and political systems
- Appreciate the world's natural and physical processes
- Explore the roots and expressions of culture

## Policies and Regulations

When appropriate, entire policies and regulations are listed in the catalog; however, in some instances, not all are printed in their entirety.

For complete and up-to-date policies and regulations, visit [www.sfccmo.edu](http://www.sfccmo.edu).

### Non-Discrimination Notice

State Fair Community College (SFCC) does not discriminate on the basis of race, color, national origin, sex, disability, religion, sexual orientation, veteran status, or age in its programs and activities or in employment. Discrimination is adverse treatment of an individual based on one of the protected statuses listed above.

The following persons have been designated to handle inquiries or complaints regarding the nondiscrimination policy:

- Executive Director of Human Resources, (660) 596-7484
- Dean of Student and Academic Support Services, (660) 596-7393

Both offices are located in the Hopkins Student Services Center on SFCC's Sedalia campus at 3201 W. 16th St. Sedalia, MO 65301. Inquires also may be directed to the U.S Department of Education, Office of Civil Rights at [OCR.KansasCity@ed.gov](mailto:OCR.KansasCity@ed.gov). (Policy 2100)

### Accessibility and Accommodations

Interested persons may obtain information as to the existence and location of services, activities and facilities at State Fair Community College that are accessible to and usable by persons with disabilities by contacting the Disability Resource Center, Charles E. Yeater Learning Center, Room 159, SFCC, 3201 W. 16th Street, Sedalia, MO 65301, (660) 530-5832.

### SFCC is Tobacco and Smoke Free

State Fair Community College (SFCC) is committed to providing its students, employees and visitors a safe, clean and healthy learning and working environment. Acknowledging the hazards arising from tobacco use and smoking, environmental tobacco smoke, vaping, or second-hand smoke, tobacco use is only permitted within vehicles parked or driven on designated college parking areas and roads. The term "tobacco products" shall include, but not limited to; unlit cigarettes, smokeless tobacco, e-cigarettes, hookah and such other smoking-related substances and products as the College chooses to prohibit. The term "smoking" should include cigarettes, cigars, pipes, vaping or puffing. This policy applies to all faculty, staff, students, employees, contractors, performers and visitors. Persons using tobacco or otherwise smoking in private vehicles must dispose of the tobacco prior to exiting the vehicle and entering campus grounds. In all other areas, SFCC is designated a tobacco and smoke-free campus. Violation of this policy may result in sanctions ranging from verbal reminders to dismissal from campus and from employment. (Policy 5250)

## Admissions

### Admission Requirements

The college is committed to providing a safe learning-centered environment for its students, personnel, and visitors. In order to implement the board's commitment to the open enrollment policy, the college will apply the following provisions in the admission of students.

To be eligible for a degree or certificate or to receive financial aid from State Fair Community College, students must have graduated from a high school or home school program or obtained high school equivalency.

For more information about homeschool students, see Missouri Annotated Statute 167.031.

All college credit earned from a country other than the United States must be translated into English on a course by course basis. Translation information is available in the Academic Records and Registrar office.

Per Policy 2410 any student who knowingly submits records that are incorrect or contain false information may be subject to disciplinary action to the extent of being dismissed from the college. Any student who falsifies college records such as grade reports or other college documents may be subject to severe disciplinary action.

## Admission Student Types

### First-time freshmen

First-time freshmen are legal residents of the United States and are beyond the age of compulsory attendance or at least 17 years old and no longer enrolled in high school. First-time freshmen have never attended college since leaving secondary education. Individuals with only dual credit obtained during high school will be considered first-time freshmen. First-time freshmen may apply for admission by submitting the following:

- An application for admission using the SFCC website; and,
- Verification of high school completion or its equivalent with graduation date; and
- Official placement scores (i.e., ACT, ACCUPLACER) from within the past three years or the appropriate documentation to waive this requirement; and,
- If dual credit, official college transcripts from all colleges where credit was attempted or earned.

### International students

International students are individuals who are not legal residents of the United States and are beyond the age of compulsory attendance or are at least 18 years old and no longer enrolled in high school. International students desiring admission to the college must meet the federal government requirements through the Student Exchange and Visitor Information System (SEVIS) to be granted an I-20. New international students and exchange visitors must have paid the SEVIS I-901 fee to be eligible to enter the United States. International students may apply for admission by submitting all of the following:

- An application for admission using the SFCC website;
  - For new students applying from outside the U.S., the application must be received and admission requirements completed at least 60 days prior to the start of the next term.
  - For international students transferring from another college or university in the U.S., the application and admission requirements must be received at least 30 days prior to the start of the term.
- A processing fee of \$75 U.S. dollars for all international admissions. This fee must be received before application processing can begin; and,
- Official document that shows completion of a secondary education equivalent to graduation from a U.S. high school; and,
- Official copies of academic records for all course work completed in secondary schools, colleges and universities within and outside the United States must be submitted (faxed copies are acceptable for records outside the U.S.). All documents must have English translations and course by course evaluations including your full name on each document.
- A hand-signed affidavit of support from the student's sponsor verifying financial support is required. The statement must be in English and the student's name must be included in the statement. This letter must be dated within six months of the start of classes.
- Students whose first language is not English must document their English proficiency in one of the following ways:
  - A minimum TOEFL (Test of English as a Foreign Language) total score of 61
  - Academic credit of 15 hours or more from a U.S. college or university with a 2.25 cumulative grade point average.
  - A minimum ACCUPLACER ESL score of 60
  - Proof of satisfactory completion of the US Department of State, J-1 visa Student Exchange Program at an American high school, for at least one academic year.
- TOEFL (Test of English as a Foreign Language) scores that indicate a proficiency in English with a total score of 450 or higher (paper-based) or 61 or higher (computer-based), if from a non-English speaking country; and,
- Proof of health insurance coverage equivalent to or better than coverage offered through the college-affiliated International Student Health Insurance plan. The student will receive information about the International Student Insurance package from the Student Services Office if he or she does not have insurance. A student who does not have sufficient insurance and does not want to purchase coverage must sign a waiver prior to attending class.
- Immunization records demonstrating proof of vaccination for measles (rubeola), mumps, and rubella (MMR). We require prospective international students obtain a negative TB test within the U.S. TB skin tests are valid for 12 months. If test results have expired you must retest before enrolling.

Upon arrival into the community, international student applicants must see the international student advisor in the Student Services Office on the main campus in Sedalia and present the following before seeing an advisor to enroll in classes:

- Copy of the I-20 stamped by Immigration upon entry into the United States; and,
- I-94 documentation; and,
- Passport or approved substitute.

**Non-Degree seeking students**

Non-degree seeking students are taking classes for personal interest and do not wish to receive a degree or certification from SFCC. Non-degree seeking students are not eligible for financial aid and may apply for admission by submitting the following:

- An application for admission using the SFCC website; and,
- Official placement scores (i.e., ACT, ACCUPLACER) from within the past three years or the appropriate documentation to waive this requirement, if required for prerequisites.

**Returning students**

Returning students are students who previously applied and did not attend SFCC within two years of their application or have not attended SFCC for four consecutive regular semesters. Returning students may apply for admission by submitting the following:

- An application for admission using the SFCC website; and,
- Verification of high school completion or its equivalent with graduation date; and,
- Official placement scores (i.e., ACT, ACCUPLACER) from within the past three years or the appropriate documentation to waive this requirement; and,
- Official college transcripts from all colleges where credit was attempted or earned.

**Transfer students**

Transfer students are students who have attended another college prior to coming to SFCC. Any student regardless of credits who attends SFCC immediately following high school will be considered a first-time freshman. Transfer students may apply for admission by submitting the following:

- An application for admission using the SFCC website; and,
- Verification of high school completion or its equivalent with graduation date; and,
- Official placement scores (i.e., ACT, ACCUPLACER) from within the past three years or the appropriate documentation to waive this requirement; and,
- Official college transcripts from all colleges where credit was attempted or earned.

**Visiting students**

Visiting students are attending another institution of high education and are taking classes at SFCC for the purpose of transferring those credits back to their home institution. Visiting students are not eligible for financial aid and may apply for admission by submitting the following:

- An application for admission using the SFCC website; and,
- Official placement scores (i.e., ACT, ACCUPLACER) from within the past three years or the appropriate documentation to waive this requirement, if required for prerequisites.

**Dual credit**

Dual credit students earn high school and college credit at the same time. Student may be eligible for dual credit if they have completed their freshman year, have a cumulative GPA of 3.0 on a 4.0 scale (as required by the Missouri Department of Higher Education), and have been recommended by a high school counselor or principal. Juniors and seniors that have a 2.5 GPA may petition to get into a course with a written recommendation from the principal and counselor. Students are not eligible for financial aid while in high school. High school students seeking dual credit may apply for admission by submitting all of the following:

- A dual credit application for admission using the SFCC website; and,
- Official high school transcript; and,
- Official placement scores (i.e., ACT, ACCUPLACER) from within the past three years or the appropriate documentation to waive this requirement, if required for prerequisites.
- Written recommendation if applicable.

**Other Student Types****Dual enrollment**

Advanced credit may be earned by high school students who have completed their freshman year or scored in the 90th percentile of the cohort with which they took the ACT. Students must maintain a cumulative GPA of 3.0 on a 4.0 scale and have written approval from the high school counselor or principal. During a regular semester, an advanced credit student may enroll in a variable amount of credit depending upon the high school principal's or counselor's recommendation. Up to ten (10) semester hours may be taken during the summer session. Students are not eligible to receive financial aid. High school students seeking advanced credit may apply for admission by submitting all of the following:

- A dual credit application using the SFCC website; and,
- Official high school transcript; and,
- Official placement scores (i.e., ACT, ACCUPLACER) from within the past three years or the appropriate documentation to waive this requirement, if required for prerequisites.

### **Early college admission**

High school students seeking early college admission may enroll as full-time students in the final semester of their senior year. Permission for early entry must be secured from the high school counselor or principal. High school students seeking early college admission may apply for admission by submitting all of the following:

- An application for admission using the SFCC website; and,
- Official high school transcript; and,
- Official placement scores (i.e., ACT, ACCUPLACER) from within the past three years or the appropriate documentation to waive this requirement.

### **Noncitizen students who are in the United States legally**

Noncitizen students who reside in the United States and are authorized by the federal government to work in the USA are not subject to the admission requirements of an F1 International Student. Students with work permits may be admitted under regular admissions requirements using one of the regular admission applications. Those students with work permits are not eligible for financial aid and will be charged out-of-state tuition. Noncitizen students may apply for admission by submitting the following:

- An application for admission using the SFCC website; and,
- Verification of high school completion or its equivalent with graduation; and,
- Proof of legal status; and,
- Proof of English proficiency with satisfactory score on ACCUPLACER ESL; and,
- Official placement scores (i.e., ACT, ACCUPLACER) from within the past three years or the appropriate documentation to waive this requirement; and,
- If dual credit, official college transcripts from all colleges where credit was attempted or earned.

### **Persons with a felony conviction**

Persons who have been convicted of a felony may be admitted to the college. In addition to the regular admissions requirements, documentation of a certified criminal background check including any legal restrictions or requirements must be provided.

The college will follow the legal restrictions of the felony conviction. Certain felony convictions may require that a person not be allowed within specific areas, programs, or within a physical distance of the various events held or administered on the college's campus. In such cases, the student may be restricted to taking classes online or not being allowed to enter specific programs or career fields.

Prior to acceptance to the college, a registration hold will be placed on the student's record, and the student will need to provide a background check and meet with the Dean of Student and Academic Support Services who will ensure that the legal restrictions are followed.

Students in programs at correctional institutions may be excluded from this requirement.

### **Articulation credit**

Students seeking articulation credit may receive credit upon completion of high school courses in a program for which the college has an articulation agreement. Students must have a grade of a B or higher in articulated courses. Students seeking articulation may apply for admission by submitting all of the following:

- An application for admission using the SFCC website; and,
- Verification of high school completion with graduation.

### **Auditing a course**

Students may audit when they wish to review or preview a course. Audited classes do not count as part of the regular load for financial aid or veteran's certification nor as hours earned in determining satisfactory academic progress. Students must pay regular tuition and fees for audited classes.

Students seeking to audit a class who are not currently enrolled at SFCC must apply for admission by submitting all of the following:

- An application for admission using the SFCC website; and,
- Request to audit form available in the Academic Records and Registrar office.
- If required for prerequisite, official placement scores (i.e., ACT or ACCUPLACER) from within the past three years or official college transcripts to waive this requirement.

Active participation and preparation for class activities is essential to the overall learning environment for the whole class. Thus, students who are auditing a class but are not prepared for class interaction such as group activities may be requested to stop attending the class. Students who choose to audit a class are expected to participate in class learning activities and discussions even though grades will not be assessed. Being prepared for class interaction may include but is not limited to prior reading of textbook and other outside assignments used for classroom discussion or activities and in-class discussion and projects.

**In addition:**

- Students may not audit applied music classes, sciences that have a lab component, internships, student teaching, fieldwork or independent study courses. Allied Health classes are not eligible for auditing. (See list of excluded classes available from the Academic Records and Registrar office.)
- Online courses are not eligible to audit.
- Students can audit a course that has been previously completed on a graded basis.
- When enrollment limits are a concern, registered students will be given preference over students auditing the course.
- Students auditing a course are required to meet all prerequisite requirements for the course.
- Students auditing a course will be expected to have or to supply required items, materials or devices as other students in the course. Students are to have any required textbooks for the audited class.
- There is no limit to the number of courses that may be audited but the hours do count as part of a student's course load but not for the purpose of financial aid, loan deferments, athletic eligibility, or to meet the residency.
- Once enrolled in a course for regular credit, it cannot be changed to an audit after the published date on the academic calendar.
- A student may drop an audited course with a W by the published date on the academic calendar.
- Students **are not** required to complete assignments (except as listed above) or take exams and should not be in the classroom during exams if they are not participating.
- Students auditing courses are issued a final grade of Audit (AU). An AU grade prevents a course from being applied to a certificate or degree.
- Request to audit form is available in the Academic Records and Registrar office. (*Referenced to Regulation 2210*)

**Waiver of the placement testing requirements**

SFCC may waive all or part of the placement test if a student provides official documentation of one of the following:

- An SFCC course with:
  - A grade of C or higher with a MATH subject prefix.
  - A grade of C or higher with an ENGL subject prefix excluding ENGL 106.
- An official college transcript from a regionally accredited institution documenting the following coursework:
  - A grade of C or higher in any SFCC equivalent course with a MATH subject prefix.
  - A grade of C or higher in any SFCC equivalent course with an ENGL subject prefix excluding ENGL 106.
- An official ACCUPLACER score earned within the last three years.
- An official ACT score earned within the last three years.
- An official SAT score earned within the last three years. (*Referenced to Regulation 6410*)

## Enrollment

Enrollment information is available prior to the start of each enrollment period for new, current and returning students at [www.sfccmo.edu](http://www.sfccmo.edu).

## Residency

**Resident classification**

Student tuition and fees will be assessed according to the following provisions:

**Definitions**

**Student** – State Fair Community College considers a student to be any individual currently registered, enrolled or in attendance in a course, or program of the college and for whom the colleges maintains records.

**Adult student** – Any student who has attained the age of twenty-one (21) years.

**District** – The State Fair Community College district consisting of the following component school districts: Benton County R-I, Cole Camp; Benton County R-II, Lincoln; Benton County R-IX, Warsaw; Cooper County R-VI, Otterville; Pettis County R-IV, La Monte;

Pettis County R-V, Hughesville/Houstonia; Pettis County R-VI, Smithton; Pettis County R-VIII, Green Ridge; Pettis County R-XII, Dresden; and Sedalia 200.

**District resident** – A person whose residence is within the district.

**Domicile** – Presence within a state with an intent of making that state a permanent home for an indefinite period.

**Emancipated minor student** – Any student who has not attained the age of twenty-one (21) years but who is not under the care, custody, or support of an individual or individuals who have legal custody of the student.

**Noncitizen student** – A foreign national who holds a student visa or a person who is not a U.S. citizen and is taking courses with the college.

**Out of district Missouri resident** – A person whose residence is in Missouri, but not in the district.

**Nonresident** – A person whose residence is not within the state of Missouri.

**Residency or resident status** – That status which is achieved when sufficient proof of a domicile within a state is presented.

**Unemancipated minor student** – Any student who has not attained the age of twenty-one (21) years and who is under the care, custody, or support of the individual or individuals who have legal custody of the student.

### Evidence of Eligibility

#### Proof of domicile within the district for resident tuition purposes:

- Presence within the district for a minimum of the immediate past twelve (12) months and the proof of intent to make the district residence a permanent residence for the indefinite period of time; or
- Presence within the district for the purpose of retirement, full-time employment, professional practice, or conducting business full-time.

#### Criteria to demonstrate intent to make a permanent home within the district:

- Continuous presence within the district during periods in which the individual was not enrolled as a student; and,
- Property taxes paid for the previous year by the student, student's spouse, or student's parents or legal guardians at student's legal permanent address to the college district and one of the following school districts: Benton County R-I, Cole Camp; Benton County R-II, Lincoln; Benton County R-IX, Warsaw; Cooper County R-VI, Otterville; Pettis County R-IV, La Monte; Pettis County R-V, Hughesville/Houstonia; Pettis County R-VI, Smithton; Pettis County R-VIII, Green Ridge; Pettis County R-XII, Dresden; and Sedalia 200; or,
- Two (2) of the following documents: employment verification, proof of home ownership or intent to purchase a home, proof of lease, voter registration, auto registration, driver's license; or,
- Presence within the district upon marriage and a marriage certificate with spouse's proof of residency following the above guidelines.

No single criterion will be determinative of student's entitlement to resident status for tuition purposes; rather the determination will be based upon review of all applicable criteria. The burden of proof of eligibility for in-district resident status rests with the student.

### Resident status

#### Adult student

If a nonresident adult student presents sufficient proof of establishment of in-district domicile as set forth above, the student will be granted resident status at the first enrollment following establishment of in-district domicile.

#### Emancipated minor student

- The domicile of an emancipated minor student will be determined as if he/she were an adult student.
- A minor student may become emancipated through marriage, formal court action, or proof of alienation of the minor student.
  - Absence of the minor student from the in-district domicile of the individual having legal guardianship does not, without more evidence, constitute proof of emancipation.
  - A minor student will not be considered to be emancipated if a second party other than a spouse takes the minor student as an income deduction.

#### Members of the military forces

- Students will neither gain nor lose resident status solely as a result of military service.
- If a person is assigned to active duty, the individual as well as his/her spouse and unemancipated minor children will be considered district residents.

- If a member of the military forces is assigned under orders to attend the college as a full-time student, that person as well as his/her spouse and unemancipated minor children will be considered district residents.

#### **Noncitizen student**

- A noncitizen student must be legally authorized to work in the United States (i.e., work permit, permanent resident card) by federal authority before he/she will be considered for admission to the college.
  - This does not apply to those students on student (F1) visas.
  - Noncitizen students must meet all other residency requirements that apply to all students.
- Aliens and their dependents holding A or L visas may be granted district resident status if it is determined that they are designated individually as representatives of their government and that their education is not being funded by their government.

#### **Unemancipated minor student**

- The domicile of an unemancipated minor student is presumed to be that of the individual(s) having legal guardianship of the student.
- Once an unemancipated minor student has established district resident status under this rule, he/she may continue to qualify for resident status so long as he/she remains continuously enrolled, excluding summer terms at the college, even if the individual(s) having legal guardianship of the unemancipated minor student ceases to reside within the district.

#### **Offset of taxes against tuition**

##### **District taxes**

Non-district Missouri residents and nonresidents may offset against tuition any real estate taxes paid to the district for the previous year.

##### **State income taxes**

Nonresidents of Missouri who pay Missouri income tax may offset against the nonresident fee an amount equal to the Missouri income tax paid the previous year. Regardless of the amount of income taxes paid to the state, the student will be required to pay the non-district Missouri resident rate fee.

Minor students may offset taxes paid by the individual(s) who has legal guardianship of those students as provided in the above paragraphs.

To benefit from these provisions, a student must furnish satisfactory evidence that the taxes have been paid.

#### **Change of resident status**

In order to change resident status, students must submit a written request as well as sufficient evidence to substantiate the change to the Director of Admissions and Outreach. The Director of Admissions and Outreach will review the evidence and determine whether the request is justified. Students may appeal the director's decision through the Student Grievance and Appellate Process as described in Regulation 2160. Tuition rates will not be changed mid-semester but will take effect for the next semester in which the student enrolls. Refunds will not be given for previous semesters.

It is the duty of the student to report the correct address on the application for admission and to inform the Academic Records and Registrar office of all address changes. Students shall observe the following guidelines:

1. It is the duty of each student to pay applicable tuition and fees based upon his/her resident status.
2. If there is any possibility that according to the resident classification the student should pay higher or lower tuition and fees, it is the duty of the student to raise the question at the time of enrollment.
3. A student must present a government-issued photo ID to make a change in his/her address.
4. Any student or graduate who wishes to make a change in his/her legal name must present appropriate legal documentation (i.e., a court order, a Social Security card, a government-issued photo ID).

A student who intentionally gives false or inaccurate information on a Certificate of Residency or who fails to inform the Academic Records and Registrar office of a change of address that alters his/her resident status will be subject to the following penalties:

1. The student may be dismissed from the college; and,
2. The student's record will not be released or certified until he/she has paid the appropriate tuition and fees based on the change in residency. (*Regulation 2220*)

## Tuition, Fees and Books

Three things determine the tuition and fees a student pays each semester: residency (permanent legal address), the number of credit hours enrolled, and the courses selected. Tuition and fees are subject to change depending upon financial exigency; however, the college's goal is to keep costs as affordable as possible.

Tuition is established by the college's Board of Trustees and is charged per credit hour. A detailed current tuition and fees listing is available online at [www.sfccmo.edu](http://www.sfccmo.edu) or from the college. Tuition and fees are subject to changes and additions.

### Primetime Learner discount of tuition waiver

Missouri residents age 65 or older may enroll in college credit classes with no tuition if space is available in that course. Students receiving the discount will not be given college credit and shall satisfy all course prerequisites. If college credit is desired, the student must enroll in the course and pay full tuition and fees. The student is responsible for any fees, supplies or books. (*Regulation 3361*)

### Military tuition

The following individuals shall be charged the in-state rate, or otherwise considered a resident, for tuition purposes:

- A participant using educational assistance under either chapter 30 (Montgomery GI Bill® Active Duty Program), chapter 31 (Vocational Rehabilitation and Employment), or chapter 33 (Post-9/11 GI Bill®), of title 38, United States Code, who lives in the State of Missouri while attending a school located in the State of Missouri (regardless of his/her formal State of residence) and enrolls in the school within three years of discharge from a period of active duty service of 90 days or more.
- Anyone using transferred Post-9/11 GI Bill® benefits (38 U.S.C. § 3319) who lives in the State of Missouri while attending a school located in the State of Missouri (regardless of his/her formal State of residence) and enrolls in the school within three years of the transferor's discharge from a period of active duty service of 90 days or more.
- A spouse or child using benefits under the Marine Gunnery Sergeant John David Fry Scholarship (38U.S.C. § 3311(b)(9)) who lives in the State of Missouri while attending a school located in the State of Missouri (regardless of his/her formal State of residence) and enrolls in the school within three years of the Service member's death in the line of duty following a period of active duty service of 90 days or more.
- Anyone described above while he or she remains continuously enrolled (other than during regularly scheduled breaks between courses, semesters, or terms) at the same school. The person so described must have enrolled in the school prior to the expiration of the three year period following discharge or death described above and must be using educational benefits under chapter 30, chapter 31, or chapter 33, of title 38, United States Code.

### Book costs

Most courses will require purchasing or renting textbooks. Also, workbooks, study guides, and other extras may need to be purchased.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at <https://www.benefits.va.gov/gibill>.

### Refund of tuition, fees and laboratory fees

Tuition and fees will be credited to the student's account in full if the student officially withdraws before the published obligation date.

Students are able to drop all but their last class online through the student portal, mySFCC, throughout the semester until the designated last day to drop a class for its part of term. A complete withdrawal form located in mySFCC must be completed to drop the last class.

All requests for refunds or credits after the refund period has ended must be made in writing. If eligible for a refund, a check will be mailed to the student; however, deductions may be made from the refund for any financial obligation due to the college. Students may make refund appeals through the Student Grievance and Appellate Process as described in Regulation 2160.

## Financial Aid

The college offers a comprehensive financial aid program funded by federal and state agencies and private organizations. The aid programs include scholarships, grants, loans, and part-time employment. All students receiving federal financial aid must enroll in courses that lead to the completion of the specific degree or major they are pursuing.

**Applying for financial aid**

For federal grants, student loans and the work-study program, the Free Application for Federal Student Aid (FAFSA) needs to be completed and all required documentation submitted by the following dates to ensure funds are in place before the student's entry semester starts.

- Fall – July 1
- Spring – November 1
- Summer – April 1

To be considered for most state programs, the FAFSA must be completed by the priority date of Feb. 1 for the upcoming fall semester. The SFCC online scholarship application needs to be completed by March 1 for the upcoming aid year.

For more information on applying for financial aid, refer to the SFCC website or visit the Financial Aid office or any extended campus location. (*Referenced to Regulations 2710, 2720, 2730, 2740, and 2760*)

**Department of Veterans Affairs**

State Fair Community College programs are approved under Title 38 of the U.S. Code to be certified for the following VA Education Benefits through the Financial Aid office:

- Chapter 30 – Montgomery GI Bill®-Active Duty
- Chapter 31 – VA Vocational Rehabilitation
- Chapter 33 – Post 9/11
- Chapter 35 – Dependent or Spouse
- 1606 – Montgomery GI Bill®- National Guard/Reserves

All other programs are managed through the Business office. All persons seeking VA Education Benefits are required to comply with SFCC's satisfactory academic progress standards. (*Referenced to Regulation 2750*)

**Academic Forgiveness**

Academic forgiveness is designed to help students overcome previously earned poor grades in order to meet new career and/or educational goals and/or to meet graduation requirements. State Fair Community College permits students to petition for academic forgiveness of course work completed at least five years prior to the petition date. Approval of the petition permits a new start without the handicap of the prior academic record. Due to the calculation for academic standing it is recommended that a student submit a petition for academic forgiveness before the next term commences or after grades for the previous term have been posted.

A student eligible for consideration may apply for academic forgiveness by contacting their navigator and completing the petition for submission to the Dean of Student and Academic Support Services using the following guidelines:

1. The following conditions must be met:
  - a. State Fair Community College course work subject to the petition must have been taken five or more calendar years prior to the date of the petition.
  - b. There must have been a break in enrollment at State Fair Community College of at least two calendar years after the term for which the petition is filed.
  - c. The request must be submitted within the first calendar year upon returning to State Fair Community College.
2. When invoking academic forgiveness, a student may designate not more than two (2) academic terms (fall, spring, or summer) to be forgiven in his/her academic record. Only terms completed prior to returning to State Fair Community College may be designated.
3. The student must have completed at least one semester and earned a minimum of 12 credit hours with a C or higher in each course and a State Fair Community College GPA of 2.0 or higher for all courses completed since returning to the college.
4. A petition for academic forgiveness will not be considered if a degree has been earned from State Fair Community College subsequent to the semester(s) in question.
5. All "forgiven" course work will continue to appear on the transcript but will not be included in the student's State Fair Community College cumulative GPA, nor shall any course in the term be counted toward a degree granted by State Fair Community College.
6. A student's academic standing will be reevaluated per Regulation 2530.
7. Academic forgiveness will be granted only once.
8. This procedure refers to State Fair Community College only. A student transferring from or to another institution will have to follow the other institution's procedure.

9. Grades that have been forgiven will not be exempt from academic progress related to Financial Aid and Veteran's Administration educational benefits or for athletic eligibility. Academic forgiveness does not apply to these processes.
10. Students who have been granted academic forgiveness will not be considered for graduation with honors. (*Regulation 2531*)

## Attendance

Class attendance is essential for student success and students are expected to attend all class sessions and report punctually. Specific attendance requirements are up to individual instructors and will be listed in the instructor's course syllabi.

Students who are absent due to representation of the college in some official capacity, such as athletic travel or participation in a class or club-sponsored activity, will be allowed to make up course work upon presentation of verifying evidence.

All excused absences must be initiated by the student, appropriate club sponsor or coach. (*Regulation 2310*)

## Developmental Courses

Developmental courses are numbered below 100 and focus on skills that need to be developed to prepare a student to enter college-level courses. Students are placed in these courses as a result of placement testing and a grade of C or higher must be earned to advance to the next course in the sequence. Developmental courses cannot be applied to a degree or certificate.

## Credit for Prior Learning (CPL)

Students planning to transfer should check with the receiving institution regarding their policy for acceptance of transfer of credit for prior learning (CPL). College credit may be awarded by State Fair Community College for credit for prior learning under the following conditions:

1. All courses for which credit for prior learning is awarded must have equivalent courses in the college curriculum. Partial credit will not be awarded.
2. Academic credit will be awarded only for those courses directly applicable to the student's certificate or degree program.
3. Students must submit the required documentation as defined by each department.
4. General Education course credit will be awarded for credit by examination but not for non-traditional education.
5. Students must have been granted admission to the college prior to the evaluation of credits and have successfully completed at least one credit hour at the institution.
6. A maximum of 21 hours may be earned and applied for work experience. The total of all credit for prior learning (CPL) cannot exceed 30 hours earned and applied toward a degree.
7. The Registrar is responsible for final approval or disapproval.

### Credit by examination

College Level Examination Program (CLEP) and DANTES Subject Standardized Tests (DSST) provide opportunity to earn academic credit for knowledge equivalent to that learned in the college classroom. These tests include general and subject examinations. SFCC uses ACE recommended scores for granting credit. SFCC does not accept CLEP or DSST credit to fulfill requirements for laboratory science or public speaking courses. Students must have a score report sent to the college to be evaluated for college credit.

### Advanced placement

SFCC grants credit for Advanced Placement test scores of 3 or higher. Students must have a score report sent to the college to be evaluated for college credit.

### Departmental exams

Credit may be awarded for departmental exams. Each academic department determines which courses have a test-out option and the minimum score to receive credit. An application to request a departmental exam must be submitted to the dean of that division. If the requirements to receive credit have been met, the paperwork will be forwarded to the Academic Records and Registrar Office to be evaluated for college credit. To receive the credit, students must enroll in the course(s) and pay tuition and fees for the course(s). Normal tuition and fees apply to any credits awarded.

### Credit for armed service experience

Advanced placement credit may be granted for educational training earned while in the armed services, according to the American Council of Education (ACE) recommendations. Students must submit an armed services transcript and/or a DD 214 to be evaluated for college credit. In some cases (e.g. the course (s) were taken many years ago), an armed services transcript may not be

available. Students will need to contact the Registrar's Office to determine what other documents are acceptable to be evaluated for college credit.

### Credit for work experience

Credit may be awarded for work experience and may only be applied to courses in the student's program of study. Specific requirements may vary by academic department. However, for any credit to be awarded, students must satisfactorily complete a significant capstone project, such as a major paper reflecting how lessons learned in that work experience can be applied to the discipline. An application to request credit for work experience (with documentation) must be submitted to the dean of that division. If the requirements to receive credit have been met, the paperwork will be forwarded to the Academic Records and Registrar Office to be evaluated for college credit. To receive the credit, students must enroll in the course(s) and pay appropriate tuition and fees. Normal tuition and fees apply to any credits awarded.

### Credit for other nontraditional education

In some cases, credit in the student's program of study may be awarded for workshops or industry certifications that are equivalent to college classes. For credit to be received, the workshops or industry certifications must meet the following criteria:

The learning was sponsored by a recognized, national or state organization; and, an application to request credit must be submitted to the Dean of that division with validated documentation stating the course, knowledge, skills, competencies, credit/clock hours completed and/or certification. If the requirements to receive credit have been met, the paperwork will be forwarded to the Academic Records and Registrar Office to be evaluated for college credit. (*Regulation 6440*)

## Degree Program Statue of Limitations

The college maintains three active catalogs. These catalogs become effective in the fall semester.

A student may use for degree requirements the catalog in effect at the time of initial enrollment or any subsequent catalog provided:

1. The catalog is still active;
2. The student enrolled in classes and earned academic credit during the time the chosen catalog was in effect;
3. Only one catalog is used to determine curriculum. (To use a subsequent catalog a student must submit a Change of Program/Catalog Request form.)

Students who are either inactive or in readmit status may only use the catalog in effect from the time of their re-entry. A student may not continue in the original program of study if the program was discontinued prior to re-entry. (*Regulation 2511*)

## Grade Reports

Final grades are available online a few days after the end of each semester or session. Questions about grades should be directed to the instructor first. Grade appeals must be initiated using the college's Student Grievance and Appellate Process within 30 days of the awarding of the original grade as described in Regulation 2160. (*Regulation 2510*)

## Grading Systems

Credits are granted on a semester-hour basis. The following symbols and points are used:

A	Excellent (4 grade points per semester hour)	CR	Credit (no grade points)
B	Good (3 grade points per semester hour)	W	Withdrawn
C	Average (2 grade points per semester hour)	WM	Withdrawn Military
D	Below average (1 grade point per semester hour)	AU	Audit
F	Failing (no grade points)	I	Incomplete
P	Passing (no grade points)		

### Pass/Fail

Pass/Fail credit is granted for some credit courses. No more than six hours of pass/fail credit may be applied to a degree or certificate. Course numbers below 100 do not apply towards a degree or certificate. This regulation does not apply to some Health Sciences programs that use Pass/Fail for required courses.

### Withdrawn

A grade of W will be assigned for any course dropped after the 100 percent refund period. Student initiated drops may not be submitted after the published drop dates.

**Incomplete**

A grade of I may be given by an instructor to indicate incomplete work or absence from a scheduled final examination if other work is of passing quality.

A grade of I may only be assigned under the following conditions:

1. An internship is extending past the end of the term.
2. A major paper/project and/or the final exam are the only graded items not completed by the end of the term.
3. Required civic or military duty. The student must make the request through the instructor with the approval of the course dean as defined in Regulation 2180.
4. In extraordinary circumstances relating to physical or mental health difficulties that prevent a student from completing, the instructor and the student both agree that the material missed may be made up. Students who qualify as pregnant/parenting under Title IX may require an Incomplete as a result of medically necessary, pregnancy-related absences. Faculty should consult with the Disability Resource Center and/or the Dean of Student and Academic Support Services for guidance. (See also Regulation 2112)

In all cases where a grade of I is submitted, the faculty member and the student should complete a written agreement which clearly states the remaining obligations to the course and a deadline for submission. This documentation will need to be provided to the appropriate Dean when the change of grade is requested. For fall semesters, the change of grade request must be made by the last day of the following spring semester. For spring and summer semesters, the change of grade must be submitted by the last day of the following fall semester. After this time, if no change of grade is submitted, the grade of I will automatically become an F.

**Change of grade**

A change of grade can only be processed using the Change of Grade form located on the Faculty Tab in the Faculty Toolbox Channel. Change of Grades sent via email will not be accepted. The form must have original faculty member and dean signature. In the case of an already awarded grade of B, C, D, or F written justification will need to accompany the Change of Grade form. All change of grades must be completed and sent to the appropriate dean before the last class day of the following semester or term.

A Change of Grade may be submitted under the following conditions:

1. Calculation error
2. Entry error
3. Completion of course work when an I was assigned
4. Original grade was not submitted
5. Grade appeal

Submission of additional work after the course is graded is not a legitimate reason for a grade change.

**Grade appeals**

Grade appeals must be initiated using the Grievance and Appellate Process as outlined in Regulation 2160 within 30 days of the awarding of the original grade (*Regulation 2510*)

---

## Graduation Requirements

---

Students should apply one semester before the completion of the certificate or degree. All students graduating in the fall, spring and summer terms participating in the May commencement must apply by the date published in the Academic Calendar. The college does not automatically award certificates or degrees except under certain circumstances as outlined below.

**Requirements for a degree**

The college offers five degrees, the Associate of Arts, the Associate of Fine Arts, the Associate of Arts in Teaching, the Associate of Science and the Associate of Applied Science. To qualify for a degree the following must be met:

1. Complete the curriculum required for the specific degree program.
2. Complete at SFCC a minimum of 15 credit hours toward the degree.
3. Maintain a minimum cumulative and institutional grade point average of 2.00. Associate of Arts in Teaching students are required to have at least a 2.75 cumulative grade point average, a 3.0 grade point average in all content area courses and complete all sections of the MoGEA with the required scores for each section.
4. Complete an application for graduation after enrolling for the final semester.
5. Order commencement regalia from the Campus Store and attend commencement. Attendance at commencement is strongly encouraged and should only be missed due to unusual or extenuating circumstances.

### Missouri Higher Education Civics Achievement Examination

In accordance with Missouri Senate Bill 807 (section 170.013.1), "any student entering a public institution of higher education for the first time after July 2019 who is pursuing an associate's or bachelor's degree from such institution shall successfully pass an examination on the provisions and principles of American civics with a score of seventy percent or greater as a condition of graduation from such institution". HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1). Visit: [Missouri Senate Bill 807](#) for more information.

### Requirements for a certificate

The college offers several certificates in various career areas. To qualify for a certificate the following must be met:

1. Complete the curriculum required for the specific certificate program.
2. Complete at SFCC a minimum of 15 credit hours toward the certificate. If the certificate is less than 15 hours, then residency is the total number of hours of the certificate.
3. Maintain a minimum institutional and cumulative grade point average of 2.00.
4. Complete an application for graduation after enrolling for the final semester.
5. Order commencement regalia from the Campus Store and attend commencement. Attendance at commencement is strongly encouraged and should only be missed due to unusual or extenuating circumstances.

### Automatic awarding of degrees

At the beginning of the summer term, the Academic Records and Registrar Office will identify students that were admitted and have an enrolled status in at least one term within the past 3 academic years earning greater than 0 credits who have completed all the requirements for a program of study on their record but have not applied for graduation. If all requirements are met the student will be notified and the certificate or degree will be automatically awarded at the end of the term unless the student opts-out by the date indicated. Students receiving financial aid should check with the financial aid office before deciding to accept the automatic award.

### Qualifications for automatic degree award

1. Student has not already earned the certificate or degree from another institution using credits earned at SFCC.
2. Student was not already identified as an auto-award student and has neither declined the award nor has an undeliverable address.
3. Student is not in readmit status.
4. Student's program of study is active on the MDHE inventory.
5. Student's catalog is less than 6 years old.
6. Student has met all course, non-course, residency and GPA requirements.

Diplomas will not be ordered and mailed without completion of an application for graduation prior to the end of the term that the degree is awarded.

### Requirements for honors graduation

Academic honors may be awarded at commencement to Associate of Arts, Associate of Fine Arts, Associate of Arts in Teaching, Associate of Science and Associate of Applied Science degree graduates, based upon courses completed and cumulative grade point average at the end of the fall term. Final designation of honors will be based upon cumulative grade point average at the conclusion of the summer term. Honors are awarded at two levels based upon all courses completed:

1. Graduation with honors for a 3.60 to 3.84 cumulative grade point average, and
2. Graduation with highest honors for a 3.85 to 4.00 cumulative grade point average.

Professional certificate completers may graduate with distinction with a cumulative grade point average of 3.60 or higher.

Students who have been awarded Academic Forgiveness are not eligible for academic honors.

### Requirements for participation in the commencement ceremony

To participate in commencement events, students must have either completed all certificate or degree requirements before the commencement date or be enrolled in sufficient hours (at the time the graduation list is finalized) to complete requirements at the end of the summer term. This includes any non-course requirements if applicable.

Only students with a cumulative grade point average of at least a 2.00 at the end of the fall semester (or upon the successful completion of all coursework) may participate.

### Awarding of certificates and degrees

Certificates and degrees are awarded at the end of the fall, spring and summer terms. The last date of the term is used as the award date. Students have until the first day of the term following their application term to complete all course requirements, all non-course requirements and submit any outstanding documents required for the certificate or degree. Students who have not

completed all requirements and submitted all documents will be moved to the next term. The application for graduation is valid until the end of the summer term each year. If all graduation requirements are not met, the student must reapply.

### Diplomas

Diplomas are mailed to fall and spring graduates at the end of June and at the end of August for summer graduates after a final degree audit is conducted. (*Regulation 2511*)

## Honors List

State Fair Community College recognizes student academic achievement. At the end of the fall, spring and summer semesters, a President's, Dean's and Trustees' list is published.

To qualify for the President's list, a student must earn a semester grade point average (GPA) of 4.0 in 12 or more SFCC GPA hours. To qualify for the Dean's list, a student must earn a semester grade point average (GPA) of 3.5 – 3.99 in 12 or more SFCC GPA hours.

To qualify for the Trustees' list, a student must earn a semester grade point average (GPA) of 3.6 – 4.0 in 6 or more SFCC GPA hours.

The published lists are determined by a student's standing two weeks after the fall, spring and summer semesters end.

SFCC GPA hours do not include hours for transfer coursework and SFCC hours with grades of AU, CR, P and W. (*Regulation 2511*)

## Military Withdrawal

This regulation follows the guidance of the Missouri Statute, Chapter 41, Military Forces, Section 41.948 that covers rules for Reserve and National Guard being called to active military service whether voluntarily or involuntarily prior to completion of the semester/term at SFCC. Also, this regulation covers military issues involving active duty members and their responsibilities to their unit in a normal day-to-day operation where their work/deployment/special duty requirements may conflict with their SFCC class(es).

In most cases Reserve and National Guard members will be placed on orders when called to active duty. Reserve and National Guard members should produce a copy of their orders when requesting action of this regulation.

Active duty members may also be issued orders when required to complete their assigned jobs. For example, an active duty member who is being deployed from their home station active duty location would normally receive orders. Active duty members should also produce a copy of their orders when requesting action based on this regulation. Active duty members that have conflicting military duty with SFCC classes and are not on orders should work with the Director of Student Success and Retention.

If a military member falls into one of the areas above prior to the completion of the semester/term or similar grading period, that person shall be eligible for either:

1. A complete refund of all tuition and incidental fees charged for enrollment at that institution for that semester, or similar grading period; or
2. The awarding of a grade of "incomplete" pursuant to this section.

### OPTION (1) WITHDRAWAL FROM ONE OR MORE CURRENTLY ENROLLED COURSES

Students may choose to withdraw from one or more currently enrolled courses. Student must complete a military withdrawal form, indicate Option 1, and attach a copy of their military orders.

In such cases, a student may request either:

1. That the official transcript indicates the courses that he or she has withdrawn and the reason for the withdrawal. Students choosing this option will have their tuition and fee charges and their student financial aid eligibility calculated effective with their official withdrawal date. They will receive a grade of WM.
2. That one or more courses for that semester be expunged from the student's academic record. Students taking this option will receive a complete refund of all tuition and incidental fees paid by the student for enrollment for that semester. Students who have received federal, state or institutionally funded financial aid must return all aid disbursed to them for the semester.

**OPTION (2) RECEIVE AN INCOMPLETE FOR ONE OR MORE CURRENTLY ENROLLED COURSES**

Students may choose to receive an incomplete in one or more currently enrolled courses. Students must complete a military withdrawal form, indicate option 2 and attach a copy of their military orders.

In such cases, the student must:

Complete all course work for the semester to the satisfaction of the instructor(s) and the institution. The grade of incomplete shall be converted to a failing grade if the person does not apply to complete the course work within six months of discharge, release from active military service or return to the home station. In the event the person cannot comply for medical reasons related to the active military service, such person may apply to complete the course work within three months of the end of the period of convalescence. Students choosing this option will not receive a refund of tuition and incidental fees paid by the student for enrollment for that semester. The student will have one complete semester after the return from duty or deployment to complete the remaining course work. The current instructor(s) will submit to the Registrar copies of the course syllabus, attendance, course work and itemized grade calculation. These documents will be retained in the Academic Records and Registrar office with a copy of the military withdrawal form.

**Financial Aid**

The Financial Aid office will be contacted and informed of the student's status and official withdrawal date and may make adjustments according to federal, state of Missouri and institutional guidelines.

**Scholarships**

If such person has been awarded a scholarship to be used to pursue an academic program in any public higher education institution in Missouri and such person is unable to complete the academic term for which the scholarship is granted, that person shall be awarded that scholarship at any subsequent academic term, provided that the person returns to the academic program at the same institution at the beginning of the next academic term after the completion of active military service. If a student has any scholarships or other aid or award, he or she should contact the issuer to determine whether it will be applicable on his or her return and whether he or she will need to satisfy any other conditions. (*Regulation 2180*)

**Repeating Courses**

Students can repeat any course regardless of the previous grade earned. The original course(s) and grade(s) earned as well as the repeated course(s) and grade(s) earned will be printed on the SFCC transcript. Regardless of how many times the course is repeated, the highest (best) grade is used to calculate the SFCC institutional GPA (SFCC courses) and cumulative GPA (all grades earned at all colleges). The repeated course with the lowest grade will be annotated with an E on the SFCC transcript indicating that the grade is excluded from the GPA calculation. The repeated course with the highest grade will be annotated with an I on the SFCC transcript indicating that the grade is included in the GPA calculation.

The following courses may be taken multiple times and do not count as repeats. Check with the Registrar if you have questions about repeating these courses.

- PEAC 124
- PEAC 125
- WELL 118
- WELL 119
- THEA 115
- Internships
- Problems classes

Students should be cautioned that repeating courses may impact financial aid received. Always check on the repeat policy of a funding source (including federal grants and loans, scholarships, A+, WIA, TRA, Vocational Rehabilitation, employer reimbursement, etc.) before enrolling to repeat a course. In some instances, students could be responsible for the payment of the tuition and fees of the repeated course.

**Schedule Changes****Adding a course**

Students may add a course through the student portal or with their navigator up to the official last day to add as published on the Academic Dates and Deadlines. Enrollment will close at 11:59 p.m. on the published date for all courses in the part of term.

After enrollment closes for the part of term, students may add a course by appealing to the appropriate dean by filling out the Late Registration Request Form (available on the college portal) up to the published late registration request date for the part of term. If permission is granted, the approval will be sent to the Academic Records and Registrar office to add the student to the course. Instructors will not be able to add a student to their course without dean approval after the published date and any special permissions required remain in effect. Class attendance guidelines remain in effect if a student enrolls late for a course.

Students may not add an interim (minimester) course after the published date on the Academic Dates and Deadlines or enroll in more than one course during an interim (minimester) part of term.

### **Dropping a course**

Students may drop a course through the student portal or with their navigator before the semester starts or until the official last day to drop as published on the Academic Dates and Deadlines. Approval is not required to drop a course. Students who have a hold on their account should send student name, ID number, CRN, course number/title, and instructor name to add-drop@sfccmo.edu using their SFCC email account. Notifying an instructor or navigator is not enough to officially drop a course.

### **Withdrawing from all courses**

Students may drop all courses before the semester starts or until the last day to drop as published on the Academic Dates and Deadlines by completing the Student Withdrawal form through the college portal. Students will not be permitted to withdraw from their last course or withdraw from all courses without completing this form. Notifying an instructor or navigator is not enough to officially drop all courses. A hold will not prevent a student from submitting this request.

Courses dropped before or during the 100% refund period will not appear on a transcript. Courses dropped after the 100% refund period will appear on a transcript with a grade of W.

Students are encouraged to contact their instructor, navigator and the financial aid office before dropping a course or withdrawing from all courses. Dropping a course or withdrawing from all courses may result in a financial obligation to the college and jeopardize insurance, financial aid, scholarships, and athletic participation eligibility. Failure to notify the college of an intent to drop a course or withdraw from all courses may result in a grade of F for the course(s) rather than a W. (*Regulation 6470*)

## **Student Academic Progress**

Students of the college are expected to make satisfactory academic progress. Students admitted to SFCC as transfer students must also meet satisfactory academic progress requirements. Both grades earned and hours attempted and completed are considered. The calculation of grade point average (GPA) will include all course credit hours for which the student is assessed grades of A, B, C, D or F.

Students must maintain satisfactory academic progress as defined below to remain in academic good standing:

- Upon completion of 12-23.9 semester GPA hours – a minimum 1.50 cumulative grade point average.
- Upon completion of 24-35.9 semester GPA hours – a minimum 1.75 cumulative grade point average.
- Upon completion of 36-47.9 semester GPA hours – a minimum of 1.85 cumulative grade point average.
- Upon completion of 48 and above semester GPA hours – a minimum of 2.0 cumulative grade point average.

### **Academic review**

1. If a student has not maintained satisfactory academic progress, the student will be placed on academic probation and be limited to enrolling in a total of 12 or less credit hours for the fall and spring semesters and total of 6 or less credit hours for the summer semester. Any student placed on academic probation who is currently enrolled in more than 12 credit hours for the fall or spring semester and more than 6 credit hours for the summer semester will be notified by the Student Success Center and advised to work with his or her navigator to adjust the course schedule accordingly by a specific date. If a student's schedule is not adjusted accordingly by the specified date, the Academic Records and Registrar office will adjust the student's schedule to keep in compliance with Regulation 2530.
2. A student is allowed to enroll in courses for three consecutive semesters while on academic probation. When a student reaches the second and third consecutive semesters on academic probation, a Student Success Plan hold will be placed on the student's account to alert the student and the navigator of the academic probation status. This hold will prevent the student from enrolling in courses during the subsequent semester. The student will be required to meet with the navigator to create an Academic Success Plan, enroll in courses and discuss resources of the college in an effort to assist the student in performing in a more satisfactory manner.
3. A student will be placed on the first academic suspension after the third consecutive semester of academic probation if the student has not met the satisfactory academic progress requirements. The first academic suspension will result in the

student being suspended from enrolling in courses at the college for one regular semester from the end of the semester suspended.

4. A student will be placed on a second academic suspension if the student has not achieved satisfactory academic progress as defined above. A second academic suspension will result in the student being suspended from enrolling in courses at the college for two regular semesters from the end of the semester suspended. A student will be placed on a third academic suspension if the student has not achieved satisfactory academic progress as defined above. A third academic suspension may result in the student being dismissed from the college. Based on the suspension, a timeline for returning as a student is charted below:

One Semester Suspension	
Semester Suspended	Return Semester
Fall	Following Summer
Spring	Following Spring
Summer	Following Spring
One Year Suspension	
Semester Suspended	Return Semester
Fall	Spring of the following Academic Year
Spring	Summer of the following Academic Year
Summer	Summer of the following Academic Year

5. Re-admission to the college after a student has been suspended is contingent upon the student serving the required suspension time period and the ability to demonstrate that the conditions that precipitated the unsatisfactory progress have been corrected.
6. A student requesting to return to the college to take courses after serving the required time period for an academic suspension must submit a suspension appeal as defined in Regulation 2160 to the Dean of Student and Academic Support Services. Appeals must be completed at least five (5) business days prior to the start of the part of term for which the student is requesting to return. A student has the option to submit an appeal before the required time period for suspension has been completed.
7. If the appeal is approved by the dean, the student's academic standing will be changed to continuing probation, the student will be limited to enrolling in a total of 6 or less credit hours for the fall or spring semester and a total of 3 or less credit hours for the summer semester, and the student will be required to follow the terms and conditions on the approval letter from the dean. A Student Success Plan hold will be placed on the student's account to alert the student and the navigator of the student's approval for continuing probation. The student will be required to meet with the navigator to prepare an Academic Success Plan and determine courses to enroll in based on the appeal approval letter from the dean.
8. Students who have been approved for continuing probation after returning from an academic suspension will be required to submit an appeal to the dean for approval to enroll in courses each semester showing satisfactory academic progress is being made by earning a 2.0 semester GPA or higher in the previous semester. Students on continuing probation who do not earn at least a 2.0 GPA or higher in the previous semester will be placed on the subsequent academic suspension or be academically dismissed.
9. When a student is placed on academic probation or academic suspension, that academic standing remains in effect for the duration of the semester.
10. A student's academic standing is calculated at the end of each semester. When a student has met the satisfactory academic progress requirements and is back in academic good standing, the Student Success Plan hold will be removed, and the student will then be able to enroll in courses without restrictions.
11. The academic standing for a student who has been granted academic forgiveness as defined in Regulation 2531, will be exempt for the semester(s) approved. The student's current academic standing will be re-evaluated and updated to reflect this change at the time of the approval. (*Regulation 2530*)

## Student Classification

Students are classified as either freshmen or sophomores. Freshmen have earned less than 30 semester hours. Sophomores have earned 30 semester hours or more.

## Student Course Load

Full-time students generally take from 12 to 19 semester hours each 16-week semester of the regular academic year and six to 10 semester hours during the eight-week summer session.

Part-time students generally take 11 semester hours or less each 16-week semester of the regular academic year and five semester hours or less during the eight-week summer session.

Students requesting to exceed the maximum 19 semester hours during the 16-week semesters and 10 semester hours during the eight-week summer session must submit a student overload request to the Academic Records and Registrar office. Consideration of the request is given to graduating students and those with a 3.0 or higher cumulative GPA.

## Transcripts

An academic record (transcript) is permanently maintained for each student who enrolls at State Fair Community College.

SFCC uses the National Student Clearinghouse as our online transcript services provider. We do not accept transcript requests in person, by telephone, email, fax, or in writing.

Delivery options are: mail, hold for pickup, electronic PDF direct to recipient.

We do not offer same-day, fax or rush options. It is important to check with your recipient to determine which delivery options are acceptable. A transcript is not considered official if the seal is broken.

Current students or former students who still have access to mySFCC may also request a transcript online in mySFCC > Student > I need to ... Request Official Transcript or Check Status.

Any financial obligation due to the college prevents the release of transcripts.

### Cost for an official transcript

A detailed current tuition and fees listing is available online at [www.sfccmo.edu](http://www.sfccmo.edu) or from the college. You can pay with a credit or debit card.

### Unofficial transcripts

State Fair Community College does not issue unofficial transcripts. A student who still has access to his or her mySFCC account may print an unofficial transcript under Academics.

## Transfer Credit

Students who have attended other colleges (including dual-credit courses taken while in high school) must request that an official transcript be sent to State Fair Community College (SFCC). The transcript can be mailed to the SFCC Academic Records and Registrar Office; it can be brought to the Student Services Office at the Sedalia campus or to an extended campus site in a sealed envelope from the sending college's Academic Records and Registrar office; or, it can be faxed from the sending college Registrar's office with a cover sheet to the SFCC Academic Records and Registrar Office. Any other form of transcript will be considered "unofficial" and will not be accepted for transfer credit. Official transcripts are required to transcript credit.

Credit is evaluated and transcribed from colleges that are accredited by a national or regional association (e.g. North Central Association of Colleges and Schools). For a list of these associations, contact the SFCC Academic Records and Registrar Office. Courses completed from colleges that are not accredited by one of the national or regional associations may be considered for college credit. Courses descriptions or course syllabi must be submitted to the appropriate course dean for review. The dean's decision is final and may be made in consultation with the department.

All grades (except withdrawals) are transcribed. When a student repeats an equivalent transfer course at SFCC, the higher of the two grades will be used to calculate hours earned and the GPA. The repeated course and grade remain on the SFCC transcript.

Transfer courses for which SFCC has an equivalent course will be transcribed with the SFCC subject code, course number and credit hours. If there is no equivalent SFCC course, the transfer course will be coded on the student's transcript to indicate which

degree requirement it fulfills. Developmental courses (numbered below 100) are transcribed and if there is not a direct equivalency to an SFCC developmental course it will be transcribed using DVLP. Grades earned in developmental courses are included in a student's GPA beginning Fall 2008. Developmental courses do not apply to a certificate or degree. Any student that has received a Bachelor's degree or higher and is returning to SFCC to pursue an AAS, AAT, AS degree, or certificate will only have the courses that apply to that major transcribed. If a student changes his or her major, a request must be made to have transfer credit reevaluated. Any student who is classified as a visiting student or a personal interest student will only have prerequisite courses transcribed. Equivalency guides for colleges that SFCC accepts transfer credit from can be found on the SFCC website.

Official transcripts are evaluated and transfer credit is entered by the Registrar on the student's SFCC transcript. This process usually occurs within a few weeks of receiving the transcript. Students transferring credit over 15 years old may be asked to provide course descriptions or course syllabi to determine SFCC course equivalency. Some departments have time limits for transfer courses. A course may transfer as an SFCC equivalent but because of its age may not be applicable to a specific program of study. Students can view the credit that has been accepted on the college portal.

If a student does not agree with the evaluation of a course, he/she may submit a catalog course description or course syllabus from the sending college to have the course re-evaluated by the Registrar. If the appeal regarding the disputed course is not resolved, the student may appeal utilizing the Grievance and Appellate Process as outlined in Regulation 2160. Credit earned by credit-by-exam (CLEP, DSST or AP) and from non-traditional sources (armed services experience, standardized occupational testing or department exams) are reviewed by the Registrar and credit may be granted if applicable.

Transfer credit is awarded for courses completed at colleges and universities outside the United States that are accredited or approved by the Ministry of Education (or other appropriate government agency) of the country in which they are located. The transcripts must be translated into English and evaluated course-by-course by one of the recognized transcript evaluation services. A student may be asked to provide course descriptions or course syllabi to determine course equivalencies. Contact the Academic Records and Registrar Office for information.

Any irregularities in transcripts that are received will be checked and if a document is determined to not be authentic, admission will be denied and registration at SFCC will be cancelled.

All college transcripts must be on file prior to enrollment. A registration hold will be placed on the student's record until all official transcripts have been submitted. (*Regulation 6610*)

---

## Prohibited Conduct and Disciplinary Action

---

State Fair Community College (SFCC) students are expected to abide by the following code of conduct. Generally, college jurisdiction and disciplinary measures shall be limited to student conduct which occurs on college premises. However, SFCC reserves the right to take jurisdiction over student conduct occurring off college premises if such conduct adversely affects the college community and/or the pursuit of its objectives. It is the responsibility of the student to be familiar with all college policies, rules, and regulations.

Any misconduct, including but not limited to those standards listed below, may be subject to discipline. A student in violation of the code of conduct will be notified by email to their student email address prior to a mandatory meeting with the Campus Judicial Officer. Students accused of code of conduct violations will have the opportunity to present witnesses and/or evidence for consideration by the Campus Judicial Officer before a decision is rendered. Listed below are code of conduct standards by which all SFCC students are expected to adhere:

1. Students must refrain from conduct that interferes with the academic freedom or the freedom of speech of any student, employee, or other member of the college community, and refrain from obstructive or disruptive conduct at any college-sanctioned activity.
2. Students are prohibited from conduct which materially or substantially alters or disrupts the educational process, college operations, or other related campus activities.
3. Students should not engage in acts of dishonesty, including but not limited to the following:
  - a. Cheating, plagiarism, or other forms of academic dishonesty.
  - b. Furnishing false information to any college official, faculty member, or office.
  - c. Forgery, alteration, or misuse of any college document, record, or instrument of identification.
  - d. Submission of a single paper to fulfill requirements in two courses without prior approval of the instructor in both courses.
  - e. Tampering with the election of any college recognized student organization.

4. No student will endanger the physical or mental health of any person on campus, or substantially limit or deny a person's ability to participate in, or benefit from, the college's programs and activities. Examples include, but are not limited to, physical abuse, verbal abuse, threats, intimidation, bullying, harassment, and coercion, in accordance with Policy 2130.
5. Students are prohibited from stalking another student, employee or other member of the campus community. Stalking is defined as purposely and repeatedly engaging in unwanted contact that causes alarm to another person when it is reasonable in that person's situation to have been alarmed by the conduct.
6. Students are expected to comply with the college's policies regarding discrimination, harassment and sexual misconduct (Regulation 2029 and Regulation 2130).
7. No student shall smoke, vape, puff or use tobacco products on campus except in vehicles, in accordance with Policy 5250.
8. Students are expected to respect the property of others and of the college. Attempted or actual theft of damage or vandalism of property of the college, or property of a member of the campus community, or other personal or other public or private property while engaged in a college-sponsored program or activity is prohibited.
9. Students or Student Organizations will not participate in any form of hazing. Hazing is defined as an act which endangers the mental or physical health or safety of a student, or which destroys or removes public or private property, for the purpose of initiation, admission into, affiliation with, or as a condition for continued membership in, a group or organization.
10. Students will be expected to identify themselves and comply with directions of college officials or law enforcement officers acting in performance of their duties.
11. Students will not be allowed possession, duplication or use of keys to any college premises or entry to, or use of, college premises without proper authorization.
12. Students will be expected to abide by all federal, state, or local laws on college premises or at college-sponsored or supervised activities.
13. Students may not at any time use, possess, or distribute any alcohol, narcotics, or other controlled substances on campus. Possession of prescription medication is allowed where expressly permitted by law. Students may not be publicly intoxicated while on campus or at a college-sponsored or supervised activity.
14. Students will not be allowed to possess or use weapons on college property. Weapons include any object or substance designed to inflict a wound, cause injury or incapacitate, including but not limited to all explosives, firearms, pellet guns, switchblade knives, knives with blades more than four inches in length, and any inappropriate use of chemicals. Commissioned peace officers attending classes will be permitted to carry their firearms if so required by their department regulations.
15. Participation in a campus demonstration which disrupts the normal operations of the college and infringes on the rights of other members of the college community; leading or inciting others to disrupt scheduled and/or normal activities within any campus building or area; and intentional obstruction which unreasonably interferes with freedom of movement, either pedestrian or vehicular, on campus, will not be permitted.
16. Students will be expected to be respectful to the college and community by not participating in conduct which is disorderly, lewd, or indecent; breach of peace, or aiding, abetting, or procuring another person to breach the peace on college premises or at functions sponsored by or participated in by, the college.
17. Students must not violate the college's Information Technology Appropriate Use policies, as outlined in Policy and Regulation 8200.
18. Students are expected to comply and participate in disciplinary, grievance or appellate processes: including but not limited to:
  - a. Comply with the summons of a Campus Judicial Officer or other college official.
  - b. Avoid falsification, distortion, or misrepresentation of information before a Campus Judicial Officer or Campus Issue Resolution Committee (CIRC).
  - c. Avoid disruption or interference with the orderly conduct of a campus judicial investigation or proceeding.
  - d. Entering a complaint or grievance process against another member of the campus community with ill intent or knowingly without cause.
  - e. Avoid tampering with or harassing any member of a campus judicial proceeding prior to, or during the course of a campus judicial investigation or proceeding.
  - f. Failing to comply with the sanction(s) imposed under the student code of conduct.
19. Students shall not engage in any and all forms of retaliation towards a complainant, witness, or other participant in a campus judicial investigation or proceeding will not be tolerated.
20. Students may be charged with a violation of this code if other incidents that the Campus Judicial Officer, at his or her discretion, may find to have disrupted the campus or infringed on the rights of others.

### Law violations and code of conduct

If a student is charged only with an off-campus violation of federal, state, or local laws, but not with any other violation of the student code of conduct, disciplinary action may be taken and sanctions may be imposed, at the discretion of the Campus Judicial Officer, if the violation involves grave misconduct demonstrating flagrant disregard for the college community, or if the impact of such conduct creates a material or substantial disruption or interference with the educational process, college operations, or safety and well-being of other members of the college community.

College disciplinary proceedings may be instituted against a student charged with violation of a law which is also a violation of this student code of conduct. For example, if both violations result from the same factual situation, without regard to the pendency of civil litigation in court or criminal arrest and prosecution, the student may also face campus discipline. Proceedings under this student code of conduct may be carried out prior to, simultaneously with, or following civil or criminal proceedings off-campus.

When a student is charged by federal, state or local authorities with a violation of law, the college will not request or agree to special consideration for that individual because of his or her status as a student.

### Sanctions for code of conduct violations

The following sanctions may be imposed upon any member of the campus community found to have violated the student code of conduct:

- **Warning:** A notice in writing to the student that the student is violating or has violated college regulations.
- **Probation:** A written reprimand for violation of specified regulations, which is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found to be violating any college regulation(s) during the probationary period.
- **Loss of Privileges:** Denial of specified campus privileges for a designated period of time.
- **Fines:** Previously established and published fines may be imposed. No official college transcript will be issued and registration for future courses or activities will be restricted until all disciplinary fines are paid in full.
- **Restitution:** Compensation for loss, damage, or injury. This may take the form of appropriate service and/or monetary or material replacement.
- **Discretionary Sanctions or Remedial Measures:** Work assignments, service to the college, counseling, mandatory training, or other related discretionary assignments (such assignments must have prior approval by the Campus Judicial Officer).
- **No Contact Order:** A student may be restricted from contacting another student, employee or member of the campus community through verbal, written or electronic means, for a specified period of time or until otherwise rescinded by the Campus Judicial Officer.
- **Residence Hall Suspension:** Separation of the student from the residence halls for a definite period of time, after which the student is eligible to return. Conditions for readmission may be specified.
- **Residence Hall Expulsion:** Permanent separation of the student from the residence halls.
- **College Suspension:** Separation of the student from the college for a definite period of time, after which the student is eligible to return. Conditions for readmission may be specified.
  - When the Campus Judicial Officer or CIRC recommends that a student be suspended, the date at which the student subsequently may apply for readmission will be specified. In no case will such a date be later than one calendar year after the effective date of the suspension. Appropriate notation will be made on the student's academic record. The suspended individual is responsible for initiating application for readmission. Such application will be reviewed by the Campus Judicial Officer who, at his/her discretion, may approve/deny the application.
  - Once the decision has been made to suspend a student, the suspension may begin immediately or, become effective at the beginning of the following semester. Should suspension be thus deferred, the student will be on disciplinary probation until the effective date of suspension.
- **Expulsion –** Permanent severance from the college. Expulsion is the most serious disciplinary action which may be imposed and may be recommended by the Campus Judicial Officer or the CIRC.
  - An expelled individual will not be permitted to enroll unless the Campus Judicial Officer approves re-admittance, and no request for re-admittance will be considered until at least two (2) calendar years after the date of expulsion; and
  - A notation of the expulsion will be made on the individual's permanent record (including the date of expulsion).

More than one of the sanctions listed above may be imposed for any single violation. Once a determination of responsibility has been reached for a violation of the code of conduct, the Campus Judicial Officer will notify the student(s) by email regarding the outcome and sanctions imposed, if applicable. Options available to the student(s) for appealing the determination or sanctions will be included (See Policy and Regulation 2160). All appeals must be filed within ten (10) business days of the original decision.

In certain circumstances, the Campus Judicial Officer, or a designee, may impose an interim college or residence hall suspension prior to the CIRC hearing.

1. Interim suspension may be imposed only:
  - a. to ensure the safety and well-being of members of the campus community or preservation of college property;
  - b. to ensure the student's own physical or emotional safety and well-being; or
  - c. if the student poses a definite threat of disruption of or interference with the normal operations of the college.
2. Summary Suspension – Suspension of five (5) school days which takes effect immediately without a hearing upon the order of the Campus Judicial Officer. This action may be taken under either of two conditions:
  - a. If the student repeatedly fails to comply with the request of the Campus Judicial Officer to meet or discuss allegations that the student has violated the student code of conduct; or
  - b. If, pending a CIRC hearing, the Campus Judicial Officer believes that the continued presence of the student would seriously disrupt the operation of the college or constitute a danger to the health, safety, or welfare of the student or other persons, or to the records or other physical property of the college.

Other than expulsion, disciplinary sanctions shall not be made part of the student's permanent academic record, but shall become part of the student's confidential record. The amount of time records for which confidential records are kept will be according to college policy and state law.

### **Code of conduct violations by campus groups of organizations**

The following sanctions may be imposed upon campus groups or organizations which are found to be responsible for violating the code of conduct:

1. Any sanctions listed above.
2. Deactivation: Loss of privileges, including college recognition, for a specified period of time. (*Regulation 2610*)

## **Academic Honesty Policy**

State Fair Community College values the academic integrity of its curriculum and the commitment of its faculty and students to uphold it in all teaching and learning processes. The following acts of academic dishonesty will not be tolerated:

- Plagiarizing any information,
- Cheating in any form, or
- Falsifying any information provided to the college.

See Regulation 6480 for penalties imposed. (*Policy 6480*)

## **Children in the Classroom**

Students and staff members should not bring children to the classroom.

## **Children in the Library**

The Donald C. Proctor Library supports the education of children by allowing staff, students and community patrons to borrow materials from the children's collection. To provide a safe environment for visiting children, the following guidelines and procedures are in effect:

1. A parent/caregiver must supervise children under the age of 12 at all times.
2. Child safety and appropriate behavior is the responsibility of the parent or caregiver.
3. Parents/caregivers are financially responsible for damaged materials/property.
4. Library staff may ask noncompliant patrons, including children and caregivers, to leave the library for unacceptable behavior. Forms of unacceptable behavior include but are not limited to:
  - a. Offensive/obscene language
  - b. Sexual harassment
  - c. Behavior deemed disruptive to the learning environment
  - d. Behavior that places the safety of the child or another patron at risk

Signage detailing parent/caregiver responsibilities is displayed at each entrance and in the children's collection area. (*Taken from Policy 6510*)

## Copyright

The Board of Trustees intends that all members of the college community adhere to the provisions of the United States Copyright Law (Title 17, U.S. Code). Copyrighted materials may be used in the preparation, delivery, or learning environment only after obtaining permission or determining that the doctrine of “Fair Use” is applicable. This also includes the following information sharing methods: document sharing, scanning, uploading, downloading, digital replication, photocopying, and other forms of information sharing.

Employees and students are expected to be familiar with the “Fair Use” doctrine outlined in the Copyright Act of 1976, the Digital Millennium Copyright Act of 1998 and the Technology, Education, and Copyright Harmonization Act of 2002, (TEACH, H.R. 2215) and other statutes governing the use of copyrighted works. Full text versions of these laws are available via Internet and the Copyright channel located on the Library tab in mySFCC.

Students, faculty, staff, and visitors who willfully disregard the copyright policy do so at their own risk, assume all liability, and may face disciplinary action. (*Policy 6240*)

## Drug, Alcohol and Tobacco Products

The following policy is adopted in compliance with the Drug-Free Schools and Communities Act Amendments of 1989.

### Illegal drugs

The unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited while in a college vehicle, on college property, at a college-related activity, or on the job while an employee of State Fair Community College (SFCC). The term “controlled substance” refers to any illegal substance, to the illegal use of alcohol, and/or to controlled prescriptive pharmaceutical products.

### Alcohol

The use or possession of alcohol is prohibited while in a college vehicle, on college property, at a college-related activity, or on the job while an employee of SFCC.

### Tobacco products

Tobacco is only permitted within vehicles parked or driven on designated college parking areas and roads.

### Other smoking devices

The use of other non-tobacco smoking, vaping or puffing devices, including e-cigarettes, hookahs, etc., is permitted only within vehicles parked or driven on designated college parking areas and roads. (*Policy 2830*)

## Firearms and Weapons

The presence of firearms and weapons poses a substantial risk of serious harm to college students, staff and community members. Therefore, possession of firearms and weapons is prohibited on college premises at all times except for law enforcement officials in the line of duty. As used in this policy, the phrase college premises include all college buildings and grounds. This prohibition also extends to the sites of college activities, whether or not those activities are conducted on college property. Instructors teaching firearms or hunter safety classes must report the need for students and/or instructors to carry firearms or weapons for instructional purposes to the Vice President for Educational and Student Support Services at least 24 hours prior to the first day of class.

Individuals found to be in violation of this policy will be dealt with severely. Students will be disciplined up to and including expulsion. Law enforcement officials will be notified, and the individual violating this policy will be directed to leave the college premises. Non-students and non-employees violating this policy will be barred from all college premises and college activities for a period of one year. Subsequent violations by the same individual will result in a permanent bar from college premises and college activities. Employees who violate this policy will be subject to discipline up to and including dismissal.

Student participation in college-sanctioned gun safety courses, student military or ROTC courses, or other college-sponsored firearm related events does not constitute a violation of this policy, provided the student does not carry a firearm or other weapon into any building, college transportation vehicle, or onto the premises of any other activity sponsored or sanctioned by college officials. In addition, persons passing through college property for purposes of dropping off or picking up a student do not violate this policy if they possess a lawful permitted weapon in the vehicle during this time. (*Regulation 1332*)

## Retaliatory Harassment

Retaliation against an individual because the individual has filed a complaint of discrimination on, reported such behavior, participated in an investigation involving such behavior, or otherwise engaged in any activity protected college policy or regulation or by the laws enforced by the Department of Education, Office of Civil Rights, is prohibited. These laws ban discrimination on the basis of race, color, national origin, sex, disability, and age in the college's programs, activities and in employment. In addition, the college prohibits discrimination based on religion, sexual orientation and veteran status. Retaliatory harassment is defined as intentional action taken by an accused individual or allied third party, absent legitimate nondiscriminatory purposes, that harms an individual as reprisal for filing or participating in a civil rights grievance proceeding.

Students or community members or allied third parties who participate in retaliatory harassment may face discipline up to and including expulsion from campus. Employees who retaliate may face discipline up to and including termination.

## Campus Safety and Security

State Fair Community College (SFCC) shall develop and maintain procedures and protocols in accordance with the Crime Awareness and Security Act of 1990, as amended in 1992. A full report on campus crime, Annual Safety Report, shall be completed and published annually and distributed to all new students and employees. The data included in the Annual Safety Report will include crime occurring within areas designated as SFCC Clery geography and reported to Campus Safety & Security personnel, as well as local law enforcement. In addition, this report shall be made available in its entirety in the Student Services Office and on the SFCC website.

Additionally, SFCC shall develop and implement procedures for educating the campus community on crime prevention, and providing appropriate resources and support for individuals who have been impacted by crime. (Policy 2820)

The Sedalia campus has automated lights for the parking areas. They are on full brightness from dusk until one-half hour after evening classes end when classes are in session. In addition, walk lights, parking lot lights and interior and exterior building lights operate from dusk to dawn at most SFCC locations.

A Campus Resource Deputy is available on the Sedalia campus and can be reached by calling (660) 596-7110. The deputy is an employee of the Pettis County Sheriff's Department and has full arrest authority while on campus. The deputy will respond to reports of safety issues and concerns and has the authority to call in additional law enforcement or emergency personnel as needed. When the deputy is not on duty, a staff member will answer the safety phone and respond. At extended campus locations the site director or coordinator is responsible for security and should be contacted in the case of a perceived threat to security.

## Complaint Process

State Fair Community College recognizes problems between students, employees or other stakeholders may occasionally occur. With the exception of issues dealing with harassment or discrimination, which by law must be dealt with immediately through a formal process defined in policy and regulation, the college attempts to resolve problems quickly and at the most appropriate level and complaints concerning the Board of Trustees' actions or operations only, which will be handled by the Office of the President.

When an issue cannot be resolved through informal efforts, the student, employee or other stakeholder may choose to submit a formal complaint. A formal complaint must be made in writing to the Dean of Student and Academic Support Services. The dean will take the following actions:

- Document the complaint
- Contact appropriate parties
- Follow up to ensure resolution of complaint
- Contact complainant to confirm resolution

A summary report of complaints will be prepared annually in May and will be analyzed and discussed by the Executive Leadership Team, who may recommend improvements or other necessary actions based on the analysis of the data presented. (*Regulation 1380*)

## Confidentiality

Students with disabilities are protected from discrimination under Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Information maintained by the Disability Resource Center about students are considered educational

records and are governed by the Family Educational Rights and Privacy Act (FERPA) (20 U.S.C. § 1232g; 34 CFR Part 99). Although certain medical records are exempt from FERPA's definition of "education records," that exemption does not apply to students with disabilities. Accordingly, confidential records are protected in accordance with FERPA regulations with the purpose of providing appropriate academic accommodation or adaptation of curriculum.

The Disability Resource Center strives to treat all personal information with the strictest confidentiality. It is the policy of the office to hold confidential all communications, observations, and information made by and/or between students, faculty, administration, and staff whenever possible.

The Disability Resource Center may release information to college officials on a "need to know" basis. The need to know must be based on compelling and legitimate educational reasons for the information disclosure. FERPA and the Americans with Disabilities Act, 1990 (ADA), do not allow faculty access to disability related information. (*Policy 2115*)

## Crime Reporting

State Fair Community College (SFCC) shall develop and maintain procedures and protocols in accordance with the Crime Awareness and Security Act of 1990, as amended in 1992. A full report on campus crime, Annual Safety Report, shall be completed and published annually and distributed to all new students and employees. The data included in the Annual Safety Report will include crime occurring within areas designated as SFCC Clery geography and reported to Campus Safety & Security personnel, as well as local law enforcement. In addition, this report shall be made available in its entirety in the Student Services Office and on the SFCC website.

Additionally, SFCC shall develop and implement procedures for educating the campus community on crime prevention, and providing appropriate resources and support for individuals who have been impacted by crime. (*Policy 2820*)

## Communicable Diseases

A student shall not attend classes or other college-related activities if the student (1) has, or has been exposed to, an acute (short duration) or chronic (long duration) communicable disease, and (2) is liable to transmit the communicable disease. The student may not return to class or college activities unless the student has demonstrated to the Dean of Student and Academic Support Services, based upon medical evidence, that the student:

1. No longer has the disease;
2. Is not in the communicable or infectious stage of an acute disease; or
3. Has a communicable disease that poses little risk of transmission in the classroom environment with reasonable precautions.

The college may require any student suspected of having a communicable disease to be examined by a health care provider and may exclude the student from classes, in accordance with the procedures authorized by this policy, so long as there is a substantial risk of transmission of the disease in the college environment.

A student who has a communicable disease, and who is permitted to attend classes, may be required to do so under specified conditions. Failure to adhere to the conditions will result in the student being excluded from classes. A student who has a communicable disease and who is not permitted to attend classes or participate in college-related activities will be provided instruction in an alternative educational setting in accordance with college policy on Equal Educational Opportunity.

Students with communicable diseases have a right to privacy and confidentiality and should report the health issue with the Dean of Student and Academic Support Services. Only staff members who have a legitimate educational reason to know the identity and condition of such students will be informed. Willful or negligent disclosure of confidential information about a student's medical condition by staff members will be cause for disciplinary action. (*Policy 2810*)

## Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act of 1974 helps protect the privacy of your education records. The act provides for the right to inspect and review education records, the right to seek to amend those records, and the right to limit disclosure of information from the records.

The intent of the legislation is to protect your rights and to ensure the privacy and accuracy of education records. The act applies to all institutions that are recipients of federal aid administered by the Secretary of Education.

**What rights does FERPA afford you with respect to your education records?**

1. The right to inspect and review your education records within 45 days of the day the college receives a request for access.
  - a. You should submit to the Registrar a written request that identifies the record(s) you wish to inspect. The Registrar will make arrangements for access and notify you of the time and place where the records may be inspected. If the records are not maintained in the Academic Records and Registrar office, the Registrar will advise you of the correct official to whom the request should be addressed.
2. The right to request an amendment to your education records that you believe are inaccurate or misleading.
3. You may ask the college to amend a record you believe is inaccurate or misleading. You should write the Registrar, clearly identify the part of the record you want changed, and specify why it is inaccurate or misleading. If the college decides not to amend the record as requested, the college will notify you and advise you of your right to a hearing regarding the request for amendment. Additional information regarding the hearing will be provided when you are notified of a hearing.
4. The right to consent to disclosures of personally identifiable information contained in your education records, except to the extent that FERPA authorizes disclosure without consent.
  - a. One exception that permits disclosure without consent is disclosure to school officials with legitimate educational interests. A school official is a person employed by the college in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the college has contracted (such as an attorney, auditor, or collection agent); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.
5. The right to file a complaint with the U.S. Department of Education concerning alleged failures by the college to comply with the requirements of FERPA.
6. The name and address of the office that administers FERPA is: Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20202-4605

**Who is protected under FERPA?**

Students who are currently or formerly enrolled, regardless of their age or status in regard to parental dependency

Students who have applied to but have not attended an institution and deceased students do not come under FERPA guidelines.

Parents of students termed as “dependent” for income tax purposes may have access to the student’s education records. A copy of the parents’ most recent federal income tax return, on which the parents declared the student as a dependent, must be submitted to the Academic Records and Registrar office to document “dependency.”

**What are education records?**

With certain exceptions, an education record is any record (1) from which a student can be personally identified and (2) maintained by the college. Students have the right of access to these records. Education records include any records in whatever medium (handwritten, print, magnetic tape, film, diskette, etc.) that are in the possession of any school official. This includes transcripts or other records obtained from a school at which a student was previously enrolled.

**What is not included in an education record?**

- Sole possession records or private notes held by school officials that are not accessible or released to other personnel;
- Records relating to individuals who are employed by the institution (unless contingent upon attendance);
- Records relating to treatment provided by a physician, psychiatrist, psychologist, or other recognized professional or paraprofessional and disclosed only to individuals providing treatment; and
- Records of an institution that contain information about an individual obtained only after that person is no longer a student at that institution, i.e., alumni records.

**What is directory information?**

SFCC may disclose information about students without violating FERPA if the college has designated that information as directory information. Directory information is not generally considered harmful or an invasion of privacy if disclosed. Unless students request in writing to the contrary, federal law permits the college to release the following directory information to the public without student consent:

- Name
- Address
- Date/place of birth
- Telephone number
- Dates of attendance

- Hours completed
- Degrees and awards, including honor lists
- Previous educational agency
- Major field of study
- Participation in officially recognized activities and sports
- Photographs taken for identification or in college publications
- Email addresses
- Job placement records
- Height/weight of student athletes
- Current enrollment

Directory information cannot include:

- Student ID numbers or Social Security numbers
- Ethnicity, race or nationality
- Gender
- Probation status
- Grades
- Courses enrolled

#### **How do you authorize release of your education record in the form of an academic transcript?**

You must authorize the release of your transcripts by written request with your signature or by completing and signing transcript request forms available in the Academic Records and Registrar office. The receipt of a written request via fax with signature to release an education record is permissible.

#### **Who may have access to your information?**

- You and any outside party who has your written request;
- School officials (as defined by the college) who have legitimate education interests;
- Parents of a dependent student as defined by the Internal Revenue Code; and
- A person in response to a lawfully issued subpoena or court order, as long as the college first makes a reasonable attempt to notify the student. Normally, the college will comply with a subpoena after two weeks have elapsed from the day the subpoena was received.

#### **When is your consent not required to disclose information?**

When the disclosure is:

- To school officials (defined in policy) who have a legitimate educational interest;
- To federal, state and local authorities involving an audit or evaluation of compliance with educational programs;
- In connection with financial aid (this includes veterans' benefits);
- To organizations conducting studies for or on behalf of educational institutions;
- To accrediting organizations;
- To parents of a dependent student;
- To comply with a judicial order or subpoena;
- In a health or safety emergency;
- Releasing directory information;
- Releasing the results of a disciplinary hearing to an alleged victim of a crime of violence.

---

## **Grievance and Appellate Process**

---

The grievance and appellate process is designed to provide students, employees and members of the public with a process to resolve potential issues relating to State Fair Community College.

Students – The following matters related to students of State Fair Community College are subject to process under this policy:

- Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. 2000d et seq., which prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving Federal financial assistance.
- Title IX of the Education Amendments of 1972 (Title IX), as amended, 20 U.S.C. 1681 et seq., which prohibits discrimination on the basis of sex in educational programs and activities receiving Federal financial assistance.
- Section 504 of the Rehabilitation Act of 1973 (Section 504), as amended, 29 U.S.C. 794, and the Americans with Disabilities Act of 1990, which prohibits discrimination on the basis of disability.

- Age Discrimination Act of 1975, as amended 42 U.S.C. 6101 et seq., which prohibits discrimination on the basis of age.
- Violations of Student Code of Conduct.
- Residence Hall disciplinary action or violations of Residence Hall regulations or contract.
- Violations of Board of Trustees approved policy including, but not limited to, Campus Security and Crime Reporting, Substance Abuse, and Campus Drug, Alcohol and Tobacco policy.
- Violations of the Family Educational Rights and Privacy Act (FERPA).
- Concerns or complaints about eligibility for student extracurricular activities both non-credit and for credit events, Campus Store, and food service policies.
- Refunds of tuition and or any fees, including housing and Campus Store purchases.
  - Restrictions: Appeals are only permissible if tuition, fees or purchases were misapplied due to administrative error.
- Appeals of administrative removal from classes (administrative drops).
  - Restrictions: Appeals are only permissible if drops were misapplied due to administrative error.
- Billing errors.
- Financial aid suspension.
- Academic probation/suspension.
- Determination of residency relative to tuition charges.
- Graduation or commencement.
- Grade appeals.
  - Restrictions: Grade appeals are only permissible if grades were inaccurate due to administrative error or if grades were computed outside of the terms defined in the course syllabus. It is recommended students follow the steps below regarding grade disputes before filing an appeal:
    1. Contact the instructor for the course regarding the grade dispute as soon as possible after the grade has been issued.
    2. If the student still disputes the grade after communicating with the instructor, he or she should contact the appropriate Division Chair for the course.
    3. If a student disputes the decision of the Division Chair, he or she should submit an appeal using the Grievance and Appellate form to the appropriate Dean.
    4. If a student disputes the decision of the Dean, he or she should submit a final appeal to the Campus Issue Resolution Committee.
- Transcript evaluations.
- Placement testing decisions.
- Late registration reinstatements.

The Executive Director of Human Resources and the Dean of Student and Academic Support Services will serve as the Compliance Officers for Section 504, Title VI, Title VII, Title IX, Age Discrimination and Americans with Disabilities Act issues. Both compliance officers have offices located in the Hopkins Student Services Center on the Sedalia campus. Students should contact the Dean of Student and Academic Support Services with issues related to these areas. The Executive Director of Human Resources will handle issues from employees and members of the public.

Human Resources Office  
3201 W. 16<sup>th</sup> Street  
Sedalia, MO 65301  
(660) 596-7484

Student Services Office  
3201 W. 16<sup>th</sup> Street  
Sedalia, MO 65301  
(660) 596-7393

### Grievance process:

Most grievances and appeals must utilize the procedure outlined below. However, details relating to the Title IX complaint/investigative processes can be found in Regulation 2929:

In most circumstances, the student may first attempt to resolve the issue informally with the appropriate student or employee involved. The Director of Student Success and Retention is available to help mediate resolution, to provide impartial advice and guidance on the process, and to discuss the issue. For complaints relating harassment or discrimination based on a person's status as a protected class, or in situations regarding sexual misconduct, intimidation, retaliation, or threats of harm, informal resolution is not encouraged.

*(Note: Degree programs with specific accreditation requirements, such as the Nursing, Radiography, Dental Hygiene, Occupational Therapy and Physical Therapy programs, must follow those guidelines outlined in program handbooks prior to pursuing this process.)*

1. If the issue cannot be resolved informally to the satisfaction of the parties involved, the student must present, a formal grievance in writing within 30 days of the incident/issue, and explanation of the situation to the Campus Judicial Officer. The Grievance and Appellate form, which is located in the college portal, is the best option for reporting such grievances and appeals.
2. The written grievance/appeal should include the specific complaint and a reference to the matter described in the bulleted items above. The burden of proof shall rest on the complainant/appellant, with the opportunity to present witnesses and other evidence, as needed. The Campus Judicial Officer will provide impartial, prompt and thorough investigation of the issue. All investigations will use preponderance of evidence as the evidentiary standard.
  - a. The primary Campus Judicial Officer is the Dean of Student and Academic Support Services, whose office is located in the Student Services Office in Hopkins Student Service Center. If the appeal involves grade changes or other academic concerns, the appropriate Academic Dean for the course will act as Campus Judicial Officer.
  - b. If a complaint should arise that includes the Campus Judicial Officer, the President will appoint a temporary, impartial substitute.
3. The Campus Judicial Officer will make a decision based on the evidence and thorough consultation with all parties involved within ten (10) business days of receiving the written grievance/appeal. The Campus Judicial Officer will then send notice to all parties of the outcome of the complaint, with specific information supporting the decision.
  - a. During this appeal period, the Campus Judicial Officer may impose interim measures on the student(s) until the process is complete, in accordance with Regulation 2610. Such interim measures can include, but are not limited to:
    - i. Temporary change of course schedule;
    - ii. Temporary change of on-campus housing;
    - iii. No-contact order on campus;
    - iv. Temporary suspension from involvement in student athletics or activities;
    - v. Loss of campus privileges.
  - b. If the issue involves an employee, the Campus Judicial Officer will work with the Human Resources Director, who may impose interim measures on an employee until the process has been completed. Such interim measures can include:
    - i. Temporary suspension with pay;
    - ii. Temporary suspension without pay;
    - iii. Temporary relocation of work station;
    - iv. No-contact order on campus.
4. If the student is not satisfied with the decision of the Campus Judicial Officer, the student must submit a formal written Second Appeal using the Grievance and Appellate form. The complaint will then be presented to the Campus Issue Resolution Committee (CIRC) during a formal campus hearing. This appeal must include reasons why the student believes the decision of the Campus Judicial Officer should be overturned. The burden of proof shall rest on the complainant/appellant, with the opportunity to present witnesses and other evidence. The CIRC will provide impartial, prompt and thorough investigation of the issue. This Second Appeal must be made within ten (10) business days of the decision of the Campus Judicial Officer, and must outline grounds for the appeal. The CIRC will return a decision within ten (10) business days of receiving the appeal and notify all parties involved of the outcome of their decision in writing. The decision of the CIRC will be final.
  - a. The CIRC members will be appointed as needed by the President of the college and will include a faculty member, staff member, and a student.
  - b. Each member of the CIRC will serve a one-year term, if feasible.
  - c. If a complaint should arise that includes one of the CIRC members, or a member of the committee is unable to complete the one-year term, the President of the college will appoint a temporary substitute for that member.
  - d. Appeals to the CIRC will be submitted on the Grievance and Appellate form, located on the college portal. The Executive Assistant to the Dean of Student and Academic Support Services will schedule the hearing with the student and CIRC, and notify all parties involved of time, date, and location of the hearing. Students who are unable to appear before the CIRC in-person can request a secure, confidential web-conference.
  - e. Decisions of the CIRC will be decided by majority vote. The Executive Assistant to the Dean of Student and Academic Support Services will then disseminate the decision information to all involved parties. The written decision from the CIRC will include specific information supporting their decision.

Any individual participating in the formal grievance/appeal process is entitled to be assisted and accompanied to any meeting or hearing by a support person of his or her choosing. The support person will not be permitted to speak, testify, serve as a witness, or provide a statement on behalf of the individual, unless that support is needed to provide for a disability. If a chosen support person is unavailable to attend the hearing, the college can appoint a member of the campus

community to serve in that role. The support person may not be an attorney unless an attorney representing the college is present. Any person participating in the formal grievance/appellate process who requires disability accommodations should request such accommodations at the time the meeting/hearing is scheduled.

5. At any stage of the grievance/appellate process, including informal resolutions, if it is discovered that the college was discriminatory, the college will take steps to prevent the recurrence of the discrimination and will correct its discriminatory effects on the complainant/appellant and others, where appropriate.

### Other appeals

Students may also file a complaint of discrimination on the basis of sex, disability, race, color, national origin or age with the Office of Civil Rights (OCR), Department of Education. The OCR can be contacted by email at [OCR.KansasCity@ed.gov](mailto:OCR.KansasCity@ed.gov). Such complaints must be filed in writing no later than 180 days after the occurrence of the alleged discrimination.

In addition, The Missouri Department of Higher Education serves as a clearinghouse for postsecondary student complaints. The MDHE complaint policy may be found at <http://www.dhe.mo.gov/documents/POLICYONCOMPLAINTRESOLUTION.pdf>.

This webpage contains information about the complaint process and includes instructions for how to file a formal complaint. Note that the policy provides that a student who wishes to file a complaint with the department must first exhaust all formal and informal avenues provided by the institution to resolve disputes.

### Retaliation notice

Retaliation against a person who files a complaint or persons who participate in the grievance/appellate process is strictly prohibited and could result in sanctions under the Student Code of Conduct or other applicable college policies. (*Regulation 2160*)

### Employees

The following matters related to employees of State Fair Community College and members of the public are subject to process under this policy:

- Title VI of the Civil Rights Act of 1964, as amended, 42 U.S.C. 2000d et seq., which prohibits discrimination on the basis of race, color, or national origin in programs and activities receiving federal financial assistance.
- Title VII of the Civil Rights Act of 1964, as amended, 42 U.S.C. 2000e et seq., which prohibits employment discrimination based on race, color, religion, sex, and national origin.
- Title IX of the Education Amendments of 1972 (Title IX), as amended, 20 U.S.C. 1681 et seq., which prohibits discrimination on the basis of sex.
- Section 504 of the Rehabilitation Act of 1973 (Section 504), as amended, 29 U.S.C. 794, and the Americans with Disabilities Act of 1990, which prohibits discrimination on the basis of disability.
- Age Discrimination Act of 1975, as amended 42 U.S.C. 6101 et seq., which prohibits discrimination on the basis of age.
- Board of Trustees policy and/regulation.

The Director of Human Resources, Human Resources office, Hopkins Student Services Center (660) 596-7484, and the Dean of Student and Academic Support Services, Student Services office, Hopkins Student Services Center, (660) 596-7393, will serve as the Compliance Officers for Section 504, Title VI, Title VII, Title IX, Age Discrimination and Americans with Disabilities Act issues. The Hopkins Center is on the Sedalia campus of SFCC, 3201 W. 16th Street, Sedalia, MO 65301. Employees and members of the public should contact the Director of Human Resources with issues related to these areas. The Dean of Student and Academic Support Services will handle issues from students.

All matters must be addressed utilizing the following procedure:

1. Within 30 days of the incident/issue, a complaint must be filed by an employee or member of the public with the Director of Human Resources. All complaints will be promptly, thoroughly, fairly and impartially investigated by the director.
  - a. During this appeal period the Director of Human Resources may impose temporary sanctions (i.e. temporary suspension with pay, temporary suspension without pay, etc.) on an employee until the process has been completed.
  - b. If the issue involves a student, the director will work in cooperation with the Dean of Student and Academic Support Services, who may impose temporary sanctions (i.e. suspension from class, suspension from residence halls, suspension from student activities, etc.) on a student until the process has been completed.
2. The director will make a decision based on the evidence and thorough consultation with all parties involved within 10 business days of receiving the complaint. The director will then send notice to all parties of the outcome of the complaint, with specific information supporting the decision.
3. If the employee or member of the public is not satisfied with the outcome after Human Resources has completed its process, the employee or member of the public may appeal by submitting a written description of the grievance to the Campus Judicial Officer. This appeal must occur within 10 days of the decision of the HR Director. The written appeal should include the specific complaint and a reference to the specific matter described in the bulleted items above. The

burden of proof shall rest on the accuser or complainant, who will have the opportunity to present witnesses and other evidence. The Campus Judicial Officer will provide impartial, prompt and thorough investigation of the issue.

- a. The Campus Judicial Officer is located in the Student Services office in Hopkins Student Service Center, SFCC Sedalia campus, 3201 W. 16th, Sedalia, Mo. 65301; phone: (660) 596-7303.
  - b. If a complaint should arise that includes the Campus Judicial Officer, the President will appoint a temporary, impartial substitute.
4. The Campus Judicial Officer will make a decision, based on the evidence and thorough consultation with all parties involved, within 10 business days of receiving the written formal grievance. The Campus Judicial Officer will then send notice to all parties of the outcome of the complaint, with specific information supporting the decision.
  5. If the employee or member of the public is not satisfied with the decision of the Campus Judicial Officer he/she must present to the Campus Issue Resolution Committee, in writing, a formal appeal. This appeal should include reasons why the student believes the decision of the Campus Judicial Officer should be overturned. The burden of proof shall rest on the accuser or complainant, with the opportunity to present witnesses and other evidence. The Campus Issue Resolution Committee will provide impartial, prompt and thorough investigation of the issue. This appeal must be made within 10 business days of the decision of the Campus Judicial Officer and must outline grounds for the appeal. The Campus Issue Resolution Committee will return a decision within 10 business days of receiving the appeal and notify, in writing, all parties involved of the outcome of their decision. The Campus Issue Resolution Committee will be impartial, prompt and thorough to investigate each appeal. The decision of the committee will be final. (*Regulation 4850*)

---

## Intellectual Property

---

State Fair Community College fosters an environment conducive to the creation, dissemination, discussion, and exploration of knowledge. In addition, ownership of academic intellectual property resides with the creator in order to encourage the investment of time, thought, creativity, and energy in the development of academic works, including copyright, books, articles, works of art, musical compositions, and course materials.

This policy applies to all intellectual property related to the academic works of faculty and students, except in the following circumstances:

- Works written or produced for grants or contracts that specify that ownership belongs to the funding or contracting party, or for college administrative software.
- Student-created products that are not claimed by students within 30 days of the close of the semester in which those products were created. After this period, these works belong to the college.
- If intellectual property developed at the college is commercialized by someone other than the college, the institution retains the right to control whether its name or logo is displayed in association with the work and to require appropriate acknowledgment of institutional support of the creation of the work. The college should be notified of intent to commercialize prior to any commercial agreements.
- If the creator was assigned, directed or specifically funded by the college to develop the material, the institution can recover direct expenses related to the development of intellectual property from revenue subsequently collected by the creator.
- Unless otherwise agreed in writing prior to the creation of copyrightable material that is developed for college courses or curriculum, the institution will have for five years nonexclusive, royalty-free, use of the work and the ability to modify the work for its use within the institution so that the college's continued use of such material for educational purposes is not jeopardized.
- Mediated courseware shall not be sold, leased, rented, or otherwise used in a manner that competes in a substantial way with the for-credit offering of State Fair Community College while the creator is employed by this institution, unless that transaction has received the approval of the Vice President for Educational and Student Support Services.
- This policy does not apply to intellectual property developed before this policy is formally approved.

Appeals concerning student issues related to intellectual property can be made through the Student Grievance and Appellate Process as described in Regulation 2160. (*Policy 6230*)

---

## Reporting and Record Keeping

---

State Fair Community College (SFCC) shall develop and maintain procedures and protocols in accordance with the Crime Awareness and Security Act of 1990, as amended in 1992. A full report on campus crime, Annual Safety Report, shall be completed and published annually and distributed to all new students and employees. The data included in the Annual Safety Report will

include crime occurring within areas designated as SFCC Clery geography and reported to Campus Safety & Security personnel, as well as local law enforcement. In addition, this report shall be made available in its entirety in the Student Services Office and on the SFCC website.

Additionally, SFCC shall develop and implement procedures for educating the campus community on crime prevention, and providing appropriate resources and support for individuals who have been impacted by crime. (*Policy 2820*)

---

## Searches by College Personnel and/or Law Enforcement

---

Property of the college is subject to periodic inspection without notice, without student consent, and without a search warrant.

Students or student property may be searched based on reasonable suspicion of a violation of college rules, policy or state or federal law. Likewise, the college retains the authority to conduct routine patrols of its parking lots. The interior of a student's vehicle on college property may be searched if a college administrator, or Campus Judicial Officer, has reasonable suspicion to believe that illegal, unauthorized, or contraband items are contained inside the vehicle. Such searches will be conducted by a Campus Judicial Office, or trained designee.

Law enforcement officials shall be contacted if the search produces a controlled substance, drug paraphernalia, weapons, stolen goods or evidence of a crime, in any case involving a violation of law when a student refuses to allow a search, or where the search cannot safely be conducted.

Residence halls regular monthly health and safety room checks will be conducted by the Student Life staff. The college reserves the right to confiscate any items found in Residence Hall rooms that are in violation of residence hall rules, college policy or state or federal law. (*Policy 2150*)

---

## Students with Disabilities

---

The student with a disability who requires accommodations must register with the Disability Resource Center in the Charles E. Yeater Learning Center. It is the student's responsibility to initiate the request for services.

Students are encouraged to establish documentation and a request for accommodations at least two weeks prior to the first day of the semester.

Students with a disability are responsible for providing documentation from the appropriate medical or psychological professional and should make an intake appointment with the Disability Resource Center. Students are responsible for any charges associated with obtaining documentation.

The Disability Resource Center shall have the authority to make the final determination as to reasonable accommodations. Students are expected to meet the technical standards Essential Qualifications of the specific program they are pursuing.

After accommodations have been established by the Disability Resource Center, a letter will be presented to the student describing the accommodations that he/she qualifies to receive for each class in which he/she is enrolled that semester. A confidential letter will also be presented to the instructor describing the accommodations for which the student qualifies for that class. However, the letter will not contain any specific disability. (*Regulation 2110*)

---

## Students with Disabilities – Testing Accommodations

---

SFCC is committed to providing fair and appropriate testing accommodations for eligible students. Accommodations include, but are not limited to, extended test taking time, use of assistive technology, minimal distraction testing environment, oral tests, use of readers and the use of scribes. In order to be eligible for these accommodations, the student must provide the Disability Resource Center with the documentation that is required to determine eligibility.

### Accommodations documentation requirements

In order to fully evaluate requests for accommodations or auxiliary aids and to determine eligibility for services, the Disability Resource Center must have recent documentation (within 3 years) of the student's disability. The documentation should include an evaluation by an appropriate medical or psychological professional that makes evident the current impact of the disability as it relates to the accommodation(s) requested.

The general guidelines listed below are developed to assist the student in working with the student's treating/diagnosing professional(s) to prepare the information needed to evaluate the student's request(s).

1. Current functional impact of the condition(s): The current relevant functional impacts on physical (mobility, dexterity, endurance, etc.), perceptual, cognitive (attention, distractibility, communication, etc.), and behavioral abilities should be described as a clinical narrative and/or through the provision of specific results from the diagnostic procedures and assessments;
2. Treatments, medications, accommodations/auxiliary aids, services currently prescribed or in use: Provide a description of treatments, medications, accommodations/auxiliary aids and/or services currently in use and their estimated effectiveness in minimizing the impact of the condition(s). Include any significant side effects that may impact physical, perceptual, behavioral or cognitive performance. If any additional accommodations or auxiliary aids are warranted, please list them along with a clear rationale and related functional limitations. Any accommodations or auxiliary aids will be taken into consideration, but not automatically implemented;
3. The expected progression or stability of disability over time: If possible, provide a description of the expected change in the functional impact of the condition(s) over time. If the condition is variable, describe the known triggers that may exacerbate the condition;
4. A diagnostic statement identifying the disability: When appropriate, include International Classification of Diseases (ICD) or Diagnostic Statistical Manual (DSM) codes, the date of the most recent evaluation, or the dates of evaluations performed by referring professionals. If the most recent evaluation was not a full evaluation, indicate when the last full evaluation was conducted; and
5. Diagnostic reports must include the names, titles and contact information of the diagnostician, the test utilized in the diagnosing and the date(s) of the testing. Reports must be typed and otherwise legible. (*Regulation 2111*)

### **Disability Resource Center responsibilities**

The process of determining reasonable and appropriate testing accommodations for qualified students with disabilities is a collaborative effort between the Disability Resource Center and the qualified student. The Disability Resource Center will evaluate the documentation, determine eligibility for testing accommodations, and meet with students on an individual basis to discuss reasonable and appropriate options. The Disability Resource Center also will work with faculty, with Testing Services, and with other departments to facilitate delivery of reasonable accommodations. Students may request a modification of their accommodations at any time. The Disability Resource Center will base the request of new or additional services on official documentation.

### **Testing Services responsibilities**

Testing Services has primary responsibility for providing appropriate testing accommodations for students with disabilities and offers students a reduced distraction-testing environment with study carrels and noise-reducing disposable earplugs.

Testing Services staff is available to proctor exams and quizzes on the main campus. For extended campus students the designated testing coordinator at these sites will coordinate the proctoring. The Disability Resource Center staff will approve all testing sites. Occasionally, with approval of the Disability Resource Center, faculty may proctor their own exams, especially for students whose accommodation is extended test time. All proctors will receive training from Testing Services Director.

### **Reduced distraction testing environment**

The testing environment will be an environment with limited visual and auditory distractions consistent with reasonable accommodations of the student. A reduced distraction environment does not necessitate a private room be afforded to each student. Students with similar testing needs may share a room for testing purposes at the discretion of the test proctor. Students will be allowed to utilize earplugs or headphones at no cost. The proctor reserves the right to check the equipment at any point prior to or during the examination. The primary location of testing on the Sedalia campus is in the Yeater Learning Center Testing Services, Room 171. In extended campus environments, the reduced distraction testing environment is provided in unused classrooms and conference rooms.

### **Faculty responsibilities**

Faculty will complete the Test Proctoring Form, which will document how appropriate testing accommodations for students with disabilities will be provided, including student name, date of the test, the name of the class and the teacher, the name of the test, the amount of extra time (if applicable), the location of the quiet room (if applicable), and the name and the title of the test proctor. Testing Services will maintain a copy of all Test Proctoring forms for a minimum of three academic years.

### **Confidentiality**

The Disability Resource Center, Testing Services, administrators, and faculty will treat all test proctoring forms as confidential, in accordance with Regulation 2115 Nondiscrimination and Student Rights Equal Educational Opportunity Students with Disabilities Confidentiality.

Completed disability test proctoring forms, including all extended campus proctoring forms, will be retained through the Testing Services document management process.

**Responsibility of students**

1. The student must request accommodations from the Disability Resource Center every semester in a timely manner. The student will work with the Disability Resource Center staff to determine reasonable and appropriate accommodations for each class.
2. The student shall schedule appointments with Testing Services for testing accommodations with as much advance notice if possible, in most cases no later than three business days prior to the exam. Requested accommodations for standardized testing require in most cases at least three weeks' notice if possible.
3. If a student must cancel an arranged exam with Testing Center for any reason, it is the student's responsibility to notify Testing Services by telephone, voicemail or email in advance of the scheduled exam, if possible. This responsibility includes cancellations when the student decides to take the exam in class; when the test is cancelled by the instructor; or when the student drops or chooses to withdraw from the class.
4. If a student is ill or needs to reschedule exams for any other reason, or if a student misses an exam, the student is responsible for seeking their instructor's permission to reschedule the missed exam. The student must provide his or her instructor's written permission to Testing Services. The student also must schedule a new time agreeable to all parties (the student, the instructor, and Testing Services). Instructors are allowed to establish their own policies for make-up assessments and those policies must apply to all students and must be spelled out in the syllabus. For all students, the ability to schedule make-up exams is dependent on their instructor's policy.
5. If the student is late for a scheduled proctoring for any reason, Testing Services or designated proctor will subtract the time missed from the total time allowed for the exam. Proctors will wait up to 20 minutes before determining the student is a "no show." The student shall inform the Disability Resource Center immediately if he/she believes a test accommodation has not been appropriately provided.

**Responsibility of instructors**

1. The Disability Resource Center will notify instructors about students who are eligible for accommodations each semester before accommodations may be implemented.
2. Instructors shall treat all information about a student's accommodation as confidential. Instructors should ensure that conversations about accommodations, even when initiated by the student, are conducted at a place and time that they may remain confidential.
3. Prior to tests, instructors will submit a Test Proctoring Form to Testing Services complete with the student's name, name of the test, date of test, the name of the class and course number and the instructor's contact information.
4. If an instructor plans a pop quiz the instructor shall complete the Test Proctoring Form. Leave the date and time blank and then notify Testing Services of the date and time of the pop quiz.
5. Faculty shall provide Testing Services a copy of the exam, quiz or other assessment no less than one business day in advance.
6. In order to ensure appropriate testing environments, faculty who prefer to proctor their own exams, typically for students whose accommodation involves extra time, receive prior approval from the Disability Resource Center to administer the exam outside Testing Services. Before providing that approval, the Disability Resource Center will ensure the faculty member has appropriate training, that the facility is appropriate for the accommodation, and that the student is in agreement with the accommodation arrangements.
7. Faculty members must contact the Disability Resource Center immediately if he/she has any issue or concern about accommodations. Any adjustment in accommodations must be approved by the Disability Resource Center.

**Use of readers**

Readers are approved persons who read aloud any materials to be graded. Readers may read aloud printed or computer-based materials. Readers may read materials such as instructions, exam questions and multiple-choice answers. The reader is not permitted to tutor a student, encourage a response or answer any questions that may affect exams integrity. The reader may not clarify instructions or questions but may re-read any information requested by the student. A request for a reader should take place at least one week prior to the date of the accommodation, if possible, in order to ensure the needs of the student are met and to ensure Testing Services can have adequate time to locate a qualified reader.

**Use of scribes**

A Scribe is an approved person to write down answers that are provided by the student on any material to be graded. The scribe writes/types words verbatim as dictated. The scribe cannot edit or assist in the answering of any questions pertaining to the material tested. Students using scribes may be asked to spell or punctuate material in some cases. A request for a scribe should take place at least one week prior, if possible, to the date of the accommodation in order to ensure the needs of the student are met and to ensure Testing Services can have adequate time to locate a qualified scribe.

**Large print format**

Documents can be enlarged to 11" X 17" with capability up to 200 percent of the original print size. Electronic information can be printed to individual font size needed. Technology is available for an individual user to access information from documents/materials in large print format on campus. A request for a large print format should take place at least one week prior to the date of the accommodation, if possible, in order to ensure the needs of the student are met and to ensure the Disability Resource Center and the Copy Center has adequate time to reformat the material.

**Audio format**

Materials can be made available in audio format by the use of a screen reader, a tape recorder, electronic recordings or other comparable software. Request for audio format should take place at least one week prior, if possible, to the date of the accommodation in order to ensure the needs of the student are met and to ensure the Disability Resource Center can have adequate time to reformat materials.

**Braille**

An exam can be provided in Braille. Disability Resource Center will make an effort to locate a Braille exam or convert electronic exam to Braille. A request for Braille exams should be made with a minimum of two weeks prior, if possible, to the arranged exam date in order for these arrangements to be made.

**Academic honesty**

Any student observed utilizing any unauthorized materials or resources during a test will be reported to the instructor and Testing Services staff shall fill out a Student Concern and Incident Report. Testing Services has the right to stop a test at any time if academic dishonesty is witnessed. **Please see the college's Academic Honesty policy and regulation, 6480.**

Justifications for deviations from this policy, though rare, will be determined by the Disability Resource Center and Dean of Student and Academic Support Services. The documentation of these deviations are maintained in Testing Services for three years.  
(Regulation 2116)

## General Education Goals

State Fair Community College faculty and staff maintain the belief that a core of learning experiences exist that are invaluable to all students regardless of their present or future roles in the workplace and the community. These core experiences, which are addressed and assessed in the general education program, are consistent with the required skill-based and knowledge-based learning outcomes identified by the Missouri Coordinating Board for Higher Education (CBHE). They are also consistent with the college's Institutional Learning Outcomes (ILOs) that students will achieve upon completion of their general or specialized study.

The CBHE outcomes include mastering the skills of communicating, higher-order thinking, managing information, and valuing through the completion of at least 42-semester hours. These are distributed across the broad knowledge areas of communications, humanities and fine arts, natural and mathematical sciences, and social and behavioral sciences. The ILOs include thinking critically, communicating effectively, behaving responsibly, valuing others, developing life skills, utilizing technology, and investigating world processes. The basic competencies are achieved through the completion of the CORE 42 in its entirety.

### ***CORE 42: Basic Competencies***

#### ***Communicating***

Communicating, defined within the context of the Core 42 framework, is the ability to communicate effectively through oral, written, and digital channels using the English language and other symbolic systems. Students should be able to communicate with thoughtfulness, clarity, and coherence; read and listen critically; and select and effectively use channels appropriate to the audience and message.

Written communication is the development and expression of ideas in writing. Written communication involves learning to work in many genres and styles. It can involve working with many different writing technologies, and mixing texts, data, and images. Written communication abilities develop through iterative experiences across the curriculum.

Oral communication focuses on how people engage in symbolic activity within and across various contexts. Oral communications takes many forms and may focus on developing meaning and understanding; increasing knowledge; enacting change; solving problems; and developing, maintaining, and transforming relations; among other goals and outcomes.

After completing the CORE 42, students shall demonstrate the ability to

- A. Analyze and evaluate their own and others' speaking and writing.
- B. Conceive of writing as a recursive process that involves many strategies, including generating material, evaluating sources when used, drafting, revising, and editing.
- C. Make formal written and oral presentations employing correct diction, syntax, usage, grammar, and mechanics.
- D. Develop written work employing correct syntax, usage, grammar, and mechanics appropriate to one's audience and purpose.
- E. Communicate effectively by engaging in symbolic activities relevant and appropriate to various purposes, audiences, relationships, groups and contexts.

#### ***Higher-Order Thinking***

Higher Order Thinking is the development of students' ability to distinguish among opinions, facts, and inferences; to identify underlying or implicit assumptions; to make informed judgments; to solve problems by applying evaluative standards; and demonstrate the ability to reflect upon and refine those problem-solving skills. This involves creative thinking, critical thinking, and quantitative literacy.

Creative thinking is both the capacity to combine or synthesize existing ideas, images, or expertise in original ways and the experience of thinking, reacting, and working in an imaginative way characterized by a high degree of innovation, divergent thinking, and risk taking. Creative thinking, as it is fostered within higher education, must be distinguished from less focused types of creativity such as, for example, the creativity exhibited by a small child's drawing, which stems not from an understanding of connections, but from an ignorance of boundaries. While demonstrating solid knowledge of the domain's parameters, the creative thinker, at the highest levels of performance, pushes beyond those boundaries in new, unique, or atypical recombinations, uncovering or critically perceiving new syntheses and using or recognizing creative risk-taking to achieve a solution.

Critical thinking is a habit of mind characterized by the comprehensive exploration of issues, ideas, artifacts, and events before accepting or formulating an opinion or conclusion. Critical thinking is transdisciplinary, and success in all disciplines requires habits

of inquiry and analysis that share common attributes. Successful critical thinkers from all disciplines increasingly need to be able to apply those habits in various and changing situations encountered in all walks of life.

Quantitative Literacy (QL) is a "habit of mind" competency and comfort in working with numerical data. Individuals with strong QL skills possess the ability to reason and solve quantitative problems from a wide array of authentic contexts and everyday life situations. They understand and can create sophisticated arguments supported by quantitative evidence and they can clearly communicate those arguments in a variety of formats (using words, tables, graphs, mathematical equations, etc., as appropriate).

After completing the CORE 42, students shall demonstrate the ability to

- A. Recognize the problematic elements of presentations of information and argument and to formulate diagnostic questions for resolving issues and solving problems.
- B. Use linguistic, mathematical or other symbolic approaches to describe problems, identify alternative solutions, and make reasoned choices among those solutions.
- C. Analyze and synthesize information from a variety of sources and apply the results to resolving complex situations and problems.
- D. Defend conclusions using relevant evidence and reasoned argument.
- E. Reflect on and evaluate their critical-thinking processes.

### ***Managing Information***

Managing Information is ability to locate, organize, store, retrieve, evaluate, synthesize, and annotate information from print, electronic, and other sources in preparation for solving problems and making informed decisions. Through the effective management of information, students should be able to design, evaluate, and implement a strategy to answer an open-ended question or achieve a desired goal.

After completing the CORE 42, students shall demonstrate the ability to

- A. Locate, organize, store, retrieve, evaluate, synthesize, and annotate information from print, electronic, and other sources in preparation for solving problems and making informed decisions.
- B. Access and generate information from a variety of sources, including the most contemporary technological information services.
- C. Evaluate information for its currency, usefulness, truthfulness, and accuracy.
- D. Organize, store, and retrieve information efficiently.
- E. Reorganize information for an intended purpose, such as research projects.
- F. Present information clearly and concisely, using traditional and contemporary technologies.

### ***Valuing***

Valuing is the ability to understand the moral and ethical values of a diverse society, and to understand that many courses of action are guided by value judgments about the way things ought to be. Students should recognize how values develop, how value judgments influence actions, and how informed decision-making can be improved through the consideration of personal values as well as the values of others. They should be able to make informed decisions through the identification of personal values and the values of others and through an understanding how such values develop. They should be able to analyze the ethical implications of choices made on the basis of these values.

After completing the CORE 42, students shall demonstrate the ability to

- A. Develop and understand the moral and ethical values of a diverse society.
- B. Develop the ability to analyze the ethical implications of actions and decisions.
- C. Compare and contrast historical and cultural ethical perspectives and belief systems.
- D. Utilize cultural, behavioral, and historical knowledge to clarify and articulate a personal value system.
- E. Recognize the ramifications of one's value decisions on self and others.
- F. Recognize conflicts within and between value systems and recognize and analyze ethical issues as they arise in a variety of contexts.
- G. Consider multiple perspectives, recognize biases, deal with ambiguity, and take a reasonable position.

## ***Communications Knowledge Area***

### **Written Communications**

General Education Goals: Communicating and Higher-Order Thinking

State-level Goal: To prepare students to communicate effectively with writing that exhibits solid construction resulting from satisfactory planning, discourse, and review. Students will engage in the writing process including drafting, editing, and revision for success in the classroom and the workforce.

Students will demonstrate the ability to

- A. Express critical and analytical thinking for reading and writing.
- B. Compose sound and effective sentences appropriate to one's audience and purpose.
- C. Compose unified, coherent and developed paragraphs.
- D. Compose unified, coherent and developed texts.
- E. Use a recursive writing process to develop strategies for generating, revising, editing and proofreading texts.
- F. Produce rhetorically effective discourse for subject, audience, and purpose.
- G. Exhibit effective research and information literacy skills.

### **Oral Communications**

General Education Goals: Communicating and Managing Information

State-level Goal: To prepare students to communicate effectively in a variety of contexts. Students will understand communication is symbolic, relational, collaborate, strategic, adaptive, and creative. They will recognize the role and importance of communication in developing meaning and understanding; increasing knowledge; enacting change; solving problems; and developing, maintaining and transforming relationships; among other goals and outcomes.

Students will demonstrate the ability to

- A. Identify communication perspectives, principles, and concepts.
- B. Recognize the role and importance of communication given various purposes, audiences, relationships, groups, and contexts.
- C. Create and adapt messages relevant and appropriate to various purposes, audiences, relationships, groups, and contexts.
- D. Present messages effectively.
- E. Critically reflect on their own communication and the communication of others.

## ***Humanities and Fine Arts Knowledge Area***

General Education Goals: Valuing (knowledge-based courses) and Higher-Order Thinking (performance-based courses)

State-level Goal: To develop students' understanding of the ways in which humans have addressed their condition through imaginative work in the humanities and fine arts; to deepen their understanding of how that imaginative process is informed and limited by social, cultural, linguistic, and historical circumstances; and to appreciate the world of the creative imagination as a form of knowledge.

Students will demonstrate the ability to

- A. Describe the scope and variety of works in the humanities and fine arts (e.g., fine and performing arts, literature, speculative thought).
- B. Explain the historical, cultural, and social contexts of the humanities and fine arts.
- C. Identify the aesthetic standards used to make critical judgments in various artistic fields.
- D. Develop a plausible understanding of the differences and relationships between formal and popular culture.
- E. Articulate a response based upon aesthetic standards to observance of works in the humanities and fine arts.

## ***Mathematical Sciences Knowledge Area***

General Education Goals: Communicating and Higher-Order Thinking

State-level Goal: To develop students' understanding of fundamental mathematical concepts and their applications. Students should develop a level of quantitative literacy that would enable them to make decisions and solve problems and which could serve as a basis for continued learning. Students will demonstrate the ability to

- A. Describe contributions to society from the discipline of mathematics.
- B. Recognize and use connections within mathematics and between mathematics and other disciplines.
- C. Read, interpret, analyze, and synthesize quantitative data (e.g., graphs, tables, statistics, and survey data) and make reasoned estimates.
- D. Formulate and use generalizations based upon pattern recognition.
- E. Apply and use mathematical models (e.g., algebraic, geometric, statistical) to solve problems.

***Natural Sciences Knowledge Area***

General Education Goals: Managing Information

State-level Goal: To develop students' understanding of the principles and laboratory procedures of the natural sciences (Life and Physical) and to cultivate their abilities to apply the empirical methods of scientific inquiry. Students should understand how scientific discovery changes theoretical views of the world, informs our imaginations, and shapes human history. Students should also understand that science is shaped by historical and social contexts.

Students will demonstrate the ability to

- A. Explain how to use the scientific method and how to develop and test hypotheses in order to draw defensible conclusions.
- B. Evaluate scientific evidence and argument.
- C. Describe the basic principles of the natural world.
- D. Describe concepts of the nature, organization, and evolution of living systems.
- E. Explain how human interaction(s) affect living systems and the environment.

***Social and Behavioral Sciences Knowledge Area***

General Education Goals: Valuing and Higher-Order Thinking

State-level Goal: To develop students' understanding of themselves and the world around them through study of content and the processes used by historians and social and behavioral scientists to discover, describe, explain, and predict human behavior and social systems. Students acquire an understanding of the diversities and complexities of the cultural and social world, past and present, and come to an informed sense of self and others. As a part of this goal, institutions of higher education include a course of instruction in the Constitution of the United States and of the state of Missouri and in American history and institutions.

Students will demonstrate the ability to

- A. Explain social institutions, structures, and processes across a range of historical periods and cultures.
- B. Develop and communicate hypothetical explanations for individual human behavior within the large-scale historical and social context.
- C. Draw on history and the social sciences to evaluate contemporary problems.
- D. Describe and analytically compare social, cultural, and historical settings and processes other than one's own.
- E. Articulate the interconnectedness of people and places around the globe.
- F. Describe and explain the constitutions of the United States and Missouri.



## Associate of Arts

The Associate of Arts (AA) degree from State Fair Community College is designed for the student who wants to transfer to a four-year college or university to earn a bachelor's degree.

If you're undecided on a major, the AA degree can serve as a springboard to explore new interests. It allows for flexibility and provides a wide choice of classes. We're here to help you discover the huge variety of academic programs and transfer options available to you with an Associate of Arts degree.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

<b>General Education Core</b>	<b>42 Hours</b>	<b>Psychology</b>	
<b>Written Communications</b>	<b>6 hours</b>	PSY 101	General Psychology 3
ENGL 101 English Composition I	3	PSY 210	Lifespan Development 3
ENGL 102 English Composition II	3	<b>Social and Behavioral Science Communications</b>	
<b>Oral Communications</b>	<b>3 hours</b>	COMM 110	Introduction to Mass Communication 3
COMM 101 Public Speaking	3	<b>Sociology</b>	
COMM 190 Argumentation and Debate	3	SOC 100	General Sociology 3
<b>Social and Behavioral Sciences</b>	<b>9 hours</b>	SOC 101	Social Problems 3
<i>Must include courses from at least two disciplines, including at least one civics course</i>		SOC 120	American Diversity 3
<b>Civics</b>		<b>Mathematical Sciences</b>	<b>3 Hours</b>
HIST 101 U.S. History Before 1877	3	MATH 113	Mathematical Reasoning and Modeling 3
HIST 102 U.S. History Since 1877	3	MATH 114	Precalculus Algebra 3
POLS 101 American/National Government	3	MATH 119	Statistical Reasoning 3
<b>Criminal Justice</b>		<b>Natural Sciences</b>	<b>7 Hours</b>
CJ 102 Introduction to Criminal Justice	3	<i>Must include courses from at least two disciplines, including one course with a lab component</i>	
<b>Economics</b>		<b>Astronomy</b>	
AGRI 132 Agriculture Economics	3	EASC 120	Introduction to Astronomy 3
ECON 101 Principles of Macroeconomics	3	<b>Biology</b>	
ECON 102 Principles of Microeconomics	3	BIO 100	General Biology 3
<b>Geography</b>		BIO 105	Wildlife Conservation 3
GEOG 101 World Geography	3	BIO 112	General Biology with Lab 5
<b>History</b>		BIO 125	Biology I with Lab 5
HIST 108 World History Before 1500	3	<b>Chemistry</b>	
HIST 109 World History After 1500	3	CHEM 101	Introduction to Chemistry with Lab 5
		CHEM 123	General Chemistry I with Lab 5

**Associate of Arts (Continued)****Geology**

EASC 101	Introduction to Earth Sciences with Lab	5
EASC 106	Physical Geology with Lab	5
EASC 118	Environmental Geology	3

**Life Sciences**

BIO 103	Human Biology	3
BIO 207	Human Anatomy with Lab	4
BIO 208	Human Physiology with Lab	4

**Physics**

PHYS 105	College Physics I with Lab	5
PHYS 118	General Physics I with Lab	5

**Humanities and Fine Arts****9 Hours***Must include courses from at least two disciplines***Art**

ART 101	Art Appreciation	3
ART 120	Modern Art History	3
ART 140	Art History Survey I	3
ART 142	Art History Survey II	3

**Foreign Language**

FREN 101	Elementary French I	3
FREN 102	Elementary French II	3
GERM 101	Elementary German I	3
SPAN 101	Elementary Spanish I	3
SPAN 102	Elementary Spanish II	3

**Literature**

LIT 101	Introduction to Literature	3
LIT 107	American Literature	3
LIT 109	British Literature	3
LIT 112	World Literature	3

**Music**

MUS 100	Music Theory I	3
MUS 101	Music Appreciation	3
MUS 102	History of Rock Music	3
MUS 103	Music History and Literature Before 1800	3
MUS 104	Music History and Literature After 1800	3

**Performance**

*A maximum of 3 credit hours can be applied to the humanities and fine arts category and the total general education core*

ART 112	Drawing I	3
ART 116	Painting I	3
ART 122	Sculpture I	3
ART 126	Ceramics I	3
ART 160	Introduction to Graphic Design	3
MUS 119	Jazz Band I	1
MUS 175	Chamber Singers I	1
MUS 196	Concert Band I	1
MUS 197	Concert Band II	1
MUS 210	Jazz Choir I	2
THEA 110	Stagecraft and Lighting	3
THEA 111	Acting I	3
THEA 131	Script Analysis	3

**Philosophy**

PHIL 101	Introduction to Philosophy	3
PHIL 102	Ethics	3

**Religion**

PHIL 104	Living Religions	3
----------	------------------	---

**Theatre**

THEA 107	Introduction to Theatre	3
----------	-------------------------	---

**General Education Elective** **5 Hours**

Select additional hours from the general education categories listed above for a minimum total of 42 hours to meet the general education core

**Electives** **22 Hours**

Additional courses numbered 100 or above may include 12 hours of restricted electives from technical training in the military or from technical courses taken at an accredited college. A maximum of 4 credit hours may be applied for THEA 115. Physical education activity and wellness courses (PE, PEAC, WELL, WL, XWLN, or XPAC prefix) may be accepted as elective credit for a maximum of 3 credit hours. Veterans, members of the National Guard and active duty military personnel may receive 2 hours of wellness credit by presenting a copy of their DD214 or similar record.

**Degree Total** **64 Hours**



## Associate of Fine Arts in Art

The Associate of Fine Arts in Art degree from State Fair Community College is designed for the student who wants to transfer to a four-year college or university to earn a bachelor's degree in Art.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

<b>General Education Core</b>	<b>42 Hours</b>	<b>Social and Behavioral Science Communications</b>	
<b>Written Communications</b>	<b>6 hours</b>	COMM 110 Introduction to Mass Communication	3
ENGL 101 English Composition I	3	<b>Sociology</b>	
ENGL 102 English Composition II	3	SOC 100 General Sociology	3
<b>Oral Communications</b>	<b>3 hours</b>	SOC 101 Social Problems	3
COMM 101 Public Speaking	3	SOC 120 American Diversity	3
COMM 190 Argumentation and Debate	3	<b>Mathematical Sciences</b>	<b>3 Hours</b>
<b>Social and Behavioral Sciences</b>	<b>9 hours</b>	MATH 113 Mathematical Reasoning and Modeling	3
<i>Must include courses from at least two disciplines, including at least one civics course</i>		MATH 114 Precalculus Algebra	3
<b>Civics</b>		MATH 119 Statistical Reasoning	3
HIST 101 U.S. History Before 1877	3	<b>Natural Sciences</b>	<b>7 Hours</b>
HIST 102 U.S. History Since 1877	3	<i>Must include courses from at least two disciplines, including one course with a lab component</i>	
POLS 101 American/National Government	3	<b>Astronomy</b>	
<b>Criminal Justice</b>		EASC 120 Introduction to Astronomy	3
CJ 102 Introduction to Criminal Justice	3	<b>Biology</b>	
<b>Economics</b>		BIO 100 Introduction to Biological Sciences	3
AGRI 132 Agriculture Economics	3	BIO 105 Wildlife Conservation	3
ECON 101 Principles of Macroeconomics	3	BIO 112 Introduction to Biology with Lab	5
ECON 102 Principles of Microeconomics	3	BIO 125 Biology I with Lab	5
<b>Geography</b>		<b>Chemistry</b>	
GEOG 101 World Geography	3	CHEM 101 Introduction to Chemistry with Lab	5
<b>History</b>		CHEM 123 General Chemistry I with Lab	5
HIST 108 World History Before 1500	3	<b>Geology</b>	
HIST 109 World History After 1500	3	EASC 101 Introduction to Earth Sciences with Lab	5
<b>Psychology</b>		EASC 106 Physical Geology with Lab	5
PSY 101 General Psychology	3	EASC 118 Environmental Geology	3
PSY 210 Lifespan Development	3		

**Associate of Fine Arts in Art (continued)****Life Sciences**

BIO 103	Human Biology	3
BIO 207	Human Anatomy with Lab	4
BIO 208	Human Physiology with Lab	4

**Physics**

PHYS 105	College Physics I with Lab	5
PHYS 118	General Physics I with Lab	5

**Humanities and Fine Arts****9 Hours***Must include courses from at least two disciplines***Art**

ART 120	Modern Art History	3
---------	--------------------	---

**Foreign Language**

FREN 101	Elementary French I	3
FREN 102	Elementary French II	3
GERM 101	Elementary German I	3
SPAN 101	Elementary Spanish I	3
SPAN 102	Elementary Spanish II	3

**Literature**

LIT 101	Introduction to Literature	3
LIT 107	American Literature	3
LIT 109	British Literature	3
LIT 112	World Literature	3

**Music**

MUS 100	Music Theory I	3
MUS 101	Music Appreciation	3
MUS 102	History of Rock Music	3
MUS 103	Music History and Literature Before 1800	3
MUS 104	Music History and Literature Since 1800	3

**Performance***A maximum of 3 credit hours can be applied to the humanities and fine arts category and the total general education core*

ART 116	Painting I	3
ART 122	Sculpture I	3
ART 126	Ceramics I	3
ART 160	Introduction to Graphic Design	3
MUS 119	Jazz Band I	1
MUS 175	Chamber Singers I	1
MUS 196	Concert Band I	1
MUS 197	Concert Band II	1

MUS 210	Jazz Choir I	2
THEA 110	Stagecraft and Lighting	3
THEA 111	Acting I	3
THEA 131	Script Analysis	3

**Philosophy**

PHIL 101	Introduction to Philosophy	3
PHIL 102	Ethics	3

**Religion**

PHIL 104	Living Religions	3
----------	------------------	---

**Theatre**

THEA 107	Introduction to Theatre	3
----------	-------------------------	---

**General Education Elective****5 Hours**

Select additional hours from the general education categories listed above for a minimum total of 42 hours to meet the general education core

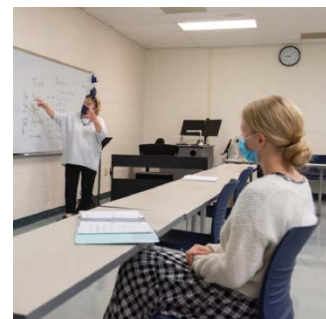
**Art Core****15 Hours**

ART 103	Design I	3
ART 112	Drawing I	3
ART 122	Sculpture I (or)	
ART 126	Ceramics I	3
ART 140	Art History Survey I	3
ART 142	Art History Survey II	3

**Art Electives****9 Hours**

ART 104	Design II	3
ART 106	Watercolor I	3
ART 107	Watercolor II	3
ART 108	Watercolor III	3
ART 110	Printmaking	3
ART 113	Drawing II	3
ART 114	Figure Drawing I	3
ART 115	Figure Drawing II	3
ART 116	Painting I	3
ART 117	Painting II	3
ART 118	Painting III	3
ART 122	Sculpture I	3
ART 123	Sculpture II	3
ART 126	Ceramics I	3
ART 127	Ceramics II	3

**Degree Total****66 Hours**



## Associate of Fine Arts in Music

The Associate of Fine Arts in Music degree from State Fair Community College is designed for the student who wants to transfer to a four-year college or university to earn a bachelor's degree in Music. Students must attend and pass four semesters of MUS 195 Concert and Recital Attendance.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

<b>General Education Core</b>		<b>42 Hours</b>	<b>Social and Behavioral Science Communications</b>		
<b>Written Communications</b>		<b>6 hours</b>	COMM 110	Introduction to Mass Communication	3
ENGL 101	English Composition I	3	<b>Sociology</b>		
ENGL 102	English Composition II	3	SOC 100	General Sociology	3
<b>Oral Communications</b>		<b>3 hours</b>	SOC 101	Social Problems	3
COMM 101	Public Speaking	3	SOC 120	American Diversity	3
COMM 190	Argumentation and Debate	3	<b>Mathematical Sciences</b>		<b>3 Hours</b>
<b>Social and Behavioral Sciences</b>		<b>9 hours</b>	MATH 113	Mathematical Reasoning and Modeling	3
<i>Must include courses from at least two disciplines, including at least one civics course</i>			MATH 114	Precalculus Algebra	3
<b>Civics</b>			MATH 119	Statistical Reasoning	3
HIST 101	U.S. History Before 1877	3	<b>Natural Sciences</b>		<b>7 Hours</b>
HIST 102	U.S. History Since 1877	3	<i>Must include courses from at least two disciplines, including one course with a lab component</i>		
POLS 101	American/National Government	3	<b>Astronomy</b>		
<b>Criminal Justice</b>			EASC 120	Introduction to Astronomy	3
CJ 102	Introduction to Criminal Justice	3	<b>Biology</b>		
<b>Economics</b>			BIO 100	General Biology	3
AGRI 132	Agriculture Economics	3	BIO 105	Wildlife Conservation	3
ECON 101	Principles of Macroeconomics	3	BIO 112	General Biology with Lab	5
ECON 102	Principles of Microeconomics	3	BIO 125	Biology I with Lab	5
<b>Geography</b>			<b>Chemistry</b>		
GEOG 101	World Geography	3	CHEM 101	Introduction to Chemistry with Lab	5
<b>History</b>			CHEM 123	General Chemistry I with Lab	5
HIST 108	World History Before 1500	3	<b>Geology</b>		
HIST 109	World History After 1500	3	EASC 101	Introduction to Earth Sciences with Lab	5
<b>Psychology</b>			EASC 106	Physical Geology with Lab	5
PSY 101	General Psychology	3	EASC 118	Environmental Geology	3
PSY 210	Lifespan Development	3			

## Associate of Fine Arts in Music (Continued)

**Life Sciences**

BIO 103	Human Biology	3
BIO 207	Human Anatomy with Lab	4
BIO 208	Human Physiology with Lab	4

**Physics**

PHYS 105	College Physics I with Lab	5
PHYS 118	General Physics I with Lab	5

**Humanities and Fine Arts 6 Hours**

MUS 103	Music History and Literature Before 1800	3
MUS 104	Music History and Literature Since 1800	3

**Humanities and Fine Arts Elective 3 Hours****Art**

ART 101	Art Appreciation	3
ART 120	Modern Art History	3
ART 140	Art History Survey I	3
ART 142	Art History Survey II	3

**Foreign Language**

FREN 101	Elementary French I	3
FREN 102	Elementary French II	3
GERM 101	Elementary German I	3
SPAN 101	Elementary Spanish I	3
SPAN 102	Elementary Spanish II	3

**Literature**

LIT 101	Introduction to Literature	3
LIT 107	American Literature	3
LIT 109	British Literature	3
LIT 112	World Literature	3

**Performance**

*A maximum of 3 credit hours can be applied to the humanities and fine arts category and the total general education core*

ART 112	Drawing I	3
ART 116	Painting I	3
ART 122	Sculpture I	3
ART 126	Ceramics I	3
ART 160	Introduction to Graphic Design	3
MUS 119	Jazz Band I	1
MUS 175	Chamber Singers I	1
MUS 196	Concert Band I	1
MUS 197	Concert Band II	1
MUS 210	Jazz Choir I	2
THEA 110	Stagecraft and Lighting	3
THEA 111	Acting I	3
THEA 131	Script Analysis	3

**Philosophy**

PHIL 101	Introduction to Philosophy	3
PHIL 102	Ethics	3

**Religion**

PHIL 104	Living Religions	3
----------	------------------	---

**Theatre**

THEA 107	Introduction to Theatre	3
----------	-------------------------	---

**General Education Elective 5 Hours**

Select additional hours from the general education categories listed above for a minimum total of 42 hours to meet the general education core

**Music Core 20 Hours**

MUS 100	Music Theory I	3
MUS 105	Aural Training I	1
MUS 106	Music Theory II	3
MUS 107	Music Theory III	3
MUS 108	Music Theory IV	3
MUS 109	Aural Training II	1
MUS 110	Aural Training III	1
MUS 111	Aural Training IV	1
MUS 145	Piano Class I	2
MUS 146	Piano Class II	2

**Music Electives 5 Hours**

MUS 102	History of Rock Music	3
MUS 119	Jazz Band I	1
MUS 120	Jazz Band II	1
MUS 121	Jazz Band III	1
MUS 122	Jazz Band IV	1
MUS 136	Applied Instrumental Lessons	1-2
MUS 137	Applied Instrumental Lessons II	1-2
MUS 138	Applied Instrumental Lessons III	1-2
MUS 139	Applied Instrumental Lessons IV	1-2
MUS 140	Guitar Class I	2
MUS 150	Applied Piano Lessons I	1-2
MUS 151	Applied Piano Lessons II	1-2
MUS 152	Applied Piano Lessons III	1-2
MUS 153	Applied Piano Lessons IV	1-2
MUS 155	Voice Class	2
MUS 160	Applied Voice Lessons I	1
MUS 161	Applied Voice Lessons II	1
MUS 162	Applied Voice Lessons III	1
MUS 163	Applied Voice Lessons IV	1
MUS 175	Chamber Singers I	1
MUS 176	Chamber Singers II	1
MUS 177	Chamber Singers III	1
MUS 178	Chamber Singers IV	1
MUS 210	Jazz Choir I	2
MUS 211	Jazz Choir II	2
MUS 212	Jazz Choir III	2
MUS 213	Jazz Choir IV	2

**Concert and Recital Attendance 4 Semesters**

MUS 195	Concert and Recital Attendance	
---------	--------------------------------	--

**Degree Total 67 Hours**



## Associate of Fine Arts in Theatre

The Associate of Fine Arts in Theatre degree from State Fair Community College is designed for the student who wants to transfer to a four-year college or university to earn a bachelor's degree in Theatre.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

<b>General Education Core</b>	<b>42 Hours</b>	<b>Social and Behavioral Science Communications</b>	
<b>Written Communications</b>	<b>6 hours</b>	COMM 110 Introduction to Mass Communication	3
ENGL 101 English Composition I	3	<b>Sociology</b>	
ENGL 102 English Composition II	3	SOC 100 General Sociology	3
<b>Oral Communications</b>	<b>3 hours</b>	SOC 101 Social Problems	3
COMM 101 Public Speaking	3	SOC 120 American Diversity	3
COMM 190 Argumentation and Debate	3	<b>Mathematical Sciences</b>	<b>3 Hours</b>
<b>Social and Behavioral Sciences</b>	<b>9 hours</b>	MATH 113 Mathematical Reasoning and Modeling	3
<i>Must include courses from at least two disciplines, including at least one civics course</i>		MATH 114 Precalculus Algebra	3
<b>Civics</b>		MATH 119 Statistical Reasoning	3
HIST 101 U.S. History Before 1877	3	<b>Natural Sciences</b>	<b>7 Hours</b>
HIST 102 U.S. History Since 1877	3	<i>Must include courses from at least two disciplines, including one course with a lab component</i>	
POLS 101 American/National Government	3	<b>Astronomy</b>	
<b>Criminal Justice</b>		EASC 120 Introduction to Astronomy	3
CJ 102 Introduction to Criminal Justice	3	<b>Biology</b>	
<b>Economics</b>		BIO 100 General Biology	3
AGRI 132 Agriculture Economics	3	BIO 105 Wildlife Conservation	3
ECON 101 Principles of Macroeconomics	3	BIO 112 General Biology with Lab	5
ECON 102 Principles of Microeconomics	3	BIO 125 Biology I with Lab	5
<b>Geography</b>		<b>Chemistry</b>	
GEOG 101 World Geography	3	CHEM 101 Introduction to Chemistry with Lab	5
<b>History</b>		CHEM 123 General Chemistry I with Lab	5
HIST 108 World History Before 1500	3	<b>Geology</b>	
HIST 109 World History After 1500	3	EASC 101 Introduction to Earth Sciences with Lab	5
<b>Psychology</b>		EASC 106 Physical Geology with Lab	5
PSY 101 General Psychology	3	EASC 118 Environmental Geology	3
PSY 210 Lifespan Development	3		

**Associate of Fine Arts in Theatre (Continued)****Life Sciences**

BIO 103	Human Biology	3
BIO 207	Human Anatomy with Lab	4
BIO 208	Human Physiology with Lab	4

**Physics**

PHYS 105	College Physics I with Lab	5
PHYS 118	General Physics I with Lab	5

**Humanities and Fine Arts 9 Hours**

*Must include courses from at least two disciplines, with a maximum of 3 credit hours from the performance discipline and the total general education core*

**Art**

ART 101	Art Appreciation	3
ART 120	Modern Art History	3
ART 140	Art History Survey I	3
ART 142	Art History Survey II	3

**Foreign Language**

FREN 101	Elementary French I	3
FREN 102	Elementary French II	3
GERM 101	Elementary German I	3
SPAN 101	Elementary Spanish I	3
SPAN 102	Elementary Spanish II	3

**Literature**

LIT 101	Introduction to Literature	3
LIT 107	American Literature	3
LIT 109	British Literature	3
LIT 112	World Literature	3

**Music**

MUS 100	Music Theory I	3
MUS 101	Music Appreciation	3
MUS 102	History of Rock Music	3
MUS 103	Music History and Literature Before 1800	3
MUS 104	Music History and Literature Since 1800	3

**Performance**

ART 112	Drawing I	3
ART 116	Painting I	3
ART 122	Sculpture I	3
ART 126	Ceramics I	3
ART 160	Introduction to Graphic Design	3
MUS 119	Jazz Band I	1
MUS 175	Chamber Singers I	1
MUS 196	Concert Band I	1
MUS 197	Concert Band II	1
MUS 210	Jazz Choir I	2

**Philosophy**

PHIL 101	Introduction to Philosophy	3
PHIL 102	Ethics	3

**Religion**

PHIL 104	Living Religions	3
----------	------------------	---

**Theatre**

THEA 107	Introduction to Theatre	3
----------	-------------------------	---

**General Education Elective 5 Hours**

Select additional hours from the general education categories listed above for a minimum total of 42 hours to meet the general education core

**Theatre Core****25 Hours**

THEA 110	Stagecraft and Lighting	3
THEA 111	Acting I	3
THEA 119	Stage Makeup	3
THEA 122	Costume Construction (or)	
THEA 113	Oral Interpretation	3
THEA 125	Theatre History	3
THEA 128	Introduction to Theatre Design	3
THEA 131	Script Analysis	3
THEA 134	Stage Voice and Movement	3
THEA 190	Theatre Capstone	1

**Degree Total****67 Hours**



## Associate of Fine Arts in Theatre with Emphasis in Musical Theatre\*

The Associate of Fine Arts in Theatre with Emphasis in Musical Theatre degree from State Fair Community College is designed for the student who wants to transfer to a four-year college or university to earn a bachelor's degree in Musical Theatre.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

<b>General Education Core</b>		<b>42 Hours</b>	<b>Social and Behavioral Science Communications</b>		
<b>Written Communications</b>		<b>6 hours</b>	COMM 110	Introduction to Mass Communication	3
ENGL 101	English Composition I	3	<b>Sociology</b>		
ENGL 102	English Composition II	3	SOC 100	General Sociology	3
<b>Oral Communications</b>		<b>3 hours</b>	SOC 101	Social Problems	3
COMM 101	Public Speaking	3	SOC 120	American Diversity	3
COMM 190	Argumentation and Debate	3	<b>Mathematical Sciences</b>		<b>3 Hours</b>
<b>Social and Behavioral Sciences</b>		<b>9 hours</b>	MATH 113	Mathematical Reasoning and Modeling	3
<i>Must include courses from at least two disciplines, including at least one civics course</i>			MATH 114	Precalculus Algebra	3
<b>Civics</b>			MATH 119	Statistical Reasoning	3
HIST 101	U.S. History Before 1877	3	<b>Natural Sciences</b>		<b>7 Hours</b>
HIST 102	U.S. History Since 1877	3	<i>Must include courses from at least two disciplines, including one course with a lab component</i>		
POLS 101	American/National Government	3	<b>Astronomy</b>		
<b>Criminal Justice</b>			EASC 120	Introduction to Astronomy	3
CJ 102	Introduction to Criminal Justice	3	<b>Biology</b>		
<b>Economics</b>			BIO 100	General Biology	3
AGRI 132	Agriculture Economics	3	BIO 105	Wildlife Conservation	3
ECON 101	Principles of Macroeconomics	3	BIO 112	General Biology with Lab	5
ECON 102	Principles of Microeconomics	3	BIO 125	Biology I with Lab	5
<b>Geography</b>			<b>Chemistry</b>		
GEOG 101	World Geography	3	CHEM 101	Introduction to Chemistry with Lab	5
<b>History</b>			CHEM 123	General Chemistry I with Lab	5
HIST 108	World History Before 1500	3	<b>Geology</b>		
HIST 109	World History After 1500	3	EASC 101	Introduction to Earth Sciences with Lab	5
<b>Psychology</b>			EASC 106	Physical Geology with Lab	5
PSY 101	General Psychology	3	EASC 118	Environmental Geology	3
PSY 210	Lifespan Development	3			

**Associate of Fine Arts in Theatre with Emphasis in Musical Theatre (Continued)****Life Sciences**

BIO 103	Human Biology	3
BIO 207	Human Anatomy with Lab	4
BIO 208	Human Physiology with Lab	4

**Physics**

PHYS 105	College Physics I with Lab	5
PHYS 118	General Physics I with Lab	5

**Humanities and Fine Arts****6 Hours**

MUS 100	Music Theory I	3
THEA 111	Acting	3

**Humanities and Fine Arts Elective****3 Hours****Art**

ART 101	Art Appreciation	3
ART 120	Modern Art History	3
ART 140	Art History Survey I	3
ART 142	Art History Survey II	3

**Foreign Language**

FREN 101	Elementary French I	3
FREN 102	Elementary French II	3
GERM 101	Elementary German I	3
SPAN 101	Elementary Spanish I	3
SPAN 102	Elementary Spanish II	3

**Literature**

LIT 101	Introduction to Literature	3
LIT 107	American Literature	3
LIT 109	British Literature	3
LIT 112	World Literature	3

**Music**

MUS 101	Music Appreciation	3
MUS 102	History of Rock Music	3
MUS 103	Music History and Literature Before 1800	3
MUS 104	Music History and Literature Since 1800	3

**Philosophy**

PHIL 101	Introduction to Philosophy	3
PHIL 102	Ethics	3

**Religion**

PHIL 104	Living Religions	3
----------	------------------	---

**Theatre**

THEA 107	Introduction to Theatre	3
----------	-------------------------	---

**General Education Elective****5 Hours**

Select additional hours from the general education categories listed above for a minimum total of 42 hours to meet the general education core

**Theatre Core****10 Hours**

THEA 119	Stage Makeup	3
THEA 131	Script Analysis	3
THEA 134	Stage Voice and Movement	3
THEA 190	Theatre Capstone	1

**Musical Theatre Core****13 Hours**

DANC 110	Jazz I	2
DANC 120	Tap I	2
MUS 105	Aural Training I	1
MUS 107	Music Theory II	3
MUS 109	Aural Training II	1
MUS 160	Applied Voice Lessons I	1
MUS 161	Applied Voice Lessons II	1
MUS 175	Chamber Singers I	1
MUS 176	Chamber Singers II	1

**Degree Total****65 Hours**

*\*Pending anticipated approval from the state Coordinating Board for Higher Education and the Higher Learning Commission.*



## Associate of Arts in Teaching

The Associate of Arts in Teaching (AAT) degree prepares students with a foundation in educational principles, theory and practice, and exposes them to complex problems and relationships in the field of education.

Teachers play an essential role in fostering the intellectual and social development of children in their formative years. Using a variety of active learning approaches, teachers help children understand abstract principles, solve problems, and develop critical thought processes.

Whether desiring to teach preschool or elementary school, teachers provide the tools and the environment for their students to develop into responsible citizens. Any Missouri community college student who has earned an AAT degree is guaranteed consistent treatment by the majority of four-year transfer institutions. Completing the AAT is the first step to achieving a Bachelor of Arts or a Bachelor of Science in an Elementary Education degree. Bachelor's degree institutions with teacher education programs have different requirements. It is essential to work with an advisor to select the correct courses (categories indicated with \*\* in the Program Requirements) needed for the transfer institution of choice.

The Missouri Department of Elementary and Secondary Education-Office of Educator Quality is working with representative stakeholder groups to redesign the standards for educator preparation including certification requirements. These changes and implementation schedule will be communicated to students through individual advising sessions, meetings, and/or other college communications. If there are any questions and/ or concerns, please contact the Director of Educator Preparation in the Office of Educator Quality.

### Other AAT Requirements

A background check is required prior to beginning the program.

A cumulative content area GPA of 3.0 or higher is required for EDUC 110, EDUC 180, EDUC 205, EDUC 209, EDUC 212, EDUC 218, EDUC 220, EDUC 228, EDUC 240 and EDUC 250 taken at SFCC or transferred in as equivalent.

Minimum cumulative GPA of 2.75 and institutional GPA of 2.0 to apply for graduation.

Successful completion of the ACT with a composite score of 20 or better or the successful completion of the MoGEA (180 or higher for Mathematics; 183 or higher for Reading Comprehension and Interpretation; 188 or higher for Science and Social Studies; 167 or higher for Writing).

\*The state could require different scores for all areas on the MoGEA.

\*Transfer institutions might require different scores for the ACT or MoGEA.

A student who meets all course requirements for the Associate of Arts in Teaching but does not have a 2.75 GPA, (but has at least a cumulative 2.0 GPA) and has not successfully completed the MoGEA may still apply to graduate with an Associate of Arts degree.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

**Associate of Arts in Teaching (Continued)***Courses to complete with a grade of C or higher<sup>^^</sup>.***Written Communications 6 hours**

ENGL 101 English Composition I 3

ENGL 102 English Composition II 3

**Oral Communications 3 hours**

COMM 101 Public Speaking 3

**Social and Behavioral Sciences 9 Hours**

GEOG 101 World Geography 3

HIST 101 U.S. History Before 1877 (or)

HIST 102 U.S. History Since 1877 3

POLS 101 American/National Government 3

**Mathematical Sciences 3 Hours**

MATH 113 Mathematical Reasoning and Modeling 3

MATH 114 Precalculus Algebra 3

MATH 119 Statistical Reasoning 3

**Natural Sciences 8 Hours**

BIO 112 General Biology with Lab (or)

BIO 125 Biology I with Lab 5

EASC 101 Introduction to Earth Sciences with Lab (or)

EASC 106 Physical Geology with Lab (or)

PHYS 105 College Physics I with Lab 5

**Humanities and Fine Arts 9 Hours***Must include courses from two disciplines***Art**

ART 101 Art Appreciation 3

ART 120 Modern Art History 3

**Literature**

LIT 101 Introduction to Literature 3

LIT 107 American Literature 3

**Music**

MUS 100 Music Theory I 3

MUS 101 Music Appreciation 3

MUS 102 History of Rock Music 3

MUS 103 Music History and Literature Before 1800 3

MUS 104 Music History and Literature After 1800 3

**Philosophy**

PHIL 101 Introduction to Philosophy 3

PHIL 102 Ethics 3

**Religion**

PHIL 104 Living Religions 3

**Theatre**

THEA 107 Introduction to Theatre 3

**General Education Electives 4 Hours**

Select additional hours from the general education categories listed above for a minimum total of 42 hours to meet the general education core

**Program Requirements 15.5 Hours**

EDUC 108 Introduction to the Field of Education .5

EDUC 205<sup>^^</sup> Teaching Profession with Field Experience 3EDUC 209<sup>^^</sup> Foundations of Education in a Diverse Society 3EDUC 212<sup>^^</sup> Educational Technology 3EDUC 220<sup>^^</sup> Educational Psychology 3PSY 102<sup>^^</sup> Child Psychology 3**Program Electives 9 Hours***Suggested Courses*

ATSM 105 Autism Spectrum Disorders 3

ATSM 110 Communication and Social Competence 3

ECD 107<sup>^^</sup> Child Nutrition, Health and Safety 3

ECON 101 Macroeconomics 3

EDUC 110<sup>^^</sup> Introduction to Physical Education in the Elementary School 2EDUC 218<sup>^^</sup> Children's Literature 3EDUC 228<sup>^^</sup> Education of Exceptional Learners pre K-12 3EDUC 240<sup>^^</sup> Multicultural Education 3

FREN 101 Elementary French I 3

GERM 101 Elementary German I 3

SOC 120 American Diversity 3

SPAN 101 Elementary Spanish I 3

**Degree Total 66.5 Hours**



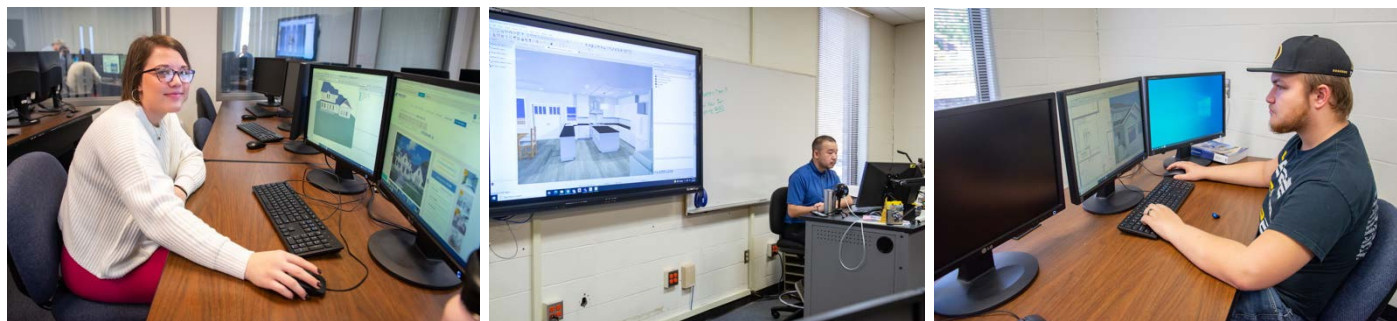
## Associate of Science in Chemistry

The Associate of Science (AS) in Chemistry is designed for students who want to earn a bachelor's degree in chemistry at a four-year institution. This program provides students with the first two years of study toward a Bachelor of Science degree at the University of Central Missouri (UCM) in Warrensburg. Students take basic courses common to most science and pre-health disciplines and continue their studies of chemistry at UCM. The curriculum was developed in cooperation with UCM and the Coordinating Board for Higher Education (CBHE). Chemistry programs at other institutions differ slightly, so it is strongly suggested that a student electing to receive an AS degree work very closely with an advisor from both State Fair Community College and the receiving institution to individually plan the four-semester degree plan.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Written Communications		6 Hours	Program Requirements		38 Hours
ENGL 101	English Composition I	3	BIO 112	General Biology with Lab	5
ENGL 102	English Composition II	3	CHEM 123	General Chemistry I with Lab	5
Oral Communications		3 Hours	CHEM 124	General Chemistry II with Lab	5
COMM 101	Public Speaking	3	CHEM 221	Organic Chemistry I with Lab	5
COMM 190	Argumentation and Debate	3	CHEM 222	Organic Chemistry II with Lab	5
Civics		3 Hours	MATH 130	Calculus and Analytic Geometry I	5
HIST 101	U.S. History Before 1877	3	PHYS 105	College Physics I with Lab (or)	
HIST 102	U.S. History Since 1877	3	PHYS 118	General Physics I with Lab	5
POLS 101	American/National Government	3	PHYS 106	College Physics II with Lab (or)	
			PHYS 119	General Physics II with Lab	3
Humanities, Sciences, and Fine Arts		9 Hours	Program Elective		3 Hours
AGRI 132	Agriculture Economics	3	You must check the individual degree requirements at your transfer institution to determine which course is best for your area.		
ART 101	Art Appreciation	3	BIO 125	Biology I with Lab	5
ECON 101	Principles of Macroeconomics	3	BIO 126	Biology II with Lab	5
ECON 102	Principles of Microeconomics	3	MATH 120	Precalculus Trigonometry	3
FREN 101	Elementary French I	3	MATH 131	Calculus and Analytic Geometry II	5
GEOG 101	World Geography	3	Degree Total		62 Hours
LIT 107	American Literature	3			
MUS 101	Music Appreciation	3			
PHIL 101	Introduction to Philosophy	3			
PHIL 102	Ethics	3			
PHIL 104	Living Religions	3			
SPAN 101	Elementary Spanish I	3			
THEA 107	Introduction to Theatre	3			



## Associate of Science in Engineering

The Associate of Science (AS) in Engineering is designed for students who want to earn a bachelor's degree in any engineering field at a four-year institution. This program provides students with the first two years of study toward a Bachelor of Science degree at the Missouri University of Science and Technology (MS&T) in Rolla, Missouri. Students take basic courses common to most engineering disciplines and continue their studies in specialized areas (electrical, mechanical, civil, chemical, etc.) during their remaining years at MS&T. The curriculum responds to the Model Program for Engineering Transfers developed in cooperation with MS&T and the Coordinating Board for Higher Education (CBHE). Engineering programs differ slightly so it is strongly suggested that a student electing to receive an AS degree work very closely with an advisor from both State Fair Community College and the receiving institution to individually plan the four-semester degree plan and select the communications and elective courses that are best for your area.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

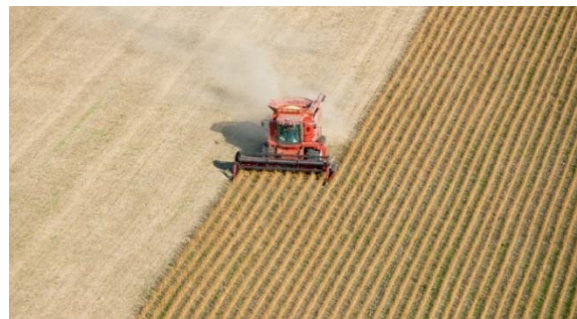
Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Written and Oral Communications		6 Hours	Program Requirements		36 Hours
ENGL 101	English Composition I	3	CHEM 123	General Chemistry I with Lab	5
<b>Select an additional course</b>			ECON 101	Principles of Macroeconomics	3
ENGL 102	English Composition II	3	MATH 130	Calculus and Analytic Geometry I	5
COMM 101	Public Speaking	3	MATH 131	Calculus and Analytic Geometry II	5
<b>Civics</b>		<b>3 Hours</b>	MATH 132	Calculus and Analytic Geometry III	5
HIST 101	U.S. History Before 1877	3	PHYS 118	General Physics I with Lab	5
HIST 102	U.S. History Since 1877	3	PHYS 119	General Physics II with Lab	5
POLS 101	American/National Government	3	PHYS 203	Statics	3
<b>Humanities, Sciences, and Fine Arts</b>		<b>6 Hours</b>	<b>Program Electives</b>		<b>16 Hours</b>
ART 101	Art Appreciation	3	BIO 112	General Biology with Lab	5
ECON 102	Principles of Microeconomics	3	CAPP 125	Microcomputer Applications	3
FREN 101	Elementary French I	3	CHEM 124	General Chemistry II with Lab	5
GEOG 101	World Geography	3	CHEM 221	Organic Chemistry I with Lab	5
LIT 107	American Literature	3	CIS 155	Programming in C#	3
MUS 101	Music Appreciation	3	CIS 157	Advanced C #	3
PHIL 101	Introduction to Philosophy	3	EDT 111	Introduction to Engineering Design	3
PHIL 102	Ethics	3	EDT 115	Advanced Engineering Design	3
PHIL 104	Living Religions	3	EDT 130	Manufacturing Design I	3
PSY 101	General Psychology	3	MATH 114	Precalculus Algebra	3
SOC 100	General Sociology	3	MATH 120	Precalculus Trigonometry	3
SPAN 101	Elementary Spanish I	3	MATH 134	Differential Equations	3
THEA 107	Introduction to Theatre	3	<b>Degree Total</b>		<b>67 Hours</b>



## Associate of Applied Science General Education Requirements

<b>General Education Core</b>		<b>15 Hours</b>	COMM 110	Introduction to Mass Communication	3
<b>Written and Oral Communications</b>		<b>6 Hours</b>	EASC 101	Introduction to Earth Sciences with Lab	5
COMM 101	Public Speaking	3	EASC 106	Physical Geology with Lab	5
COMM 190	Argumentation and Debate	3	EASC 118	Environmental Geology	3
ENGL 101	English Composition I	3	EASC 120	Introduction to Astronomy	3
ENGL 102	English Composition II	3	ECON 101	Principles of Macroeconomics	3
ENGL 110	Communication for Business and Industry	3	ECON 102	Principles of Microeconomics	3
<b>Civics</b>		<b>3 Hours</b>	FREN 101	Elementary French I	3
HIST 101	U.S. History Before 1877	3	FREN 102	Elementary French II	3
HIST 102	U.S. History Since 1877	3	GEOG 101	World Geography	3
POLS 101	American/National Government	3	GERM 101	Elementary German I	3
<b>Mathematical Sciences</b>		<b>3 Hours</b>	HIST 108	World History Before 1500	3
MATH 101	Business Math	3	HIST 109	World History After 1500	3
MATH 107	Technical Math I	3	LIT 101	Introduction to Literature	3
MATH 108	Technical Math II	3	LIT 107	American Literature	3
MATH 110	Intermediate Algebra with Review	5	LIT 109	British Literature	3
MATH 112	Intermediate Algebra	3	LIT 112	World Literature	3
MATH 113	Mathematical Reasoning and Modeling	3	MUS 100	Music Theory I	3
MATH 114	Precalculus Algebra	3	MUS 101	Music Appreciation	3
MATH 119	Statistical Reasoning	3	MUS 102	History of Rock Music	3
<b>Humanities, Sciences, and Fine Arts</b>		<b>3 Hours</b>	MUS 103	Music History and Literature Before 1800	3
AGRI 119	Soils I with Lab	4	MUS 104	Music History and Literature After 1800	3
AGRI 132	Agriculture Economics	3	MUS 119	Jazz Band I	1
ART 101	Art Appreciation	3	MUS 175	Chamber Singers I	1
ART 112	Drawing I	3	MUS 196	Concert Band I	1
ART 116	Painting I	3	MUS 197	Concert Band II	1
ART 122	Sculpture I	3	MUS 210	Jazz Choir I	2
ART 126	Ceramics I	3	PHIL 101	Introduction to Philosophy	3
ART 120	Modern Art History	3	PHIL 102	Ethics	3
ART 140	Art History Survey I	3	PHIL 104	Living Religions	3
ART 142	Art History Survey II	3	PHYS 105	College Physics I with Lab	5
ART 160	Introduction to Graphic Design	3	PHYS 118	General Physics I with Lab	5
BIO 100	General Biology	3	PHYS 125	Technical Science	4
BIO 103	Human Biology	3	PSY 101	General Psychology	3
BIO 105	Wildlife Conservation	3	PSY 210	Lifespan Development	3
BIO 112	General Biology with Lab	5	SOC 100	General Sociology	3
BIO 125	Biology I with Lab	5	SOC 101	Social Problems	3
BIO 207	Human Anatomy with Lab	4	SOC 120	American Diversity	3
BIO 208	Human Physiology with Lab	4	SPAN 101	Elementary Spanish I	3
CHEM 101	Introduction to Chemistry with Lab	5	SPAN 102	Elementary Spanish II	3
CHEM 123	General Chemistry I with Lab	5	THEA 107	Introduction to Theatre	3
CJ 102	Introduction to Criminal Justice	3	THEA 110	Stagecraft and Lighting	3
			THEA 111	Acting I	3
			THEA 131	Script Analysis	3

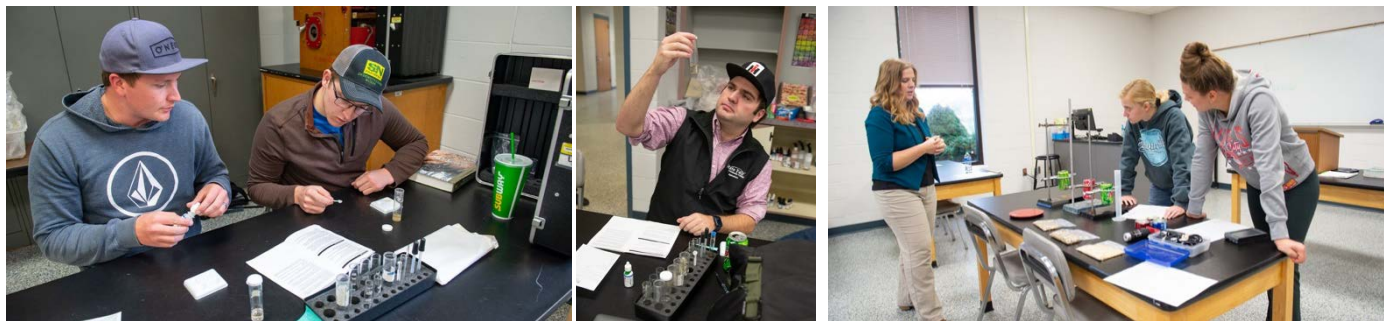


## Professional Certificate in Agribusiness

The Professional Certificate in Agribusiness is designed to provide the student with business skills specific to agriculture. Career paths such as production agriculture, agricultural lending, commodity marketing, risk management, business management, and agricultural retail sales would be well served by completion of this certificate. Students will learn valuable skills in price risk management through hedging practices, effective management of business resources and leadership of human resources, analyzing economic factors and their relationship to agriculture, basic salesmanship skills, and the impact of agricultural and food policy on the agriculture industry.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Program Requirements		30 Hours
AGRI 101	Ag Leadership and Issues I	2
AGRI 102	Ag Leadership and Issues II	1
AGRI 108	Animal Science	3
AGRI 118	Plant Science	3
AGRI 131	Introduction to Agribusiness Systems	3
AGRI 132	Agriculture Economics	3
AGRI 133	Agricultural and Food Policy	3
AGRI 134	Marketing Farm Commodities	3
AGRI 136	Ag Credit and Finance	3
AGRI 138	Ag Business Management	3
CAPP 125	Microcomputer Applications	3
<b>Certificate Total</b>		<b>30 Hours</b>



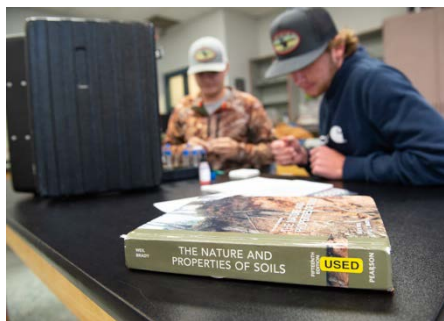
## AAS in Agriculture with Emphasis in Agribusiness

The Agribusiness program provides a vast assortment of opportunities. Firms supply farmers with fertilizer, seed, feed, fuel, chemicals, machinery, equipment, marketing, credit, and supplies. Agribusinesses also produce, buy, process, package, transport, and deliver livestock and products to the consumer. In agribusiness, trained staff familiar with agriculture, marketing, accounting, economics, and public relations is a must. Agriculture is one of the largest and most diverse industries in the world. Careers in agriculture are exciting and satisfying; the opportunities are numerous and the salaries competitive. Students interested in a career in agribusiness are self-motivated, goal-oriented, and take a tenacious, creative approach to problem solving. The technical and business skills to be gained will provide an advantage to work on the family farm or pursue a job in agribusiness. The program combines instruction with job experience. In addition to regular classroom hours, students work for a major industry in their chosen career field with an occupational internship. The internship provides a unique opportunity to apply the knowledge acquired in class to work situations.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Written and Oral Communications		6 Hours	Program Requirements		46 Hours
COMM 101	Public Speaking (or)		AGRI 101	Ag Leadership and Issues I	2
COMM 190	Argumentation and Debate	3	AGRI 102	Ag Leadership and Issues II	1
<b>Select an additional course</b>			AGRI 103	Ag Leadership and Issues III	2
ENGL 101	English Composition I	3	AGRI 104	Ag Leadership and Issues IV	1
ENGL 110	Communication for Business and Industry	3	AGRI 108	Animal Science	3
<b>Civics</b>		<b>3 Hours</b>	AGRI 118	Plant Science	3
HIST 101	U.S. History Before 1877	3	AGRI 121	Soils II	3
HIST 102	U.S. History Since 1877	3	AGRI 125	Natural Resources	3
POLS 101	American/National Government	3	AGRI 129	General Horticulture	3
<b>Mathematical Sciences</b>		<b>3 Hours</b>	AGRI 131	Introduction to Agribusiness Systems	3
MATH 101	Business Math	3	AGRI 132	Agriculture Economics	3
MATH 110	Intermediate Algebra with Review	5	AGRI 133	Agricultural and Food Policy	3
MATH 112	Intermediate Algebra	3	AGRI 134	Marketing Farm Commodities	3
MATH 114	Precalculus Algebra	3	AGRI 136	Ag Credit and Finance	3
<b>Humanities, Sciences, and Fine Arts</b>		<b>4 Hours</b>	AGRI 138	Ag Business Management	3
AGRI 119	Soils I with Lab	4	AGRI 175	Occupational Internship	4
			CAPP 125	Microcomputer Applications	3
<b>Degree Total</b>					<b>62 Hours</b>



## AAS in Agriculture with Emphasis in Agronomy

The Agronomy program provides students with a strong foundation to pursue a career in an agronomic related field. As world population approaches nine billion people, agronomists will be responsible for increasing food production on fewer acres while ensuring resources will be available for future generations. Employment opportunities include crop and seed production; fertilizer sales and application; pest and weed control; seed sales; crop scouting; seed analysts, and soil scientists. Course work focuses on soil and plant sciences, soil erosion management, soil fertilization, and chemical safety and application. In addition to regular classroom hours, students work for an employer in the agronomy industry with an occupational internship. The internship provides a unique opportunity to apply the knowledge acquired in class to work situations.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Written and Oral Communications		6 Hours	Program Requirements		47 Hours
COMM 101	Public Speaking (or)		AGRI 101	Ag Leadership and Issues I	2
COMM 190	Argumentation and Debate	3	AGRI 102	Ag Leadership and Issues II	1
<b>Select an additional course</b>			AGRI 103	Ag Leadership and Issues III	2
ENGL 101	English Composition I	3	AGRI 104	Ag Leadership and Issues IV	1
ENGL 110	Communication for Business and Industry	3	AGRI 118	Plant Science	3
<b>Civics</b>		<b>3 Hours</b>	AGRI 121	Soils II	3
HIST 101	U.S. History Before 1877	3	AGRI 123	Soil Erosion and Management	3
HIST 102	U.S. History Since 1877	3	AGRI 125	Natural Resources	3
POLS 101	American/National Government	3	AGRI 127	Farm Chemicals	3
<b>Mathematical Sciences</b>		<b>3 Hours</b>	AGRI 129	General Horticulture	3
MATH 101	Business Math	3	AGRI 131	Introduction to Agribusiness Systems	3
MATH 110	Intermediate Algebra with Review	5	AGRI 133	Agricultural and Food Policy	3
MATH 112	Intermediate Algebra	3	AGRI 134	Marketing Farm Commodities	3
MATH 114	Precalculus Algebra	3	AGRI 149	Chemistry of Soil Additives	3
<b>Humanities, Sciences, and Fine Arts</b>		<b>4 Hours</b>	AGRI 168	Commercial Applicator Licensing	2
AGRI 119	Soils I with Lab	4	AGRI 174	Crop and Insect Scouting	2
			AGRI 175	Occupational Internship	4
			CAPP 125	Microcomputer Applications	3
<b>Degree Total</b>					<b>63 Hours</b>



## AAS in Agriculture with Emphasis in Animal Science

The Animal Science program is focused on the livestock portion of the agricultural industry. Students will gain a fundamental knowledge of livestock production through animal selection and reproduction, nutrition, and management courses. This program focuses on all species of livestock and is intended for students pursuing a career in livestock production.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Written and Oral Communications		6 Hours	Program Requirements		47 Hours
ENGL 101	English Composition I	3	AGRI 101	Ag Leadership and Issues I	2
<b>Select an additional course</b>			AGRI 102	Ag Leadership and Issues II	1
COMM 101	Public Speaking	3	AGRI 103	Ag Leadership and Issues III	2
COMM 190	Argumentation and Debate	3	AGRI 104	Ag Leadership and Issues IV	1
<b>Civics</b>		<b>3 Hours</b>	AGRI 108	Animal Science	3
HIST 101	U.S. History Before 1877	3	AGRI 110	Contemporary Issues in Animal Agriculture	3
HIST 102	U.S. History Since 1877	3	AGRI 112	Livestock and Meat Evaluation	3
POLS 101	American/National Government	3	AGRI 114	Livestock Management	3
<b>Mathematical Sciences</b>		<b>3 Hours</b>	AGRI 116	Animal Nutrition	3
MATH 110	Intermediate Algebra with Review	5	AGRI 131	Introduction to Agribusiness Systems	3
MATH 112	Intermediate Algebra	3	AGRI 133	Agricultural and Food Policy	3
MATH 114	Precalculus Algebra	3	AGRI 134	Marketing Farm Commodities	3
<b>Humanities, Sciences, and Fine Arts</b>		<b>5 Hours</b>	AGRI 141	Livestock Breeding	3
BIO 112	General Biology with Lab	5	AGRI 143	Livestock Reproduction	3
			AGRI 175	Occupational Internship	4
			BIO 210	Principles of Genetics with Lab	4
			CAPP 125	Microcomputer Applications	3
<b>Degree Total</b>					<b>64 Hours</b>



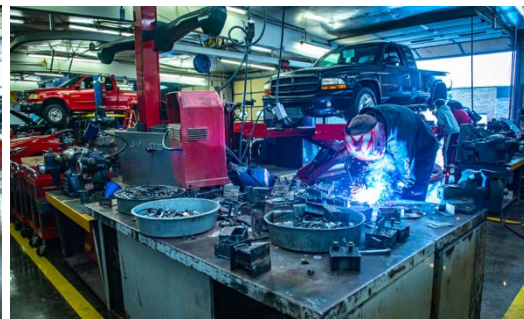
## AAS in Agriculture with Emphasis in Horticulture

The Horticulture program will prepare students for numerous career opportunities with practical experience in a fully equipped greenhouse and an internship to enhance the classroom learning experiences. Workers in landscaping, groundskeeping, nursery, greenhouse, and lawn service occupations are responsible for a variety of tasks necessary to achieve a pleasant and functional outdoor environment. They also care for indoor gardens and planting in commercial and public facilities. Nursery and greenhouse workers help cultivate plants. Managers make decisions about type and quantity of plants to be grown; purchase seed, fertilizers, and chemicals; hire employees; manage record keeping and marketing, and oversee operations. Landscape contractors usually follow designs of a landscape architect to install trees, shrubs, sod, and ornamental features. Groundskeepers maintain a variety of facilities including athletic fields, golf courses, cemeteries, college campuses, and parks.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Written and Oral Communications		6 Hours	Program Requirements		46 Hours
COMM 101	Public Speaking (or)		AGRI 101	Ag Leadership and Issues I	2
COMM 190	Argumentation and Debate	3	AGRI 102	Ag Leadership and Issues II	1
<b>Select an additional course</b>			AGRI 103	Ag Leadership and Issues III	2
ENGL 101	English Composition I	3	AGRI 104	Ag Leadership and Issues IV	1
ENGL 110	Communication for Business and Industry	3	AGRI 118	Plant Science	3
<b>Civics</b>		<b>3 Hours</b>	AGRI 121	Soils II	3
HIST 101	U.S. History Before 1877	3	AGRI 126	Ornamental Woody Plants	3
HIST 102	U.S. History Since 1877	3	AGRI 127	Farm Chemicals	3
POLS 101	American/National Government	3	AGRI 128	Ornamental Herbaceous Plants	3
<b>Mathematical Sciences</b>		<b>3 Hours</b>	AGRI 129	General Horticulture	3
MATH 101	Business Math	3	AGRI 131	Introduction to Agribusiness Systems	3
MATH 110	Intermediate Algebra with Review	5	AGRI 138	Ag Business Management	3
MATH 112	Intermediate Algebra	3	AGRI 151	Landscape Design and Maintenance	3
MATH 114	Precalculus Algebra	3	AGRI 154	Greenhouse Management with Lab	4
<b>Humanities, Sciences, and Fine Arts</b>		<b>4 Hours</b>	AGRI 168	Commercial Applicator Licensing	2
AGRI 119	Soils I with Lab	4	AGRI 175	Occupational Internship	4
			CAPP 125	Microcomputer Applications	3
<b>Degree Total</b>					<b>62 Hours</b>



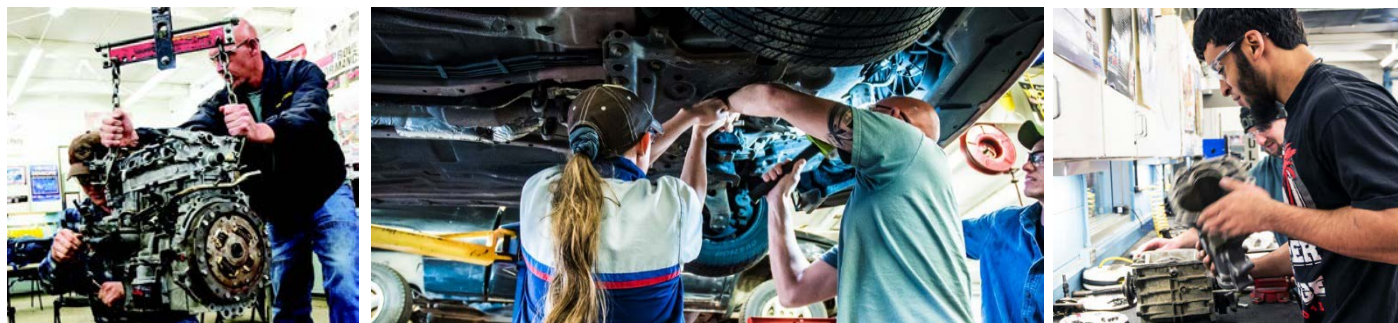
## Professional Certificate in Automotive Technology

The Professional Certificate in Automotive Technology requires satisfactory completion of the 14 core courses within the Automotive Technology program. Students who complete this course of study will learn automotive systems, theory and principles and receive specialized hands-on training using up-to-date industry standard equipment. With this certificate, the student will be prepared to enter the labor force equipped with the knowledge and skills to go to work. In addition, this specialized training enhances the student's chance of securing employment quickly.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		59 Hours
AUTO 102^^	Introduction to Automotive Industry	3
AUTO 103^^	Manual Transmissions, Drivelines and Axles	5
AUTO 104^^	Introduction to Automotive Technology	4
AUTO 105^^	Automatic Transmissions	5
AUTO 106^^	Power Train Management	5
AUTO 108^^	Advanced Engine Performance	6
AUTO 113^^	Steering, Suspension and Wheels	5
AUTO 115^^	Automotive Brakes	5
AUTO 116^^	Automotive Electrical System Fundamentals	3
AUTO 118^^	Automotive Electrical Systems	3
AUTO 119^^	Automotive Heating and Air Conditioning	5
AUTO 120^^	Advanced Electrical Systems Diagnosis	4
AUTO 121^^	Automotive Engines	6
<b>Certificate Total</b>		<b>59 Hours</b>



## AAS in Automotive Technology

The Automotive Technology program gives students the opportunity to study automotive systems in depth, beginning with fundamental principles and quickly advancing to more sophisticated theories and application.

Along with classroom study, the program is designed to help students develop a strong skill foundation through lab and shop learning activities. In today's automotive repair industry, technicians must have the ability to quickly diagnose and repair vehicle systems from the trivial problems to the most sophisticated. This course of study will prepare the student to embrace the ever-changing technology associated with the automobile repair industry. An automotive technician must be well versed in computers, mathematics, reading, and communication skills, along with skills specific to the trade. The program will provide instruction on employability skills and shop operation management. Students frequently work with dirty and greasy parts and in awkward positions. They often lift heavy parts and tools. Minor cuts, burns and bruises are common.

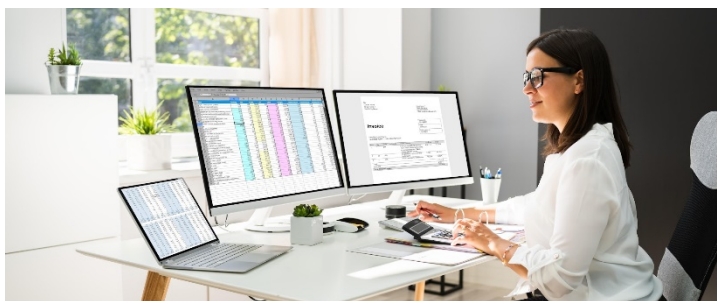
The Automotive Technology program has attained national accreditation status from the National Automotive Technicians Education Foundation (NATEF), an affiliate of the National Institute of Automotive Service Excellence (ASE), signifying that the program meets uniform standards for instructional facilities, equipment, curriculum, and staff credentials.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

			Program Requirements	59 Hours
<b>Written and Oral Communications</b>				
COMM 101	Public Speaking	3	AUTO 102^^ Introduction to Automotive Industry	3
ENGL 110	Communication for Business and Industry	3	AUTO 103^^ Manual Transmissions, Drivelines and Axles	5
<b>Civics</b>			AUTO 104^^ Introduction to Automotive Technology	4
HIST 101	U.S. History Before 1877	3	AUTO 105^^ Automatic Transmissions	5
HIST 102	U.S. History Since 1877	3	AUTO 106^^ Power Train Management	5
POLS 101	American/National Government	3	AUTO 108^^ Advanced Engine Performance	6
<b>Mathematical Sciences</b>			AUTO 113^^ Steering, Suspension and Wheels	5
MATH 108	Technical Math II	3	AUTO 115^^ Automotive Brakes	5
<b>Humanities, Sciences, and Fine Arts</b>			AUTO 116^^ Automotive Electrical System Fundamentals	3
PHYS 125	Technical Science	4	AUTO 118^^ Automotive Electrical Systems	3
			AUTO 119^^ Automotive Heating and Air Conditioning	5
			AUTO 120^^ Advanced Electrical Systems Diagnosis	4
			AUTO 121^^ Automotive Engines	6
			<b>Degree Total</b>	<b>75 Hours</b>

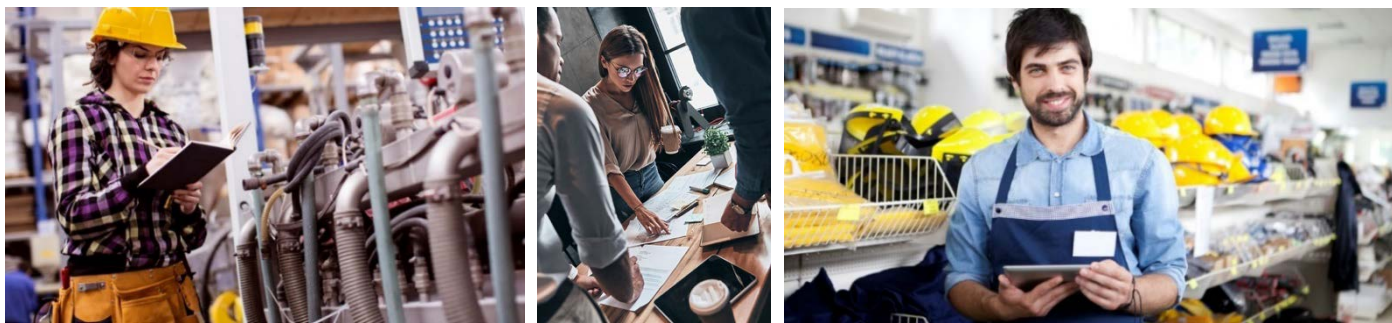


### Skills Certificate in First Line Supervision in Office Support

The first line manager is the bridge between the line staff and management. This certificate is designed to provide front line employees with the skills necessary to transition to a supervisory role. Students will gain knowledge in the areas of leadership, human relations, communication, and functions of business.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Program Requirements		16 Hours
BSMT 119	Customer Service Management	3
BSMT 125	Human Relations	3
CAPP 125	Microcomputer Applications	3
ENGL 110	Communication for Business and Industry	3
OADM 134	Office Management	3
SS 120	Employment Strategies	1
<b>Certificate Total</b>		<b>16 Hours</b>



### Skills Certificate in First Line Supervision in Production

The first line manager is the bridge between the line staff and management. This certificate is designed to provide front line employees with the skills necessary to transition to a supervisory role. Students will gain knowledge in the areas of leadership, human relations, communication, and quality.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Program Requirements		16 Hours
BSMT 108	Principles of Management	3
BSMT 125	Human Relations	3
CAPP 125	Microcomputer Applications	3
CIS 185	Project Management	3
IEM 146	Quality Management and Control	3
SS 120	Employment Strategies	1
<b>Certificate Total</b>		<b>16 Hours</b>



### Skills Certificate in First Line Supervision in Retail

The first line manager is the bridge between the line staff and management. This certificate is designed to provide front line employees with the skills necessary to transition to a supervisory role. Students will gain knowledge in the areas of leadership, human relations, communication, and customer service.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Program Requirements		16 Hours
BSMT 108	Principles of Management	3
BSMT 119	Customer Service Management	3
BSMT 122	Digital and Social Media Marketing	3
BSMT 125	Human Relations	3
CAPP 125	Microcomputer Applications	3
SS 120	Employment Strategies	1
<b>Certificate Total</b>		<b>16 Hours</b>



## AAS in Business Management

In the Business Management program, students should possess leadership and decision-making skills and enjoy analyzing information and implementing solutions in a variety of situations. It is essential that a student possess good communication and human relation skills to be successful. Employment opportunities in this area typically are found in entry-level positions in human resource management, banking, insurance, and entry-level management in areas such as retail, sales and food service. Many students pursuing this degree are seeking to open their own business.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

<b>Written and Oral Communications</b>		<b>6 Hours</b>			
ENGL 110	Communication for Business and Industry	3			
<b>Select an additional course</b>					
COMM 101	Public Speaking	3			
ENGL 101	English Composition I	3			
<b>Civics</b>		<b>3 Hours</b>			
HIST 101	U.S. History Before 1877	3			
HIST 102	U.S. History Since 1877	3			
POLS 101	American/National Government	3			
<b>Mathematical Sciences</b>		<b>3 Hours</b>			
MATH 101	Business Math	3			
MATH 110	Intermediate Algebra with Review	5			
MATH 112	Intermediate Algebra	3			
<b>Humanities, Sciences, and Fine Arts</b>		<b>3 Hours</b>			
ECON 102	Principles of Microeconomics	3			
PHIL 102	Ethics	3			
PSY 101	General Psychology	3			
SOC 100	General Sociology	3			
SPAN 101	Elementary Spanish I	3			
<b>Program Requirements</b>		<b>34 Hours</b>			
ACCT 101	Principles of Financial Accounting	3			
ACCT 109	Applied Accounting Procedures	3			
BADM 101	Introduction to Business	3			
BADM 103	Legal Environment of Business	3			
BADM 107	Personal Finance	3			
BSMT 108	Principles of Management	3			
BSMT 119	Customer Service Management	3			
BSMT 125	Human Relations	3			
BSMT 130	Business Strategies	3			
CAPP 125	Microcomputer Applications	3			
CAPP 166	Excel	3			
SS 120	Employment Strategies	1			
<b>Program Electives</b>		<b>15 Hours</b>			
ACCT 102	Managerial Accounting	3			
ACCT 125	Computerized Accounting Applications	3			
ACCT 135	Business and Federal Taxation	3			
BSMT 106	Principles of Marketing	3			
BSMT 110	Salesmanship	3			
BSMT 122	Digital and Social Media Marketing	3			
BSMT 175	Business Management Internship	3-6			
CAPP 160	Word	3			
CIS 124	Database Management	3			
CIS 185	Project Management	3			
IEM 146	Quality Management and Control	3			
OADM 134	Office Management	3			
<b>Degree Total</b>		<b>64 Hours</b>			



## Skills Certificate in Enterprise Server Administration

The Skills Certificate in Enterprise Server Administration is designed to prepare students for entry into the server administration field and includes courses such as Server Administration, Directory Services, as well as a choice of electives from other server technologies common to today's corporate IT environments.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		12 Hours
NET 101^^	Introduction to Networks	3
NET 120^^	Network Server	3
NET 126^^	Network Client	3
NET 138^^	Network Directory Services	3
Program Electives		6 Hours
NET 135^^	SQL Server System Administration	3
NET 136^^	Exchange Server Administration	3
NET 222^^	Enterprise Applications I	3
NET 223^^	Enterprise Applications II	3
<b>Certificate Total</b>		<b>18 Hours</b>



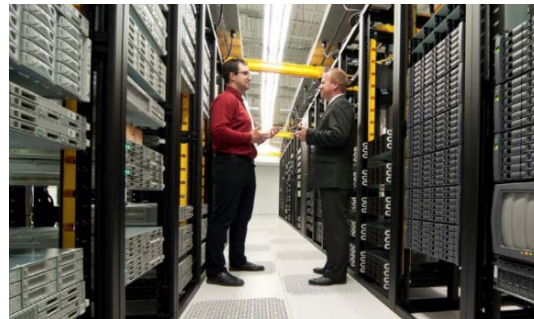
## Skills Certificate in Information Security

The Skills Certificate in Information Security is designed to prepare students for entry into the information security field. In addition to covering basic network and security and related topics, students will study Ethical Hacking and Digital Forensics.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		18 Hours
NET 101^^	Introduction to Networks	3
NET 103^^	Routing/Switching Essentials	3
NET 106^^	Introduction to Network Security	3
NET 158^^	Network Firewalls	3
NET 202^^	Digital Forensics	3
NET 206^^	Ethical Hacking	3
<b>Certificate Total</b>		<b>18 Hours</b>



## Skills Certificate in Storage and Virtualization

The Skills Certificate in Storage and Virtualization is designed to prepare students for entry into the storage and virtualization administration areas in today's corporate data centers.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		18 Hours
NET 101^^	Introduction to Networks	3
NET 106^^	Introduction to Network Security	3
NET 120^^	Network Server	3
NET 126^^	Network Client	3
NET 238^^	Server Virtualization	3
NET 240^^	Enterprise Storage	3
<b>Certificate Total</b>		<b>18 Hours</b>



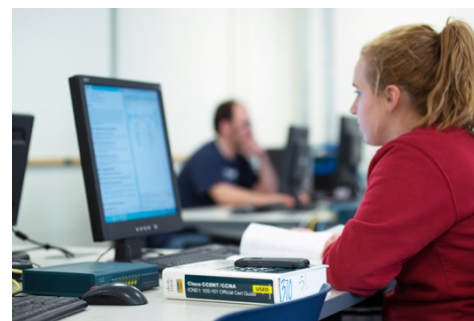
## Professional Certificate in IT Essential Skills

The Professional Certificate in IT Essential Skills will teach students essential core Information from Information Technology disciplines which will allow them to be better prepared to enter the workforce in a variety of entry level roles.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		31 Hours
CIS 120	Programming in Python	3
ENGL 110^^	Communication for Business and Industry	3
NET 101^^	Introduction to Networks	3
NET 103^^	Routing and Switching Essentials	3
NET 106^^	Introduction to Network Security	3
NET 126^^	Network Client	3
NET 140^^	PC Hardware	3
NET 142^^	PC Operating Systems	3
NET 203^^	Enterprise Networks, Security, and Automation	3
NET 280	CISCO Capstone	1
NET 281	A+ Capstone	1
NET 282	Security+ Capstone	1
NET 283	Windows Client Capstone	1
<b>Certificate Total</b>		<b>31 Hours</b>



## AAS in Computer and Network Administration

The Computer and Network Administration program prepares students for a number of certifications, including A+, Network +, Security +CCNA, MCP, MCSA, or MCSE. Students work on current versions of software and hardware. The high demand for certified network administrators will continue to increase as software and hardware become more and more complex. Typical job titles for this degree are systems administrator, IT specialist, IT manager, LAN administrator, or network manager. Tasks associated with the job may include installation, configuration, and support of a local area network (LAN), a wide area network (WAN), and an Internet system or segment of the network. Students learn to maintain and monitor network hardware and software to ensure network availability to all system users.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher<sup>^^</sup>*

<b>Written and Oral Communications</b>		<b>6 Hours</b>
ENGL 101	English Composition I	3
<b>Select an additional course</b>		
ENGL 102	English Composition II	3
ENGL 110	Communication for Business and Industry	3
<b>Civics</b>		<b>3 Hours</b>
HIST 101	U.S. History Before 1877	3
HIST 102	U.S. History Since 1877	3
POLS 101	American/National Government	3
<b>Mathematical Sciences</b>		<b>3 Hours</b>
MATH 101	Business Math	3
MATH 108	Technical Math II	3
MATH 110	Intermediate Algebra with Review	5
MATH 112	Intermediate Algebra	3
<b>Humanities, Sciences, and Fine Arts</b>		<b>3 Hours</b>
ECON 101	Principles of Macroeconomics	3
ECON 102	Principles of Microeconomics	3

<b>Program Requirements</b>		<b>41 Hours</b>
CAPP 125 <sup>^^</sup>	Microcomputer Applications	3
CIS 120	Programming in Python	3
NET 101 <sup>^^</sup>	Introduction to Networks	3
NET 103 <sup>^^</sup>	Routing/Switching Essentials	3
NET 106 <sup>^^</sup>	Introduction to Network Security	3
NET 120 <sup>^^</sup>	Network Server	3
NET 126 <sup>^^</sup>	Network Client	3
NET 138 <sup>^^</sup>	Network Directory Services	3
NET 140 <sup>^^</sup>	PC Hardware	3
NET 142 <sup>^^</sup>	PC Operating Systems	3
NET 158 <sup>^^</sup>	Network Firewalls	3
NET 175 <sup>^^</sup>	Network Administration Internship	4
NET 203 <sup>^^</sup>	Enterprise Networks, Security, and Automation	3
SS 120	Employment Strategies	1
<b>NET Electives</b>		<b>6 Hours</b>
Choose any NET course not taken		
<b>Program Electives</b>		<b>3 Hours</b>
Choose any CIS course (except CIS 103)		
Choose any NET course not taken		
Choose any WEB course		
<b>Degree Total</b>		<b>65 Hours</b>



## AAS in Computer Information Systems with Emphasis in Accounting

The Computer Information Systems (CIS) with Emphasis in Accounting program can launch an exciting career. Changes in markets and technology have transformed the way companies compete in the global workplace. Businesses are rapidly computerizing their accounting and information systems. Preparing for tomorrow's jobs today requires a new level of skill and dedication. Working in the field of accounting computer information systems demands patience, persistence and extreme accuracy. Students need to think logically and analytically. A graduate of the CIS/Accounting program has the skills needed to set up and maintain the latest computerized accounting systems. The demand is increasing daily for employees who can apply both accounting and computer skills.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher<sup>^^</sup>*

**Written and Oral Communications** **6 Hours**  
ENGL 110 Communication for Business and Industry 3

**Select an additional course**  
COMM 101 Public Speaking 3  
ENGL 101 English Composition I 3

**Civics** **3 Hours**  
HIST 101 U.S. History Before 1877 3  
HIST 102 U.S. History Since 1877 3  
POLS 101 American/National Government 3

**Mathematical Sciences** **3 Hours**  
MATH 101 Business Math 3  
MATH 107 Technical Math I 3  
MATH 108 Technical Math II 3  
MATH 110 Intermediate Algebra with Review 5  
MATH 112 Intermediate Algebra 3  
MATH 113 Mathematical Reasoning and Modeling 3  
MATH 114 Precalculus Algebra 3  
MATH 119 Statistical Reasoning 3

**Humanities, Sciences, and Fine Arts** **3 Hours**  
ECON 101 Principles of Macroeconomics 3  
PHIL 102 Ethics 3

**Program Requirements** **44 Hours**  
ACCT 101<sup>^^</sup> Principles of Financial Accounting 3  
ACCT 102<sup>^^</sup> Managerial Accounting 3  
ACCT 109<sup>^^</sup> Applied Accounting Procedures 3  
ACCT 125<sup>^^</sup> Computerized Accounting Applications 3  
CAPP 125 Microcomputer Applications 3  
CAPP 166<sup>^^</sup> Excel 3  
CIS 103<sup>^^</sup> Introduction to CIS 3  
CIS 124<sup>^^</sup> Database Management 3  
CIS 155<sup>^^</sup> Programming in C# 3  
CIS 161<sup>^^</sup> Systems Analysis 3  
CIS 175<sup>^^</sup> CIS Internship 4  
CIS 185<sup>^^</sup> Project Management 3  
NET 101<sup>^^</sup> Introduction to Networks 3  
SS 120 Employment Strategies 1  
WEB 160<sup>^^</sup> Portfolio Design 3

**Program Electives** **6 Hours**  
ACCT 135<sup>^^</sup> Business and Federal Taxation 3  
CIS 145<sup>^^</sup> Visual Basic 3  
CIS 157<sup>^^</sup> Advanced C# 3  
CIS 174<sup>^^</sup> Programming in C# with SQL 3

**Degree Total** **65 Hours**



## Skills Certificate in Computer User Support

The Skills Certificate in Computer User Support is designed to help students prepare for an entry-level technician position. This certificate includes introductory courses in networking, programming, applications, and communications.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		19 Hours
CAPP 125^^	Microcomputer Applications	3
CIS 120^^	Programming in Python	3
CIS 145^^	Visual Basic	3
ENGL 110	Communication for Business and Industry	3
NET 101^^	Introduction to Networks	3
NET 106^^	Introduction to Network Security	3
SS 120	Employment Strategies	1
<b>Certificate Total</b>		<b>19 Hours</b>



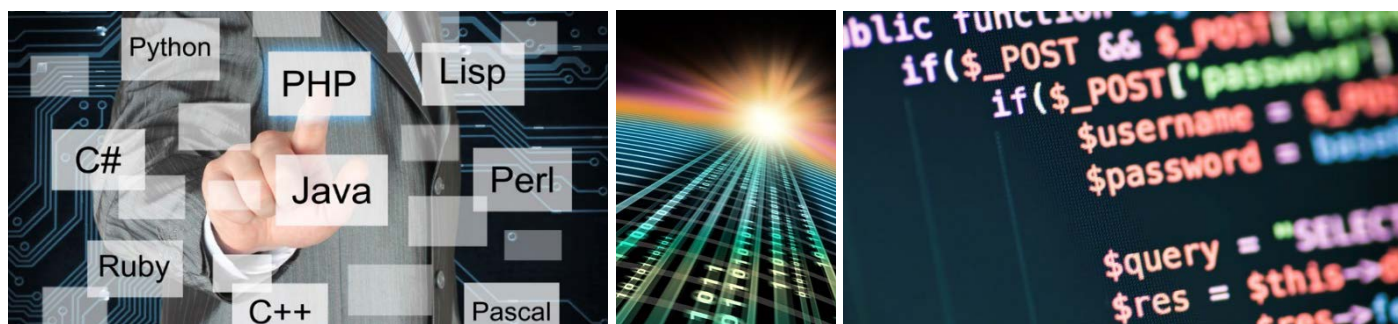
## Skills Certificate in Programming

The Skills Certificate in Programming is designed to allow students to achieve this qualification in a single 18-credit hour semester. The courses for this certificate prepare students for entry-level programming jobs using the languages of Visual Basic, C#, Java, and an understanding of database relationships and SQL coding.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		18 Hours
CIS 103^^	Introduction to CIS	3
CIS 124^^	Database Management	3
CIS 145^^	Visual Basic	3
CIS 155^^	Programming in C#	3
CIS 158^^	Java	3
CIS 161^^	Systems Analysis	3
<b>Certificate Total</b>		<b>18 Hours</b>



## AAS in Computer Information Systems with Emphasis in Programming

The Computer Information Systems with Emphasis in Programming program prepares students to enter an exciting field of computer programming. Local, national and international companies including banks, insurance companies, state agencies, and major programming firms have hired State Fair Community College graduates. Students receive hands-on experience in programming. COBOL, DB2, Visual Basic, C#, and JAVA are taught in addition to courses in programming concepts, software and hardware applications, and computer operations. An internship provides an opportunity to apply knowledge and skills in a work environment.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

<i>Courses to complete with a grade of C or higher^^</i>			CIS 124^^	Database Management	3
<b>Written and Oral Communications</b>			CIS 145^^	Visual Basic	3
<b>6 Hours</b>			CIS 155^^	Programming in C#	3
ENGL 110	Communication for Business and Industry	3	CIS 157^^	Advanced C#	3
<b>Select an additional course</b>			CIS 158^^	Java	3
COMM 101	Public Speaking	3	CIS 161^^	Systems Analysis	3
ENGL 101	English Composition I	3	CIS 174^^	Programming in C# with SQL	3
<b>Civics</b>			CIS 175^^	CIS Internship	4
<b>3 Hours</b>			CIS 185^^	Project Management	3
HIST 101	U.S. History Before 1877	3	SS 120	Employment Strategies	1
HIST 102	U.S. History Since 1877	3	WEB 103^^	Introduction to Web Development	3
POLS 101	American/National Government	3	WEB 104^^	Android Applications	3
<b>Mathematical Sciences</b>			WEB 160^^	Portfolio Design	3
<b>3 Hours</b>			<b>Program Electives</b>		
MATH 101	Business Math	3	<b>9 Hours</b>		
MATH 107	Technical Math I	3	CIS 120^^	Programming in Python	3
MATH 108	Technical Math II	3	CIS 148^^	COBOL	3
MATH 110	Intermediate Algebra with Review	5	CIS 149^^	Advanced COBOL	3
MATH 112	Intermediate Algebra	3	CIS 151^^	DB2 Relational Database	3
MATH 113	Mathematical Reasoning and Modeling	3	CIS 168^^	Game Programming	3
MATH 114	Precalculus Algebra	3	NET 101^^	Introduction to Networks	3
MATH 119	Statistical Reasoning	3	NET 102^^	Networking Essentials	3
<b>Humanities, Sciences, and Fine Arts</b>			NET 106^^	Introduction to Network Security	3
<b>3 Hours</b>			NET 120^^	Network Server	3
ECON 101	Principles of Macroeconomics	3	WEB 114^^	Web Scripting	3
PHIL 102	Ethics	3	WEB 116^^	Web Development	3
<b>Program Requirements</b>			<b>Degree Total</b>		
<b>44 Hours</b>			<b>68 Hours</b>		
CAPP 125	Microcomputer Applications	3			
CIS 103^^	Introduction to CIS	3			



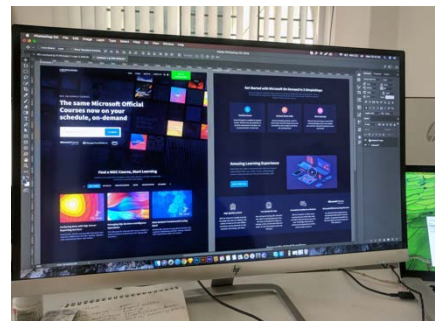
## Professional Certificate in Web Design Applications

The Professional Certificate in Web Design Applications prepares students for entry-level employment in the field of digital imaging. Job opportunities include digital imager, imaging technician and graphic artist. Employment responsibilities in these areas includes: scanning, image enhancement, image manipulation, and page layout. The courses in this certificate may also be used to satisfy requirements for the Web Development degree.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		30 Hours
CAPP 125	Microcomputer Applications	3
CAPP 162^^	Desktop Publishing	3
CIS 103^^	Introduction to CIS	3
CIS 158^^	Java	3
WEB 103^^	Introduction to Web Development	3
WEB 116^^	Web Development	3
WEB 118^^	Digital Imaging	3
WEB 119^^	Digital Illustration	3
WEB 120^^	XML	3
WEB 160^^	Portfolio Design	3
<b>Certificate Total</b>		<b>30 Hours</b>



## AAS in Computer Information Systems with Emphasis in Web Development

The Computer Information Systems with Emphasis in Web Development program is designed for the individual seeking a career in the world of cyber industry. With the explosion of e-commerce, many companies now generate a substantial percentage of their revenue from online purchases. Even the smallest companies have a presence on the Web. Companies are seeking individuals with the ability to create interactive websites capable of accessing multiple databases.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

### Written and Oral Communications 6 Hours

ENGL 110 Communication for Business and Industry 3

### Select an additional course

COMM 101 Public Speaking 3

ENGL 101 English Composition I 3

### Civics 3 Hours

HIST 101 U.S. History Before 1877 3

HIST 102 U.S. History Since 1877 3

POLS 101 American/National Government 3

### Mathematical Sciences 3 Hours

MATH 101 Business Math 3

MATH 107 Technical Math I 3

MATH 108 Technical Math II 3

MATH 110 Intermediate Algebra with Review 5

MATH 112 Intermediate Algebra 3

MATH 113 Mathematical Reasoning and Modeling 3

MATH 114 Precalculus Algebra 3

MATH 119 Statistical Reasoning 3

### Humanities, Sciences, and Fine Arts 3 Hours

ECON 101 Principles of Macroeconomics 3

PHIL 102 Ethics 3

### Program Requirements 47 Hours

CAPP 125 Microcomputer Applications 3

CAPP 162^^ Desktop Publishing 3

CIS 103^^ Introduction to CIS 3

CIS 124^^ Database Management 3

CIS 161^^ Systems Analysis 3

NET 101^^ Introduction to Networks 3

SS 120 Employment Strategies 1

WEB 103^^ Introduction to Web Development 3

WEB 104^^ Android Applications 3

WEB 114^^ Web Scripting 3

WEB 116^^ Web Development 3

WEB 118^^ Digital Imaging 3

WEB 119^^ Digital Illustration 3

WEB 120^^ XML 3

WEB 160^^ Portfolio Design 3

WEB 175^^ Web Development Internship 4

### Program Electives 6 Hours

CIS 120^^ Programming in Python 3

CIS 145^^ Visual Basic 3

CIS 155^^ Programming in C# 3

CIS 157^^ Advanced C# 3

CIS 158^^ Java 3

CIS 174^^ Programming in C# with SQL 3

NET 102^^ Networking Essentials 3

NET 106^^ Introduction to Network Security 3

NET 120^^ Network Server 3

WEB 117^^ Advanced Web Development 3

WEB 130^^ Media Productions 3

**Degree Total 68 Hours**

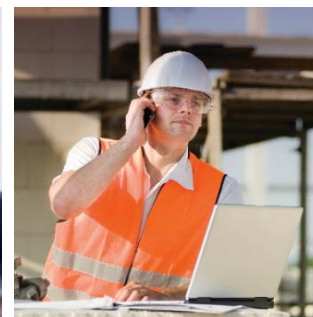
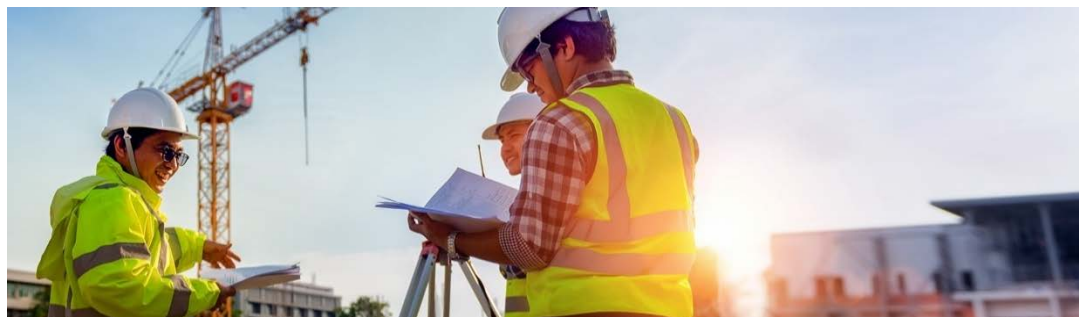


## Professional Certificate in Construction Management Technology

The Professional Certificate in Construction Management Technology covers the fundamentals of construction principles and applications. The graduate can apply skills obtained in print reading, construction management, construction materials and methods, construction safety, codes Building and beginning estimating in jobs related to the construction industry. Completion of this certificate will also transition into the Associate of Applied Science in Construction Management Technology.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Program Requirements		25 Hours
CAPP 125	Microcomputer Applications	3
CNST 105	Construction Materials and Methods	3
CNST 113	Construction Management	3
CNST 148	Construction Codes and Law	3
CNST 162	Construction Safety	3
EDT 105	Print Reading for Construction	3
EDT 120	Architectural Design	3
MATH 108	Technical Math II	3
SS 120	Employment Strategies	1
<b>Certificate Total</b>		<b>25 Hours</b>



## AAS in Construction Management Technology

The Construction Management Technology program can provide the knowledge and skills needed to begin a rewarding career in the construction industry. In this program, theory and practical courses are combined to lead to competencies needed to meet employers' needs. Graduates may work with businesses engaged in all areas of construction. The jobs are varied and challenging, including general contractors, construction management, materials suppliers, and employment with government agencies. Work environments range from permanent offices to job site offices. Studies of future workforce needs project a high demand for persons trained in construction technology. The program is accredited by the American Council for Construction Education (ACCE).

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Written and Oral Communications		6 Hours	Program Requirements		43 Hours
COMM 101	Public Speaking (or)		ACCT 101	Principles of Financial Accounting	3
ENGL 110	Communication for Business and Industry	3	CAPP 125	Microcomputer Applications	3
ENGL 101	English Composition I	3	CNST 105	Construction Materials and Methods	3
<b>Civics</b>		<b>3 Hours</b>	CNST 106	Construction Estimation	3
HIST 101	U.S. History Before 1877	3	CNST 113	Construction Management	3
HIST 102	U.S. History Since 1877	3	CNST 138	Construction Planning and Scheduling	3
POLS 101	American/National Government	3	CNST 142	Building Mechanical Systems	3
<b>Mathematical Sciences</b>		<b>3 Hours</b>	CNST 148	Construction Codes and Law	3
MATH 108	Technical Math II	3	CNST 150	Building Layout and Surveying	3
MATH 114	Precalculus Algebra	3	CNST 160	Statics and Strength of Materials	3
<b>Humanities, Sciences, and Fine Arts</b>		<b>3 Hours</b>	CNST 162	Construction Safety	3
EASC 118	Environmental Geology	3	EDT 105	Print Reading for Construction	3
PHYS 125	Technical Science	4	EDT 111	Introduction to Engineering Design	3
			EDT 120	Architectural Design	3
			SS 120	Employment Strategies	1
			<b>Business Elective</b>		<b>3 Hours</b>
			BADM 101	Introduction to Business	3
			BSMT 106	Principles of Marketing	3
			<b>Degree Total</b>		<b>61 Hours</b>



## AAS in Criminal Justice

The Criminal Justice program prepares students to enter the job market for various occupations in criminal justice, including but not limited to law enforcement and corrections. In addition, successful completion of the degree requirements prepares students to enter a law enforcement training academy for Missouri police officers.

The Associate of Arts degree is designed for students seeking to continue their education at a four-year college or university.

The education of a criminal justice student requires assimilation of knowledge and acquisition of skills through practical experiences and classroom participation. Essential skills and capabilities needed will vary with the demand of the job to be performed.

Students may receive college credit for past basic law enforcement academy/corrections training. Please contact the program coordinator for more information.

Students are also required to complete the NOCTI exam in the area of Criminal Justice during their final semester.

**Note:** People with felony convictions may have difficulty securing employment in the criminal justice field.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

<b>Written and Oral Communications</b>		<b>6 Hours</b>	CJ 103	Traffic Safety and Investigation (or)	
COMM 101	Public Speaking	3	CJ 122	Current Events in Criminal Justice	3
ENGL 101	English Composition I	3	CJ 104	Criminal Investigation	3
<b>Civics</b>		<b>3 Hours</b>	CJ 105	Criminal Law	3
HIST 101	U.S. History Before 1877	3	CJ 107	Criminology	3
HIST 102	U.S. History Since 1877	3	CJ 109	Juvenile Delinquency	3
POLS 101	American/National Government	3	CJ 111	Introduction to Corrections	3
<b>Mathematical Sciences</b>		<b>3 Hours</b>	CJ 115	Procedural Law	3
MATH 101	Business Math	3	CJ 118	Criminal Justice Communications (or)	
MATH 110	Intermediate Algebra with Review	5	CJ 120	Probation and Parole	3
MATH 112	Intermediate Algebra	3	CJ 124	Drugs, Society and Criminal Justice	3
MATH 113	Mathematical Reasoning and Modeling	3	CJ 150	Criminal Justice Seminar	1
MATH 114	Precalculus Algebra	3	CJ 175	Supervised Occupational Experience in Criminal Justice	4
MATH 119	Statistical Reasoning	3	<b>Program Elective</b>		<b>3 Hours</b>
<b>Humanities, Sciences, and Fine Arts</b>		<b>6 Hours</b>	CJ 103	Traffic Safety and Investigation	3
PSY 101	General Psychology	3	CJ 118	Criminal Justice Communications	3
SOC 100	General Sociology	3	CJ 120	Probation and Parole	3
<b>Program Requirements</b>		<b>44 Hours</b>	CJ 122	Current Events in Criminal Justice	3
BSMT 125	Human Relations (or)		PHIL 102	Ethics	3
SOC 120	American Diversity	3	PSY 104	Psychology of Personal Adjustment	3
CAPP 125	Microcomputer Applications	3	SOC 101	Social Problems	3
CJ 101	Introduction to Law Enforcement (or)		SOC 102	Marriage and Family	3
SOC 103	Introduction to Social Work	3	<b>Degree Total</b>		<b>65 Hours</b>
CJ 102	Introduction to Criminal Justice	3			



## Skills Certificate in Digital Media Communications

The Skills Certificate in Digital Media Communications is designed to retrain professionals on principles in marketing, public relations, and imaging within the realm of new technologies, including blogs, podcasts, video production, websites, and social media platforms.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

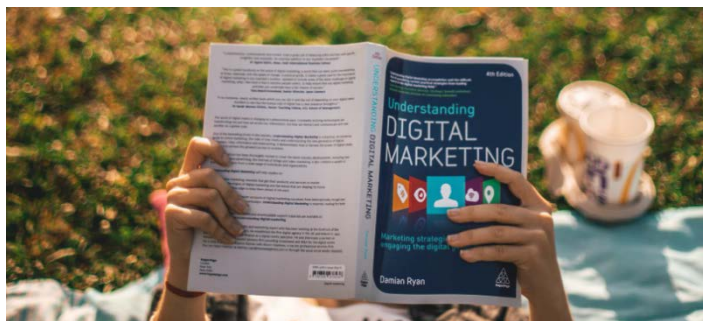
### Program Requirements 12 Hours

BSMT 122^^	Digital and Social Media Marketing	3
COMM 112^^	Introduction to Public Relations	3
COMM 201^^	Writing Across the Media	3
COMM 215^^	New Media Communications Applications	3

### Program Electives 6 Hours

ART 160^^	Introduction to Graphic Design	3
ART 162^^	Digital Photography	3
COMM 160^^	Introduction to Digital Video	3
WEB 103^^	Introduction to Web Development	3
WEB 118^^	Digital Imaging	3

### Certificate Total 18 Hours



## AAS in Digital Media Communications

The Digital Media Communications program builds skills in mass communication, graphic design, journalism, marketing, and public relations within the realm of new technologies including blogs, podcasts, video production, websites, and social media platforms.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

<b>Written and Oral Communications</b>	<b>6 Hours</b>
COMM 101^^ Public Speaking	3
ENGL 101^^ English Composition I	3
<b>Civics</b>	<b>3 Hours</b>
POLS 101^^ American/National Government	3
<b>Mathematical Sciences</b>	<b>3 Hours</b>
MATH 119^^ Statistical Reasoning	3
<b>Humanities, Sciences, and Fine Arts</b>	<b>3 Hours</b>
COMM 110^^ Introduction to Mass Communication	3

<b>Program Requirements</b>		<b>45 Hours</b>
ART 160^^	Introduction to Graphic Design	3
ART 162^^	Digital Photography	3
ART 165^^	Web Authoring and Graphic Tools	3
BSMT 106^^	Principles of Marketing	3
BSMT 122^^	Digital and Social Media Marketing	3
COMM 105^^	Interpersonal Communication	3
COMM 112^^	Introduction to Public Relations	3
COMM 114^^	News Reporting I	3
COMM 160^^	Introduction to Digital Video	3
COMM 201^^	Writing Across the Media	3
COMM 215^^	New Media Communications Applications	3
COMM 220^^	Digital Media Communications Internship	6
WEB 103^^	Introduction to Web Development	3
WEB 118^^	Digital Imaging	3
<b>Degree Total</b>		<b>60 Hours</b>



## Skills Certificate in Early Childhood Development

Early childhood development involves teaching, inspiring, and nurturing young children ages from birth through age eight (third grade). Students will gain an understanding of the child growth and development and the best practices for evaluating and fostering the child's emotional, social, physical, and cognitive development. Students will learn hands-on skills and preparation for assisting in the childcare environment, creating a supportive learning environment, and developing relationships with children and families.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		24.5 Hours
EDUC 108	Introduction to the Field of Education	.5
ECD 101^^	Introduction to Early Childhood	3
ECD 103^^	Child Growth and Development	3
ECD 107^^	Child Nutrition, Health and Safety	3
ECD 109^^	Observation, Planning and Assessment	3
ECD 111^^	Language Development/Early Literacy	3
ECD 125^^	Introduction to Special Individuals and Sensory Integration	3
ECD 127^^	Parent/Teacher Interaction	3
ECD 131^^	Child Development Portfolio/Assessment Preparation	3
<b>Certificate Total</b>		<b>24.5 Hours</b>



## Professional Certificate in Early Childhood Development

Early childhood development involves teaching, inspiring, and nurturing young children ages from birth through age eight (third grade). Students will gain an understanding of the child growth and development and the best practices for evaluating and fostering the child's emotional, social, physical, and cognitive development. Students will learn hands-on skills and preparation for assisting in the childcare environment, creating a supportive learning environment, and developing relationships with children and families.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		36.5 Hours
COMM 101	Public Speaking	3
EDUC 108	Introduction to the Field of Education	.5
ECD 101^^	Introduction to Early Childhood	3
ECD 103^^	Child Growth and Development	3
ECD 107^^	Child Nutrition, Health and Safety	3
ECD 109^^	Observation, Planning and Assessment	3
ECD 111^^	Language Development/Early Literacy	3
ECD 115^^	Child Social/Emotional Development	3
ECD 125^^	Introduction to Special Individuals and Sensory Integration	3
ECD 127^^	Parent/Teacher Interaction	3
ECD 129^^	Administration in Early Childhood Care	3
ENGL 101	English Composition I	3
SOC 120	American Diversity	3
Program Elective		3 Hours
BSMT 125	Human Relations	3
ECD 131^^	Child Development Portfolio/Assessment Preparation	3
EDUC 205^^	Teaching Profession with Field Experience	3
<b>Certificate Total</b>		<b>39.5 Hours</b>



## AAS in Early Childhood Development

The Early Childhood Development program prepares graduates to enter the child care field at several levels. Graduates from the program will be prepared to manage an in-home child care facility, teach in an early childhood classroom or be a director for an early childhood center. This program offers various forms of classroom options (hybrid, online and on ground) to enable students who are employed in the field to complete a degree and increase their opportunities for advancement. Graduates must be physically able and willing to participate in all children's activities.

Students can apply for The Child Development Associate (CDA) Credential after completing ECD 101, ECD 107, ECD 109, and ECD 131.

### Other Requirements

A successful background check included in EDUC 108 is required in this program. This requirement is included in and will be met once students successfully complete EDUC 108. This course must be successfully completed prior to taking most ECD or EDUC courses.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

### Written and Oral Communications 6 Hours

COMM 101	Public Speaking	3
ENGL 101	English Composition I	3

### Civics 3 Hours

HIST 101	U.S. History Before 1877	3
HIST 102	U.S. History Since 1877	3
POLS 101	American/National Government	3

### Mathematical Sciences 3 Hours

MATH 101	Business Math	3
MATH 110	Intermediate Algebra with Review	5
MATH 112	Intermediate Algebra	3
MATH 113	Mathematical Reasoning and Modeling	3
MATH 114	Precalculus Algebra	3

### Humanities, Sciences, and Fine Arts 3 Hours

SOC 120	American Diversity	3
---------	--------------------	---

### Program Requirements 42.5 Hours

ECD 101^^	Introduction to Early Childhood	3
ECD 103^^	Child Growth and Development	3

ECD 107^^	Child Nutrition, Health and Safety	3
ECD 109^^	Observation, Planning and Assessment	3
ECD 111^^	Language Development/Early Literacy	3
ECD 115^^	Child Social/Emotional Development	3
ECD 117^^	Creative Expression and Play	3
ECD 121^^	Curriculum Strategies for Early Childhood	3
ECD 125^^	Introduction to Special Individuals and Sensory Integration	3
ECD 127^^	Parent/Teacher Interaction	3
ECD 129^^	Administration in Early Childhood Care	3
ECD 175^^	Child Care Practicum	3
EDUC 108	Introduction to the Field of Education	.5
EDUC 212^^	Educational Technology	3
PSY 102	Child Psychology	3

### Program Elective 3 Hours

BSMT 125	Human Relations	3
ECD 131^^	Child Development Portfolio/Assessment Preparation	3
EDUC 205^^	Teaching Profession with Field Experience	3

**Degree Total 60.5 Hours**

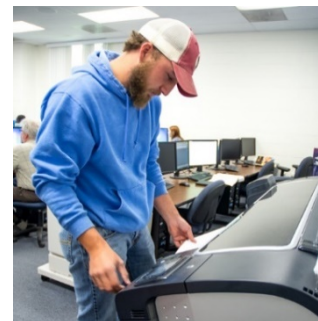
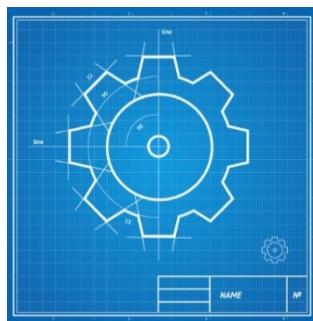


## Skills Certificate in Architectural Design

The Skills Certificate in Architectural Design provides necessary skills and knowledge to obtain employment in the growing, high-demand engineering design field as a designer/drafter in an architectural environment. The outlook for competent designers is expected to increase faster than average since all new buildings require designs and specifications to manufacture, build and assemble. The application of engineering and design standards and skills will be examined with the study of basic to advanced concepts in popular engineering design programs. Completion of this certificate will transition into the Professional Certificate in Engineering Design Technology.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

<b>Program Requirements</b>		<b>13 Hours</b>
CNST 162	Construction Safety	3
EDT 105	Print Reading for Construction	3
EDT 111	Introduction to Engineering Design	3
EDT 120	Architectural Design	3
SS 120	Employment Strategies	1
<b>Program Elective</b>		<b>3 Hours</b>
Choose any CNST course		
EDT 115	Advanced Engineering Design	3
EDT 125	Architectural Applications	3
EDT 130	Manufacturing Design I	3
<b>Certificate Total</b>		<b>16 Hours</b>

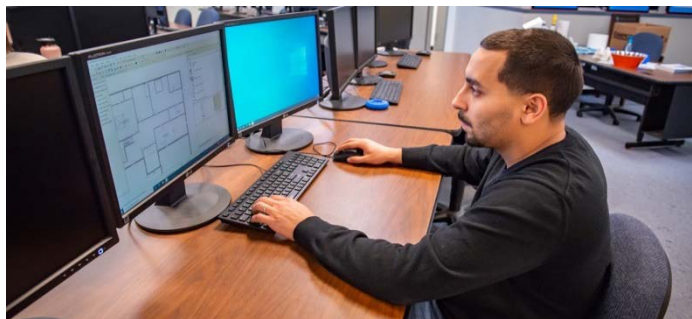
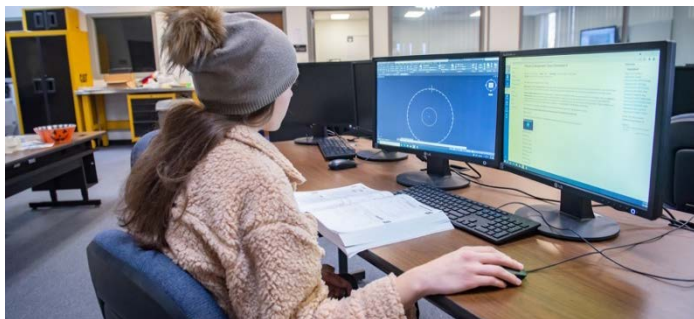


## Skills Certificate in Mechanical Design

The Skills Certificate in Mechanical Design provides necessary skills and knowledge to obtain employment in the growing, high-demand engineering design field as a designer/drafter in a manufacturing and engineering environment. The outlook for competent designers is expected to increase faster than average since all new products require designs and specifications to manufacture, build and assemble. The application of drafting and design standards and skills will be examined with the study of basic to advanced concepts in popular engineering design programs. Completion of this certificate will transition into the Professional Certificate in Engineering Design Technology.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

<b>Program Requirements</b>		<b>13 Hours</b>
CNST 162	Construction Safety	3
EDT 105	Print Reading for Construction	3
EDT 111	Introduction to Engineering Design	3
EDT 130	Manufacturing Design I	3
SS 120	Employment Strategies	1
<b>Program Elective</b>		<b>3 Hours</b>
EDT 115	Advanced Engineering Design	3
EDT 120	Architectural Design	3
EDT 132	Manufacturing Design II	3
Choose any MACH course		
Choose any WELD course		
<b>Certificate Total</b>		<b>16 Hours</b>



## Professional Certificate in Engineering Design Technology

The Professional Certificate in Engineering Design Technology will provide necessary skills and knowledge to obtain employment in the growing, high-demand engineering design field as a designer/drafter in a manufacturing, civil, structural, or architectural environment. The outlook for competent designers is expected to increase faster than average since all new products and buildings require designs and specifications to manufacture, build and assemble. The application of drafting and design standards and skills will be examined with the study of basic to advanced concepts in popular engineering design programs. Completion of this certificate will transition into the Associate of Applied Science in Engineering Design Technology.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

### Program Requirements 25 Hours

EDT 105	Print Reading for Construction	3
EDT 111	Introduction to Engineering Design	3
EDT 115	Advanced Engineering Design	3
EDT 120	Architectural Design	3
EDT 125	Architectural Applications	3
EDT 130	Manufacturing Design I	3
EDT 132	Manufacturing Design II	3
EDT 140	Engineering Design for Industry	3
SS 120	Employment Strategies	1

### Program Electives 6 Hours

Choose any CNST course  
 Choose any EDT course  
 Choose any IEM course  
 Choose any MACH course  
 Choose any WELD course

### Certificate Total 31 Hours



## AAS in Engineering Design Technology

The Engineering Design Technology program will provide necessary skills and knowledge to obtain employment in the growing, high-demand engineering design field as a designer/drafter in a manufacturing, civil, structural, or architectural environment. The outlook for competent designers is expected to increase faster than average since all new products and buildings require designs and specifications to manufacture, build and assemble. The application of drafting and design standards and skills will be examined with the study of basic to advanced concepts in popular engineering design programs.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Written and Oral Communications		9 Hours	Program Requirements		35 Hours
COMM 101	Public Speaking	3	CAPP 125	Microcomputer Applications	3
ENGL 101	English Composition I	3	EDT 105	Print Reading for Construction	3
ENGL 102	English Composition II (or)		EDT 111	Introduction to Engineering Design	3
ENGL 110	Communication for Business and Industry	3	EDT 115	Advanced Engineering Design	3
Civics		3 Hours	EDT 120	Architectural Design	3
HIST 101	U.S. History Before 1877	3	EDT 125	Architectural Applications	3
HIST 102	U.S. History Since 1877	3	EDT 130	Manufacturing Design I	3
POLS 101	American/National Government	3	EDT 132	Manufacturing Design II	3
Mathematical Sciences		3 Hours	EDT 140	Engineering Design for Industry	3
MATH 108	Technical Math II	3	EDT 175	EDT Internship	4
MATH 114	Precalculus Algebra	3	EDT 190	EDT Capstone	3
Humanities, Sciences, and Fine Arts		4 Hours	SS 120	Employment Strategies	1
PHYS 105	College Physics I with Lab	5	Program Electives		9 Hours
PHYS 125	Technical Science	4	Choose any CNST course		
			EDT 180 Problems in EDT		
			Choose any IEM course		
			Choose any MACH course		
			Choose any WELD course		
			Degree Total		63 Hours



## Professional Certificate in Fire Science

The Professional Certificate in Fire Science prepares students to enter an exciting career as a firefighter. All fire specific courses are taught by experienced firefighters and offer the opportunity for current firefighters to upgrade job skills or prepare themselves as supervisors in their departments. It also prepares students who wish to begin a career in firefighting. The Fire Science program offers two tracks of study, a complete two-year associate of applied science degree and a shorter 30 credit hour professional certificate.

Students may receive college credit for current fire service employees based on work experience and prior training. Please contact the program coordinator for more information.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Program Requirements		30 Hours
FIRE 130	Firefighter I	6
FIRE 131	Firefighter II	6
FIRE 132	Introduction to Emergency Services	3
FIRE 133	Fire Behavior and Combustion	3
FIRE 134	Fire Prevention	3
FIRE 135	Fire Safety and Survival	3
FIRE 139	Tactics and Strategies	3
FIRE 175	Fire Internship	3
<b>Certificate Total</b>		<b>30 Hours</b>



## AAS in Fire Science

The Fire Science program prepares students to enter an exciting career as a firefighter. All fire specific courses are taught by experienced firefighters and offer the opportunity for current firefighters to upgrade job skills or prepare themselves as supervisors in their departments. It also prepares students who wish to begin a career in firefighting.

The Fire Science program offers two tracks of study, a complete two-year associate of applied science degree and a shorter 30 credit hour professional certificate.

Students may receive college credit for current fire service employees based on work experience and prior training. Please contact the program coordinator for more information.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Written and Oral Communications		6 Hours	Program Requirements		45 Hours
COMM 101	Public Speaking	3	FIRE 130	Firefighter I	6
ENGL 101	English Composition I	3	FIRE 131	Firefighter II	6
<b>Civics</b>		<b>3 Hours</b>	FIRE 132	Introduction to Emergency Services	3
POLS 101	American/National Government	3	FIRE 133	Fire Behavior and Combustion	3
<b>Mathematical Sciences</b>		<b>3 Hours</b>	FIRE 134	Fire Prevention	3
MATH 101	Business Math	3	FIRE 135	Fire Safety and Survival	3
MATH 110	Intermediate Algebra with Review	5	FIRE 136	Building Construction for Fire	3
MATH 112	Intermediate Algebra	3	FIRE 137	Fire Protection Systems	3
<b>Humanities, Sciences, and Fine Arts</b>		<b>3 Hours</b>	FIRE 138	Fire Investigations	3
CHEM 101	Introduction to Chemistry with Lab	5	FIRE 139	Tactics and Strategies	3
PHIL 102	Ethics	3	FIRE 140	Hydraulics and Water	3
PSY 101	General Psychology	3	FIRE 141	Fire Leadership	3
SOC 100	General Sociology	3	FIRE 175	Fire Internship	3
<b>Degree Total</b>					<b>60 Hours</b>



## Skills Certificate in Electro-Mechanical Technology

The Skills Certificate in Electro-Mechanical Technology provides new and existing maintenance technicians with state-of-the-art skills in maintaining and troubleshooting industrial electricity and mechanical devices.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		18 Hours
IEM 102^^	Electric Fundamentals	3
IEM 104^^	Electrical Power	3
IEM 106^^	Industrial Mechanics	3
IEM 108^^	Fluid Power Technology	3
IEM 112^^	Control Circuit Troubleshooting	3
IEM 114^^	Motor Controls	3
<b>Certificate Total</b>		<b>18 Hours</b>



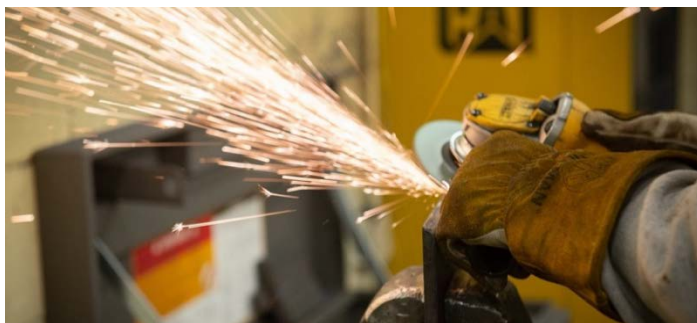
## Professional Certificate in Manufacturing Production Technician

The Professional Certificate in Manufacturing Production Technician prepares students for entry into production employment with a solid foundation of manufacturing processes, safety, quality, operations and maintenance functions. The four CPT courses have a certification assessment through the Manufacturing Skill Standards Council (MSSC). Through MSSC students will earn a certificate for each of the four assessments successfully completed, and students who successfully complete all four assessments are awarded the Certified Production Technician (CPTAE) from MSSC. The CPT is recognized by the National Association of Manufacturers (NAM). This certificate can be accepted as part of the technical requirements for the AAS in Industrial Technology with Emphasis in Electrical Maintenance.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		31 Hours
CPT 102^^	Safety	3
CPT 104^^	Quality Practices and Measurement	3
CPT 106^^	Manufacturing Processes and Production	3
CPT 108^^	Maintenance Awareness	3
ENGL 110^^	Communication for Business and Industry	3
IEM 102^^	Electric Fundamentals	3
IEM 104^^	Electrical Power	3
IEM 128^^	Maintenance Management	3
MACH 101^^	Introduction to Machining	4
WELD 120^^	Shielded Metal Arc Welding I	3
<b>Certificate Total</b>		<b>31 Hours</b>



## Professional Certificate in Millwright Technician

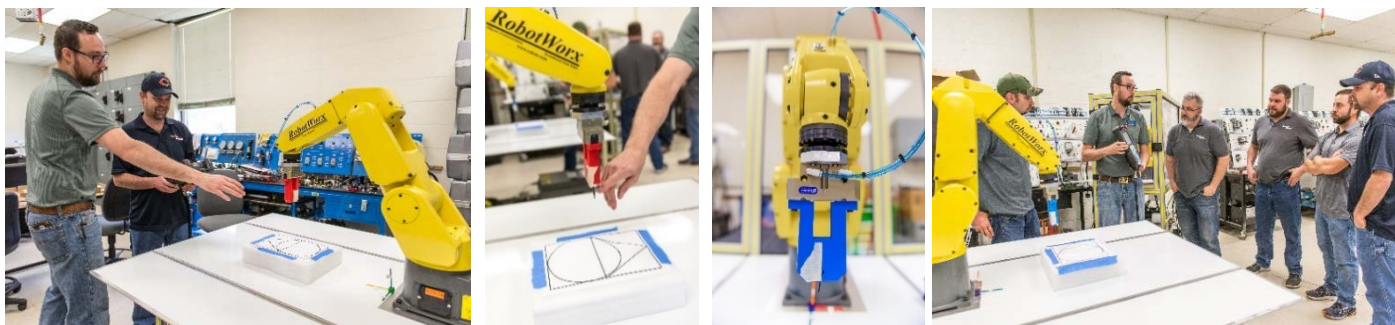
The Professional Certificate in Millwright Technician is designed to provide students instruction in all major maintenance disciplines resulting in a comprehensive knowledge and skill base including the basics of welding, structural welding, lathe and milling machine operations.

The physical requirements of this occupation typically include lifting up to 45 pounds, pushing, pulling, reaching, walking, standing, crawling, kneeling, ascending and descending ladders, manual dexterity, and working in cramped positions for sustained periods of time.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		31 Hours
IEM 102^^	Electric Fundamentals	3
IEM 104^^	Electrical Power	3
IEM 106^^	Industrial Mechanics	3
IEM 108^^	Fluid Power Technology	3
IEM 112^^	Control Circuit Troubleshooting	3
IEM 114^^	Motor Controls	3
IEM 126^^	Industrial Safety	3
MACH 101^^	Introduction to Machining	4
WELD 120^^	Shielded Metal Arc Welding I	3
WELD 122^^	Shielded Metal Arc Welding II - Structural	3
<b>Certificate Total</b>		<b>31 Hours</b>



## Professional Certificate in Robotics and Automation Technician

The Professional Certificate in Robotics and Automation Technician is designed to prepare students as robotics and automation technicians for employment in commercial, production, manufacturing, and other industrial settings. Competency is gained in robot setup, record and/or troubleshooting programs, interpreting and utilizing electrical diagrams for troubleshooting, programming, troubleshooting and converting machinery to programmable logic control.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		33 Hours
IEM 102^^	Electric Fundamentals	3
IEM 104^^	Electrical Power	3
IEM 107	Introduction to Robotics	3
IEM 109	Robotics Automation Technician I	3
IEM 112^^	Control Circuit Troubleshooting	3
IEM 114^^	Motor Controls	3
IEM 122^^	Introduction to PLCs	3
IEM 124^^	Intermediate PLCs	3
IEM 126	Industrial Safety	3
IEM 132	Advanced PLCs	3
IEM 134	PLC Networks	3
<b>Certificate Total</b>		<b>33 Hours</b>



## Professional Certificate in Total Productive Maintenance

The Professional Certificate in Total Productive Maintenance is designed to prepare students as industrial maintenance technologists or millwrights for employment in commercial, production, manufacturing, and other industrial settings. Inclusion of major maintenance disciplines of fluid power, mechanics, electrical, and PLC controls results in a comprehensive knowledge and skill base, with emphasis on safety, reliability, predictive, and preventive maintenance. Competency is gained in interpreting and utilizing electrical and fluid power schematics for troubleshooting, as well as PLC functions and programming. This certificate is fully accepted as part of the technical requirements for the Associate of Applied Science in Industrial Technology with Emphasis in Electrical Maintenance and comprises the recommended courses students should pursue in the first two semesters.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		30 Hours
IEM 102^^	Electric Fundamentals	3
IEM 104^^	Electrical Power	3
IEM 106^^	Industrial Mechanics	3
IEM 108^^	Fluid Power Technology	3
IEM 112^^	Control Circuit Troubleshooting	3
IEM 114^^	Motor Controls	3
IEM 122^^	Introduction to PLCs	3
IEM 124^^	Intermediate PLCs	3
IEM 126^^	Industrial Safety	3
IEM 128^^	Maintenance Management	3
<b>Certificate Total</b>		<b>30 Hours</b>



## AAS in Industrial Technology with Emphasis in Electrical Maintenance

The Industrial Technology with Emphasis in Electrical Maintenance program is designed to prepare students as electrical and maintenance technologists or millwrights for employment in commercial, production, manufacturing, and other industrial settings. Inclusion of all major maintenance disciplines results in a comprehensive knowledge and skill base. Competency is gained in interpreting and utilizing electrical and fluid power schematics for troubleshooting; performing general wiring tasks in accordance with the National Electrical Code, and programming, troubleshooting and converting machinery to programmable logic control. The physical requirements of this occupation typically include lifting up to 45 pounds, pushing, pulling, reaching, walking, standing, crawling, kneeling, ascending and descending ladders, manual dexterity, and working in cramped positions for sustained periods of time.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

### Written and Oral Communications 6 Hours

COMM 101 Public Speaking 3

### Select an additional course

ENGL 101 English Composition I 3

ENGL 110 Communication for Business and Industry 3

### Civics 3 Hours

HIST 101 U.S. History Before 1877 3

HIST 102 U.S. History Since 1877 3

POLS 101 American/National Government 3

### Mathematical Sciences 3 Hours

MATH 108 Technical Math II 3

MATH 110 Intermediate Algebra with Review 5

MATH 112 Intermediate Algebra 3

MATH 113 Mathematical Reasoning and Modeling 3

MATH 114 Precalculus Algebra 3

MATH 119 Statistical Reasoning 3

### Humanities, Sciences, and Fine Arts 4 Hours

PHYS 125 Technical Science 4

### Program Requirements 19 Hours

IEM 102^^ Electric Fundamentals 3

IEM 104^^ Electrical Power 3

IEM 106^^ Industrial Mechanics 3

IEM 108^^ Fluid Power Technology 3

IEM 112^^ Control Circuit Troubleshooting 3

IEM 114^^ Motor Controls 3

SS 120 Employment Strategies 1

### IEM Electives 18 Hours

Select courses from any of the four groups

#### Electrical Installations Group

IEM 136 General NEC Requirements 3

IEM 138 Power Distribution 3

IEM 140 Transformers and Motors 3

#### Electronics Group

IEM 110 Digital Principles 3

IEM 116 Solid State Devices 3

IEM 118 Analog/Digital 3

#### Robotics and Automation Group

IEM 107 Introduction to Robotics 3

IEM 109 Robotics Automation Technician I 3

IEM 122^^ Introduction to PLCs 3

IEM 124^^ Intermediate PLCs 3

IEM 132 Advanced PLCs 3

IEM 134 PLC Networks 3

**AAS in Industrial Technology with Emphasis in Electrical Maintenance (Continued)**

<b>Safety and Management Group</b>			CPT 108	Maintenance Awareness	3
IEM 126	Industrial Safety	3	EDT 105	Print Reading for Construction	3
IEM 128	Maintenance Management	3	EDT 111	Introduction to Engineering Design	3
IEM 146	Quality Management and Control	3	IEM	Any course(s) not taken	
<b>Program Electives</b>			MACH 101	Introduction to Machining	4
<b>12 Hours</b>			MACH 102	Lathe and Milling Machine Operations	4
AUTO 104	Introduction to Automotive Technology	4	MACH 103	Milling and Grinding Machine Applications	4
AUTO 116	Automotive Electrical Systems		MATH 107	Technical Math I	3
	Fundamentals	3	NET 101	Introductions to Networks	3
AUTO 118	Automotive Electrical Systems	3	NET 102	Networking Essentials	3
CNST 105	Construction Materials and Methods	3	NET 103	Routing and Switching Essentials	3
CNST 138	Construction Planning and Scheduling	3	WELD 120	Shielded Metal Arc Welding I	3
CNST 142	Building Mechanical Systems	3	WELD 122	Shielded Metal Arc Welding II - Structural	3
CPT 102	Safety	3			
CPT 104	Quality Practices and Measurement	3	<b>Degree Total</b>		<b>65 Hours</b>
CPT 106	Manufacturing Processes and Production	3			



## Skills Certificate in Machinist Level I

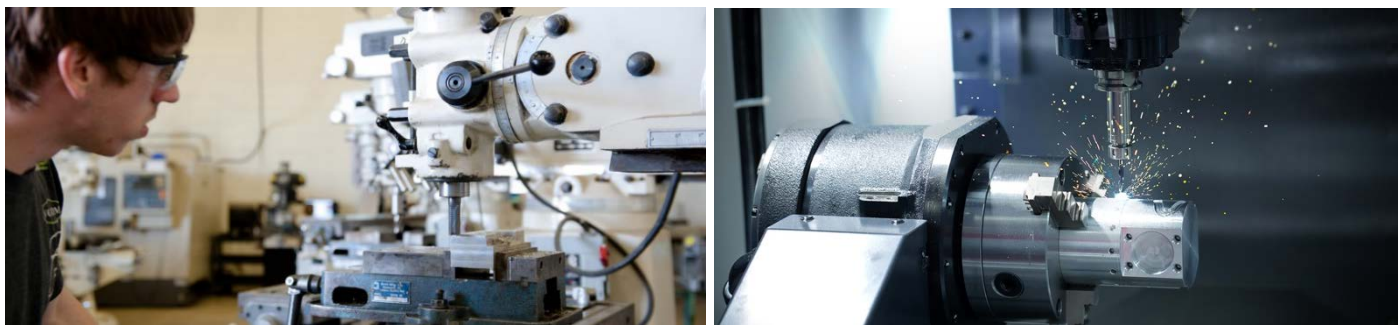
The Skills Certificate in Machinist Level I is designed for the student who wants to get into the manufacturing workforce as soon as possible. Upon completion of the certificate, students will gain knowledge and exposure to various styles of machining, including manual and computer numerical controlled (CNC) machining. The certificate also allows students to gain certifications from the National Institute for Metal Working Skills (NIMS). This 18-credit hour program can be completed in one semester and provides entry-level experience and fundamental skills.

Machinists need good eyesight, hand-eye coordination and manual dexterity. Students need to be able to concentrate for long periods of time as well as lift up to 45 pounds, bend, stoop, and kneel. All students should be aware welding fumes produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). Students should review the Material Data Safety Sheets (MSDS) available in the welding department located in the Fielding Technical Center, Room 270, to be aware of the hazards of welding fumes.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		18 Hours
ENGL 110	Communication for Business and Industry	3
MACH 101^^	Introduction to Machining	4
MACH 105^^	Metrology	4
MACH 111^^	Introduction to CNC Machining	4
MATH 107	Technical Math I	3
<b>Certificate Total</b>		<b>18 Hours</b>



## Professional Certificate in Machine Tool Technology

The Professional Certificate in Machine Tool Technology gives the student machine shop skills, including conventional and CNC machining processes. There is a strong emphasis on preparing the students for entry-level employment in the machine shop industry, including computer numerical controlled (CNC) operators and setup, manual machinists, computer aided drafting (CAD) and computer aided manufacturing (CAM) users, and inspectors.

All students should be aware welding fumes produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). Students should review the Material Data Safety Sheets (MSDS) available in the welding department located in the Fielding Technical Center, Room 270, to be aware of the hazards of welding fumes.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		35 Hours
ENGL 110	Communication for Business and Industry	3
MACH 101^^	Introduction to Machining	4
MACH 102^^	Lathe and Milling Machine Operations	4
MACH 103^^	Milling and Grinding Machine Applications	4
MACH 105^^	Metrology	4
MACH 111^^	Introduction to CNC Machining	4
MACH 134^^	Computer Aided Manufacturing	4
MATH 107	Technical Math I	3
MATH 108	Technical Math II	3
WELD 132	Gas Tungsten Arc Welding I	2
<b>Certificate Total</b>		<b>35 Hours</b>



## AAS in Manufacturing Technology with Emphasis in Precision Machining Technology

The Manufacturing Technology with Emphasis in Precision Machining Technology program teaches the processes of manufacturing and machining with an understanding of specifications, dimensions, materials, quality, print reading, assembly methods, and inspection. The program prepares students for machining-related occupations such as machinist helper, manual machine operator, entry machinist, computer numerical control (CNC) operator, CNC setup, and manufacturing technician, all with a strong emphasis on safety. Because of the demanding changes in technology, the need for skilled manufacturing personnel with communications, design, decision-making and computer skills is increasing. The CNC equipment in the machine tool program is interfaced with the computer aided drafting (CAD) and computer aided manufacturing (CAM) lab to provide students with integrated manufacturing skills. The physical requirements for this occupation typically include lifting up to 50 pounds, pushing, pulling, reaching, walking, kneeling, manual dexterity, and standing for long periods of time.

All students should be aware welding fumes produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). Students should review the Material Data Safety Sheets (MSDS) available in the welding department located in the Fielding Technical Center, Room 270, to be aware of the hazards of welding fumes.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

<b>Written and Oral Communications</b>	<b>6 Hours</b>
COMM 101 Public Speaking	3
<b>Select an additional course</b>	
ENGL 101 English Composition I	3
ENGL 110 Communication for Business and Industry	3
<b>Civics</b>	<b>3 Hours</b>
HIST 101 U.S. History Before 1877	3
HIST 102 U.S. History Since 1877	3
POLS 101 American/National Government	3
<b>Mathematical Sciences</b>	<b>6 Hours</b>
MATH 107 Technical Math I	3
MATH 108 Technical Math II	3
<b>Humanities, Sciences, and Fine Arts</b>	<b>4 Hours</b>
PHYS 125 Technical Science	4

<b>Program Requirements</b>	<b>46 Hours</b>
MACH 101^^ Introduction to Machining	4
MACH 102^^ Lathe and Milling Machine Operations	4
MACH 103^^ Milling and Grinding Machine Applications	4
MACH 104^^ Advanced Machining	4
MACH 105^^ Metrology	4
MACH 111^^ Introduction to CNC Machining	4
MACH 117^^ Introduction to CNC Programming	4
MACH 118 Intermediate CNC Machining	4
MACH 119 Advanced CNC Machining	4
MACH 134^^ Computer Aided Manufacturing	4
MACH 135 Advanced Computer Aided Manufacturing	4
WELD 132 Gas Tungsten Arc Welding I	2
<b>Degree Total</b>	<b>65 Hours</b>



## Skills Certificate in Structural Welding

The Skills Certificate in Structural Welding is designed for the student who wants to get into the workforce as soon as possible. The welding courses follow American Welding Society (AWS) guidelines, and the successful student will be eligible for up to six AWS welder qualifications, according to the AWS D 1.1 Structural Welding Code. In the classroom, students will learn the technological information associated with the welding processes and how to apply that information to practical use on the job. This program meets the needs of both beginning and experienced welders who are seeking certification.

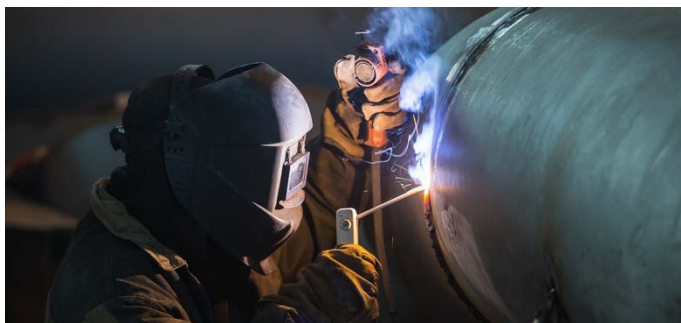
Welders need good eyesight, hand-eye coordination and manual dexterity. Students should be able to concentrate on detailed work for long periods and must be able to lift up to 45 pounds, bend, stoop, crawl, kneel, climb ladders, and work in awkward and cramped positions.

All students should be aware welding fumes produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). Students should review the Material Data Safety Sheets (MSDS) available in the welding department located in the Fielding Technical Center, Room 270, to be aware of the hazards of welding fumes.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

<b>Mathematical Sciences</b>	<b>3 Hours</b>
MATH 107 Technical Math I	3
MATH 108 Technical Math II	3
MATH 110 Intermediate Algebra with Review	5
MATH 112 Intermediate Algebra	3
MATH 114 Precalculus Algebra	3
<b>Program Requirements</b>	<b>21 Hours</b>
CNST 162 Construction Safety	3
WELD 114^^ Structural Layout and Fabrication	3
WELD 116^^ Print Reading for Welders	3
WELD 120^^ Shielded Metal Arc Welding I	3
WELD 122^^ Shielded Metal Arc Welding II - Structural	3
WELD 126^^ Gas Metal/Flux Core Arc Welding I	3
WELD 128^^ Gas Metal/Flux Core Arc Welding II - Structural	3
<b>Certificate Total</b>	<b>24 Hours</b>



## Professional Certificate in Pipe Welding

The Professional Certificate in Pipe Welding is for students who want to learn the skills of pipe welding. The course follows the American Society of Mechanical Engineers (ASME) section 9 codes. The course involves Shielded Metal Arc Welding (SMAW) and Gas Tungsten Arc Welding (GTAW) of pipe in the 2G, 5G, and 6G positions. The successful student will be eligible for up to six ASME section 9 qualifications in pipe. In the classroom the student will learn the technological information associated with the pipe welding process and how to apply that information to practical use on the job. This program meets the needs of both the beginning and experienced welders who are seeking certification/qualifications in pipe welding.

Welders need good eyesight, hand-eye coordination and manual dexterity. Students should be able to concentrate on detailed work for long periods and must be able to lift up to 45 pounds, bend, stoop, crawl, kneel, climb ladders, and work in awkward and cramped positions.

All students should be aware welding fumes produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). Students should review the Material Data Safety Sheets (MSDS) available in the welding department located in the Fielding Technical Center, Room 270, to be aware of the hazards of welding fumes.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Mathematical Sciences		3 Hours	Program Requirements		34 Hours
MATH 107	Technical Math I	3	CNST 162	Construction Safety	3
MATH 108	Technical Math II	3	WELD 114^^	Structural Layout and Fabrication	3
MATH 110	Intermediate Algebra with Review	5	WELD 116^^	Print Reading for Welders	3
MATH 112	Intermediate Algebra	3	WELD 120^^	Shielded Metal Arc Welding I	3
MATH 114	Precalculus Algebra	3	WELD 122^^	Shielded Metal Arc Welding II - Structural	3
			WELD 124^^	Shielded Metal Arc Welding III - Pipe	4
			WELD 126^^	Gas Metal/Flux Core Arc Welding I	3
			WELD 128^^	Gas Metal/Flux Core Arc Welding II - Structural	3
			WELD 132^^	Gas Tungsten Arc Welding I	2
			WELD 134^^	Gas Tungsten Arc Welding II	3
			WELD 136^^	Gas Tungsten Arc Welding III	4
			<b>Certificate Total</b>		<b>37 Hours</b>



## Professional Certificate in Welding Technology

The Professional Certificate in Welding Technology is a one-year certificate program and is based on four semesters of instruction and hands-on experience. Students will study oxy/acetylene welding and cutting; shielded metal arc welding (stick); gas metal arc welding (mig); gas tungsten arc welding (tig), and plasma arc cutting.

All welding procedures follow American Welding Society (AWS) guidelines. Welder qualifications are available for the successful student in AWS D 1.1 Structural Welding Code and ASME Section 9 (pipe).

In the classroom, students will learn the technological information associated with welding processes and how to apply that information to practical use on the job. This program meets the needs of both beginning and experienced welders who are seeking certification.

Welders need good eyesight, hand-eye coordination and manual dexterity. Students should be able to concentrate on detailed work for long periods and must be able to lift up to 45 pounds, bend, stoop, crawl, kneel, climb ladders, and work in awkward and cramped positions.

All students should be aware welding fumes produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). Students should review the Material Data Safety Sheets (MSDS) available in the welding department located in the Fielding Technical Center, Room 270, to be aware of the hazards of welding fumes.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher<sup>^^</sup>*

Mathematical Sciences		3 Hours	Program Requirements		44 Hours
MATH 107	Technical Math I	3	CNST 162	Construction Safety	3
MATH 108	Technical Math II	3	WELD 114 <sup>^^</sup>	Structural Layout and Fabrication	3
MATH 110	Intermediate Algebra with Review	5	WELD 116 <sup>^^</sup>	Print Reading for Welders	3
MATH 112	Intermediate Algebra	3	WELD 120 <sup>^^</sup>	Shielded Metal Arc Welding I	3
MATH 114	Precalculus Algebra	3	WELD 122 <sup>^^</sup>	Shielded Metal Arc Welding II - Structural	3
			WELD 124 <sup>^^</sup>	Shielded Metal Arc Welding III - Pipe	4
			WELD 126 <sup>^^</sup>	Gas Metal/Flux Core Arc Welding I	3
			WELD 128 <sup>^^</sup>	Gas Metal/Flux Core Arc Welding II - Structural	3
			WELD 130 <sup>^^</sup>	Gas Metal/Flux Core Arc Welding III	3
			WELD 132 <sup>^^</sup>	Gas Tungsten Arc Welding I	2
			WELD 134 <sup>^^</sup>	Gas Tungsten Arc Welding II	3
			WELD 136 <sup>^^</sup>	Gas Tungsten Arc Welding III	4
			WELD 160 <sup>^^</sup>	Welding Fabrication	4
			WELD 170 <sup>^^</sup>	Welding Inspection and Testing	3
Certificate Total					47 Hours



## AAS in Manufacturing Technology with Emphasis in Welding Technology

The Manufacturing Technology with Emphasis in Welding Technology program is designed for the individual who wants to learn the millwright trade, fabrication/shop management or quality control/quality assurance. The program is a combination of the welding and machine tool programs, and the successful student will have the skills and knowledge to become part of today's workforce.

Students should be able to concentrate on detailed work for long periods and must be able to lift up to 45 pounds, bend, stoop, crawl, kneel, climb ladders, and work in awkward and cramped positions.

All students should be aware welding fumes produce a chemical known to the state of California to cause cancer and birth defects (or other reproductive harm). Students should review the Material Data Safety Sheets (MSDS) available in the welding department located in the Fielding Technical Center, Room 270, to be aware of the hazards of welding fumes.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

### Written and Oral Communications 6 Hours

COMM 101 Public Speaking 3

### Select an additional course

ENGL 101 English Composition I 3

ENGL 110 Communication for Business and Industry 3

### Civics 3 Hours

HIST 101 U.S. History Before 1877 3

HIST 102 U.S. History Since 1877 3

POLS 101 American/National Government 3

### Mathematical Sciences 3 Hours

MATH 107 Technical Math I 3

MATH 108 Technical Math II 3

MATH 110 Intermediate Algebra with Review 5

MATH 112 Intermediate Algebra 3

MATH 114 Precalculus Algebra 3

### Humanities, Sciences, and Fine Arts 4 Hours

PHYS 125 Technical Science 4

### Program Requirements 52 Hours

CNST 162 Construction Safety 3

EDT 111 Introduction to Engineering Design (or)

EDT 130 Manufacturing Design I 3

MACH 101 Introduction to Machining 4

SS 120 Employment Strategies 1

WELD 114^^ Structural Layout and Fabrication 3

WELD 116^^ Print Reading for Welders 3

WELD 120^^ Shielded Metal Arc Welding I 3

WELD 122^^ Shielded Metal Arc Welding II - Structural 3

WELD 124^^ Shielded Metal Arc Welding III - Pipe 4

WELD 126^^ Gas Metal/Flux Core Arc Welding I 3

WELD 128^^ Gas Metal/Flux Core Arc Welding II

- Structural 3

WELD 130^^ Gas Metal/Flux Core Arc Welding III 3

WELD 132^^ Gas Tungsten Arc Welding I 2

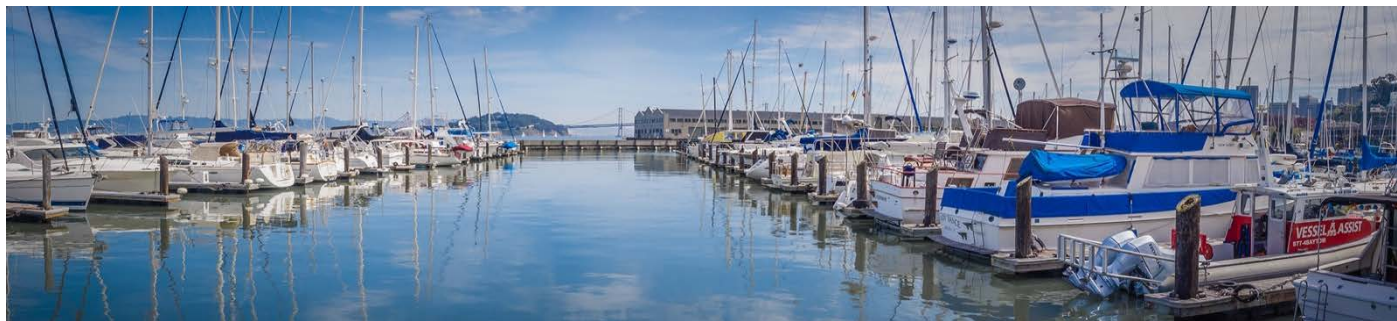
WELD 134^^ Gas Tungsten Arc Welding II 3

WELD 136^^ Gas Tungsten Arc Welding III 4

WELD 160^^ Welding Fabrication 4

WELD 170^^ Welding Inspection and Testing 3

**Degree Total 68 Hours**



## AAS in Marine Technology

The Marine Technology program is a partnership with the Lake Career and Technical Center (LCTC) in Camdenton and State Fair Community College-Lake of the Ozarks. The program courses are only taught at the LCTC campus in Camdenton. The general education requirements are taught at State Fair Community College locations. Students who have graduated from an accredited marine technology/ power sports program or have experience in industry may earn up to 46 credit hours toward the Marine Technology degree. To qualify for the articulated credit, students must provide official transcripts from an accredited technical program, occupational testing scores and/or industry certification. Successful completion of an approved end of program marine technical assessment is required.

The physical requirements of this profession typically include lifting up to 45 pounds, pushing, pulling, reaching, walking, standing, crawling, kneeling, ascending and descending ladders, manual dexterity and working in cramped positions for sustained periods of time.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

### **Courses to be taken from State Fair Community College**

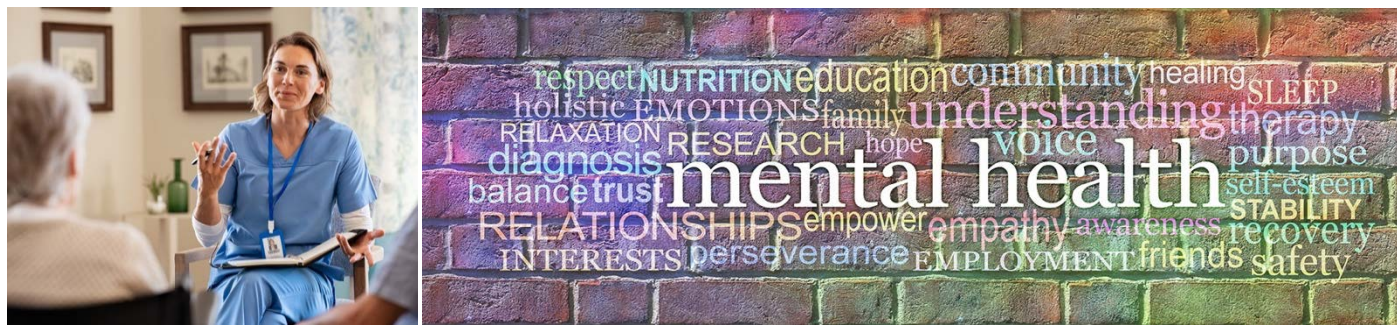
<b>Written and Oral Communications</b>		<b>6 Hours</b>
COMM 101	Public Speaking	3
<b>Select an additional course</b>		
ENGL 101	English Composition I	3
ENGL 110	Communication for Business and Industry	3
<b>Civics</b>		<b>3 Hours</b>
HIST 101	U.S. History Before 1877	3
HIST 102	U.S. History Since 1877	3
POLS 101	American/National Government	3
<b>Mathematical Sciences</b>		<b>3 Hours</b>
MATH 108	Technical Math II	3
MATH 110	Intermediate Algebra with Review	5
MATH 112	Intermediate Algebra	3
<b>Humanities, Sciences, and Fine Arts</b>		<b>3 Hours</b>
EASC 118	Environmental Geology	3
PHIL 102	Ethics	3
SPAN 101	Elementary Spanish I	3

### **Courses available for articulation from the Lake Career and Technical Center**

<b>Program Requirements</b>		<b>46 Hours</b>
MRN 101	Marine Systems Rigging I	6
MRN 105	Marine Ignition Systems	3
MRN 107	Marine Starter and Charging Systems	2
MRN 109	Marine Cooling Systems	2
MRN 111	Marine Lubrication Systems	2
MRN 113	Marine Engine Component and Precision Measuring	3
MRN 115	Marine Shop Procedures and Business Operations	2
MRN 117	Marine Engine Systems Analysis	2
MRN 119	Marine Systems Preventive Maintenance	4
MRN 121	Marine Power Transfer Systems	4
MRN 123	Marine Systems Troubleshooting	3
MRN 125	Marine Fuel Systems	4
MRN 127	Marine Instrumentation Systems	2
MRN 129	Marine Power Trim/Tilt Systems	2
MRN 175	Marine Technology Internship	4
SS 120	Employment Strategies	1

**Degree Total**

**61 Hours**



### AAS in Behavioral Health Support\*

The Behavioral Health Support (BHS) program will provide students with the education and skills needed to work in a variety of behavioral health or substance abuse support roles. Students will train for entry-level positions such as care coordinators, community support specialists, and case managers. Upon completion of the program, students will have the required skills to provide quality case management to clients in a variety of settings who need guidance and support. Students will be able to properly complete client documentation from intake to discharge including appropriate assessments, safety plans, treatment plans, and discharge summaries. They will be able to identify and utilize case-management treatment modalities for clients in the areas of behavioral health, substance abuse disorders, and chronic health, and family and youth issues. Students will be qualified to work with other behavioral health and medical professionals as part of a treatment team. Finally, student will know how to work within their own competency to provide services to those in need by valuing the dignity and worth of each client and recognizing the importance of the human relationship. Graduates will be prepared to begin working immediately in state, county, and local human service agencies, substance abuse treatment programs, rehabilitation centers, correction facilities, retirement facilities and schools along with various other human service agencies. Perspective students will need to complete an application and pass drug and background checks.

**Note:** To apply to the program a student must have an overall 2.5 GPA for all college level course work and a C or higher in all required general education courses required as part of the 1<sup>st</sup> year AAS courses in Behavioral Health.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

*\*Pending anticipated approval from the state Coordinating Board for Higher Education and the Higher Learning Commission.*

**AAS in Behavioral Health Support\* (Continued)***Courses to complete with a grade B or higher^**Courses to complete with a grade of C or higher^^***Program Prerequisites****Written and Oral Communications****9 Hours**

COMM 101^^ Public Speaking 3

ENGL 101^^ English Composition I 3

ENGL 102 English Composition II 3

**Civics****3 Hours**

HIST 101^^ U.S. History Before 1877 3

HIST 102^^ U.S. History Since 1877 3

POLS 101^^ American/National Government 3

**Mathematical Sciences****3 Hours**

MATH 110^^ Intermediate Algebra with Review 5

MATH 112^^ Intermediate Algebra 3

MATH 114^^ Precalculus Algebra 3

MATH 119^^ Statistical Reasoning 3

**Humanities, Sciences, and Fine Arts****3 Hours**

PSY 101^^ General Psychology 3

**Other Requirements****14 Hours**

BHS 200^ Introduction to Behavioral Health 2

CAPP 125 Microcomputer Applications 3

CJ 102 Introduction to Criminal Justice (or)

SOC 103 Introduction to Social Work 3

PSY 102 Child Psychology 3

PSY 220 Abnormal Psychology 3

**Prerequisite Total****32 Hours****Program Requirements****32 Hours**

BHS 210^ Law and Ethics 3

BHS 220^ Systems of Care 3

BHS 230^ Substance Abuse Intervention 3

BHS 240^ Client Encounters I 3

BHS 250^ Chronic Health Support 3

BHS 260^ Family and Youth Strategies 3

BHS 270^ Client Encounters II 3

BHS 280^ Evidence Based Treatment 3

BHS 290^ Field Practicum I 4

BHS 295^ Field Practicum II 4

**Degree Total****64 Hours***\*Pending anticipated approval from the state Coordinating Board for Higher Education and the Higher Learning Commission.*



## AAS in Dental Hygiene

Dental hygienists are the only member of the dental health team licensed to provide direct care to the patient, other than the dentist. The dental hygienist works under the supervision of the dentist by performing duties delegated by the dentist in accordance with the Missouri Dental Practice Act. They work directly with patients to help them care for their oral health. Duties include cleanings, administering local anesthesia and nitrous oxide analgesia, exposing x-rays, providing oral health care instructions and education to patients, and maintaining patient records. Students receive clinical experiences in the SFCC Dental Hygiene Clinic and other selected agencies.

### About the Program

Through classroom theory, laboratory practice and clinical application, students are provided comprehensive learning experiences that prepare them to secure an entry-level position as a licensed dental hygienist in oral health care. The Dental Hygiene degree program fosters clinical problem solving and critical-thinking skills and provides students with classroom and experiential educational foundation to promote lifelong learning.

Upon completion of the program, students are eligible to take the required exams necessary for licensure. These include the National Board Dental Hygiene Examination (NDHBE), a regional clinical exam (CRDTS) and the Missouri Jurisprudence exam. Individual results of these exams are based upon the student's performance. SFCC does not guarantee passage of licensure exams.

### Admission Process

Admission to the dental hygiene program at SFCC is competitive and requires an additional admission application following admission to the college. An information/application packet is available online at [www.sfccmo.edu/dental-hygiene](http://www.sfccmo.edu/dental-hygiene) or by request from Student Services at the Sedalia campus. This packet contains the essential qualifications and admission requirements, fee schedule, program mission and philosophy, sequencing of courses, an application form and other pertinent information. Successful program applicants are subject to background checks and drug tests that could prevent an applicant's progression in the program. The program accepts 10 first-year students each fall.

An applicant must have successfully completed all prerequisites for the Dental Hygiene program by the end of the spring semester before the fall they wish to enter. State Fair Community College does accept transfer courses from other colleges but an applicant would be advised to have their transcript evaluated before assuming transfer of credits.

The SFCC Dental Hygiene program has been accredited by the Commission on Dental Accreditation since 2005.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

**AAS in Dental Hygiene (Continued)***Courses to complete with a grade of B or higher^**Courses to complete with a grade of C or higher^^**Courses can be completed prior to the start of the program\****Program Prerequisites****Program Requirements****17 Hours**

BIO 121^	Microbiology	4
BIO 207^	Human Anatomy with Lab	4
BIO 208^	Human Physiology with Lab	4
CHEM 101^	Introduction to Chemistry with Lab	5

**Mathematical Sciences****3 Hours**

MATH 110^^	Intermediate Algebra with Review	5
MATH 112^^	Intermediate Algebra	3
MATH 113^^	Mathematical Reasoning and Modeling	3
MATH 114^^	Precalculus Algebra	3
MATH 119^^	Statistical Reasoning	3

**Prerequisite Total****20 Hours****Written and Oral Communications****6 Hours**

*COMM 101^^	Public Speaking	3
*ENGL 101^^	English Composition I	3

**Civics****3 Hours**

*HIST 101^^	U.S. History Before 1877	3
*HIST 102^^	U.S. History Since 1877	3
*POLS 101^^	American/National Government	3

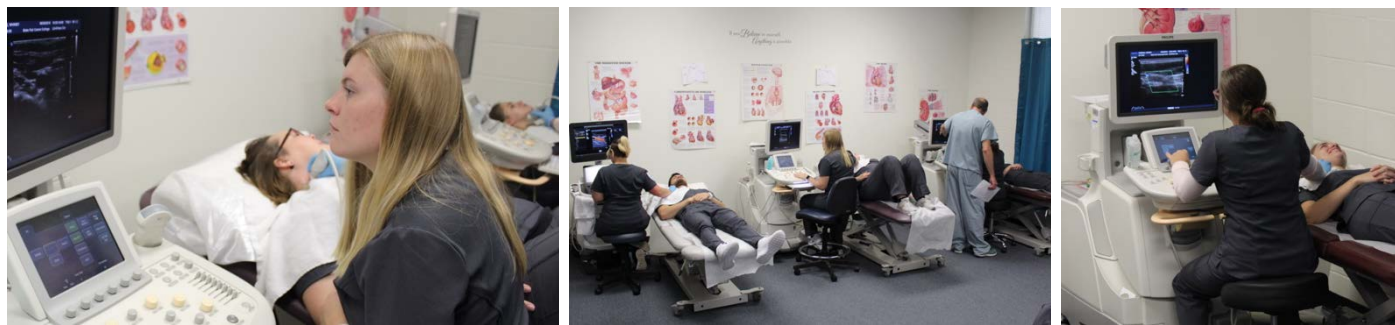
**Humanities, Sciences, and Fine Arts****6 Hours**

*PSY 101^^	General Psychology	3
*SOC 100^^	General Sociology	3

**Program Requirements****57 Hours**

DH 102^	Dental Radiography	2
DH 104^	Dental Radiography Lab	1
DH 106^	Dental Clinic Emergencies	1
DH 108^^	Oral Anatomy and Histology	3
DH 111^^	Pharmacology	3
DH 113^	Dental Hygiene Ethics and Legal Issues	1
DH 115^	Community Dental Health I	2
DH 117^	Community Dental Health II	.5
DH 118^	Principles of Periodontics	2
DH 120^^	Dental Biomaterials with Lab	2
DH 122^^	General and Oral Pathology	3
DH 124^^	Applied Nutrition and Oral Health Education	2
DH 128^	Local Anesthesia	2
DH 131^	Introduction to Dental Hygiene Theory	2
DH 133^	Dental Hygiene Theory I	2
DH 134^	Dental Hygiene Theory II	1
DH 135^	Dental Hygiene Theory III	2
DH 136^	Dental Hygiene Theory IV	2
DH 139^	Dental Hygiene Clinic I	4
DH 140^	Dental Hygiene Pre-Clinic I	4
DH 143^	Dental Hygiene Clinic II	3
DH 144^	Dental Hygiene Clinic III	6
DH 145^	Dental Hygiene Clinic IV	6
HEOC 135^^	Allied Health Career Development	.5

**Degree Total****92 Hours**



## AAS in Diagnostic Medical Sonography

Sonographers are diagnostic medical professionals who operate ultrasonic imaging devices to produce diagnostic images, scans, videos, or 3D volumes of anatomy and diagnostic data. Sonography requires specialized education and skills to view, analyze and modify the scan to optimize the information in the image. Because of the high levels of decisional latitude and diagnostic input, sonographers have a high degree of responsibility in the diagnostic process.

### About the Program

Through classroom theory, laboratory practice and clinical application students learn to safely use ultrasound in the diagnosis of trauma and disease. Students are introduced to the vast opportunities in diagnostic medical sonography and achieve entry-level competency in the performance and evaluation of ultrasound examinations and procedures. This is an intense 22-month course of study.

### Admission Process

Students in the program are admitted to the college on the same basis as other students, but admission to the college does not ensure admission into the program.

Enrollment in the program is selective and admission cannot be offered to all qualified applicants. A selection committee comprised of the program director, clinical coordinator, members of the advisory committee and possibly other college personnel will evaluate students for the class.

Only students meeting the minimum requirements and who have submitted a completed application packet prior to the application deadline will be presented to the Admissions Committee. Applicants will receive a letter regarding admissions status following committee review. Decisions of the Admissions Committee are final.

Students are eligible to submit the program application packet when all prerequisite courses are complete or will be complete by the end of the spring semester of the year in which they are applying, meet the Essential Qualifications for the Diagnostic Medical Sonography program, and have a cumulative GPA of 2.75 or greater on a 4.0 scale and a meet the minimum grade requirement in each individual course (GPA is checked at the end of the spring semester of the school year in which the student is applying).

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

**AAS in Diagnostic Medical Sonography (Continued)***Courses to complete with a grade of B or higher^**Courses to complete with a grade of C or higher^^***Program Prerequisites****Written and Oral Communications****6 Hours**

ENGL 101^ English Composition I 3

**Select an additional course**

COMM 101^ Public Speaking 3

ENGL 102^ English Composition II 3

**Civics****3 Hours**

HIST 101^ U.S. History Before 1877 3

HIST 102^ U.S. History Since 1877 3

POLS 101^ American/National Government 3

**Mathematical Sciences****3 Hours**

MATH 113^ Mathematical Reasoning and Modeling 3

MATH 114^ Precalculus Algebra 3

MATH 119^ Statistical Reasoning 3

**Humanities, Sciences, and Fine Arts****8 Hours**

BIO 207^ Human Anatomy with Lab 4

BIO 208^ Human Physiology with Lab 4

**Other Requirements****6 Hours**

HEOC 119^ Medical Terminology 3

PHYS 105^^ College Physics I with Lab (or) 3-5

RAD 130^^ Radiation Production and Characteristics 3-5

**Prerequisite Total****26 Hours****Program Requirements****42.5 Hours**

DMS 102^ Patient Care and Health Care Communication 2

DMS 107^ Ultrasound Scanning Lab I 4

DMS 108^ Seminar in Sonography 2

DMS 120^ Sonography Principles and Instrumentation I 3

DMS 122^ Sonography Principles and Instrumentation II 3

DMS 127^ Ultrasound Lab II 4

DMS 145^ Sonography Clinical I 4

DMS 150^ Vascular Sonography I 2

DMS 152^ Vascular Sonography II 2

DMS 154^ Vascular Sonography III 2

DMS 155^ Sonography Clinical II 7

DMS 165^ Sonography Clinical III 7

HEOC 135^ Allied Health Career Development .5

**Cardiac Track or General Track****12 Hours****Cardiac Track**

DMS 103^ Cardiac Ultrasound I 3

DMS 113^ Cardiac Ultrasound II 3

DMS 123^ Cardiac Ultrasound III 3

DMS 133^ Cardiac Ultrasound IV 3

**General Track**

DMS 130^ General Sonography I 2

DMS 132^ General Sonography II 2

DMS 134^ General Sonography III 2

DMS 140^ OB/GYN Sonography I 2

DMS 142^ OB/GYN Sonography II 2

DMS 144^ OB/GYN Sonography III 2

**Degree Total****80.5 Hours**



### Skills Certificate in Nurse Aide

The Skills Certificate in Nurse Aide is designed to provide a student with the training to become a Certified Nurse Assistant (CNA) or Certified Medication Technician (CMT). The courses are offered on-ground and online, and clinicals are on-site at an approved long-term care facility.

A CNA works closely with nurses and the health care team. The nurse assistant must be skilled in the actual procedures being performed; have a strong grasp of emergency procedures; be able to stay calm in stressful situations, and be able to observe a patient's condition and report that information back to the nurse. Tasks may include turning and repositioning bedridden patients; helping patients exercise and move in and out of bed; preparing patients for surgery, treatment or examination; applying dressing, and transporting patients to treatment units.

The CMT training prepares a student to work in long-term care facilities. The program teaches skills in administration of non-parenteral (oral or by inhalation) medications and in assisting RNs or LPNs with medication therapy.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

Program Requirements		16.5 Hours
HEOC 119	Medical Terminology	3
HEOC 152	Certified Nurse Assistant	6
HEOC 155	Certified Nurse Assistant Clinical	2
HEOC 158	Certified Medication Technician	4
HEOC 160	Certified Medication Technician Clinical	1
NURS 102	CPR for Health Care Providers	.5
<b>Certificate Total</b>		<b>16.5 Hours</b>



## Professional Certificate in Nurse Aide

The Professional Certificate in Nurse Aide consists of a combination of the Skills Certificate in Nurse Aide along with other health care related classes. Students can increase employability with completion of this certificate.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

Program Requirements		31.5 Hours
BIO 103	Human Biology	3
ENGL 110	Communication for Business and Industry	3
HEOC 119	Medical Terminology	3
HEOC 140	Technology and Health Care	3
HEOC 152	Certified Nurse Assistant	6
HEOC 155	Certified Nurse Assistant Clinical	2
HEOC 158	Certified Medication Technician	4
HEOC 160	Certified Medication Technician Clinical	1
HEOC 169	Social Services Director/Activities Director	3
NURS 102	CPR for Health Care Providers	.5
SS 104	College Skills	3
<b>Certificate Total</b>		<b>31.5 Hours</b>



### AAS in Health Care Specialist with Emphasis in Nurse Aide

The Health Care Specialist with emphasis in Nurse Aide program includes all the courses from the Professional Certificate in Nurse Aide. Graduates of this program will have the skills necessary to work in all capacities of a long-term care facility.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

Written and Oral Communications		6 Hours	Program Requirements		35.5 Hours
COMM 101	Public Speaking	3	BIO 121	Microbiology	4
ENGL 110	Communication for Business and Industry	3	CAPP 125	Microcomputer Applications	3
<b>Civics</b>		<b>3 Hours</b>	HEOC 119	Medical Terminology	3
HIST 101	U.S. History Before 1877	3	HEOC 140	Technology and Health Care	3
HIST 102	U.S. History Since 1877	3	HEOC 152	Certified Nurse Assistant	6
POLS 101	American/National Government	3	HEOC 155	Certified Nurse Assistant Clinical	2
<b>Mathematical Sciences</b>		<b>3 Hours</b>	HEOC 158	Certified Medication Technician	4
MATH 110	Intermediate Algebra with Review	5	HEOC 160	Certified Medication Technician Clinical	1
MATH 112	Intermediate Algebra	3	HEOC 169	Social Services Director/Activities Director	3
<b>Humanities, Sciences, and Fine Arts</b>		<b>14 Hours</b>	HIT 100	Introduction to Health Information Technology	3
BIO 103	Human Biology	3	NURS 102	CPR for Health Care Professionals	.5
BIO 207	Human Anatomy with Lab	4	SS 104	College Skills	3
BIO 208	Human Physiology with Lab	4			
PSY 101	General Psychology	3			
<b>Degree Total</b>					<b>61.5 Hours</b>



### Skills Certificate in Pharmacy Technician

The Skills Certificate in Pharmacy Technician provides the knowledge and skills to prepare students with no pharmacy background to take the Pharmacy Technician Certificate Board Examination (PTCE) to achieve CPhT designation.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

Program Requirements		16 Hours
PHRM 102	Top 200 Medications	1
PHRM 104	Calculations for Pharmacy Technician	3
PHRM 106	Role of the Pharmacy Technician	4
PHRM 109	Pharmacology	3
PHRM 110	Federal Law and Ethics in Pharmacy Practice	2
PHRM 115	Pharmacology Certification	3
<b>Certificate Total</b>		<b>16 Hours</b>



## Professional Certificate in Pharmacy Technician

The Professional Certificate in Pharmacy Technician consists of a combination of the Skills Certificate in Pharmacy Technician along with other health care related courses. Students can increase employability with completion of this certificate.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

Program Requirements		31.5 Hours
HEOC 119	Medical Terminology	3
NURS 102	CPR for Health Care Providers	.5
PHRM 102	Top 200 Medications	1
PHRM 104	Calculations for Pharmacy Technician	3
PHRM 106	Role of the Pharmacy Technician	4
PHRM 109	Pharmacology	3
PHRM 110	Federal Law and Ethics in Pharmacy Practice	2
PHRM 115	Pharmacology Certification	3
PHRM 120	Immunization Training for Pharmacy Technician	2
PHRM 122	Advanced Top 200 and Over-the-Counter Medications	4
PHRM 124	Inventory Control and Financial Issues in Pharmacy	3
PHRM 175	Professional Practice Experience	3
<b>Certificate Total</b>		<b>31.5 Hours</b>



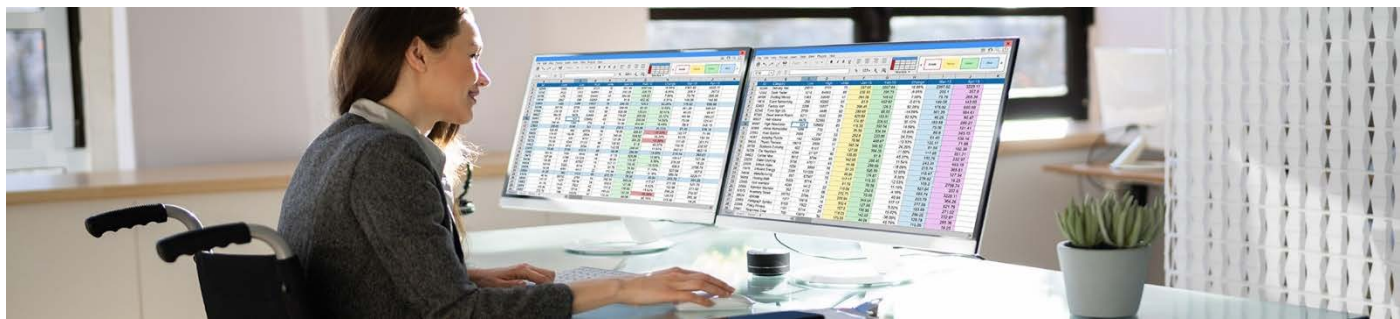
## AAS in Health Care Specialist with Emphasis in Pharmacy Technician

The Health Care Specialist with emphasis in Pharmacy Technician program includes all the courses from the Professional Certificate in Pharmacy Technician. Graduates of this program will have the skills necessary to work in both retail and hospital pharmacies, as well as related fields in the health care industry. The CPhT is a nationally recognized certification and is required in some states.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

Written and Oral Communications			6 Hours	Program Requirements		40.5 Hours
COMM 101	Public Speaking		3	CAPP 125	Microcomputer Applications	3
ENGL 110	Communication for Business and Industry		3	HEOC 119	Medical Terminology	3
Civics			3 Hours	HEOC 140	Technology and Health Care	3
HIST 101	U.S. History Before 1877		3	NURS 102	CPR for Health Care Providers	.5
HIST 102	U.S. History Since 1877		3	PHRM 102	Top 200 Medications	1
POLS 101	American/National Government		3	PHRM 104	Calculations for Pharmacy Technician	3
Mathematical Sciences			3 Hours	PHRM 106	Role of the Pharmacy Technician	4
MATH 110	Intermediate Algebra with Review		5	PHRM 109	Pharmacology	3
MATH 112	Intermediate Algebra		3	PHRM 110	Federal Law and Ethics in Pharmacy Practice	2
Humanities, Sciences, and Fine Arts			11 Hours	PHRM 115	Pharmacology Certification	3
BIO 103	Human Biology		3	PHRM 120	Immunization Training for Pharmacy Technician	2
CHEM 101	Introduction to Chemistry with Lab		5	PHRM 122	Advanced Top 200 and Over-the-Counter Medications	4
SOC 100	General Sociology		3	PHRM 124	Inventory Control and Financial Issues in Pharmacy	3
				PHRM 175	Professional Practice Experience	3
				SS 104	College Skills	3
				Degree Total		63.5 Hours



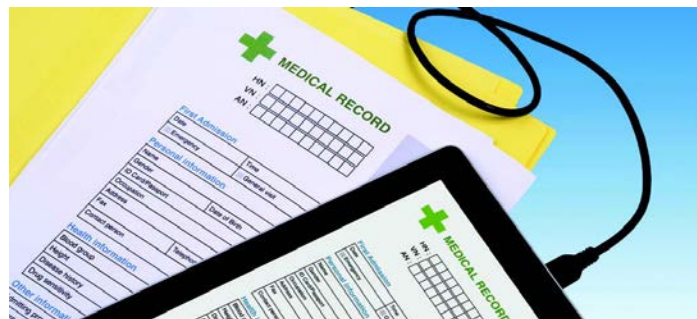
## Professional Certificate in Medical Coding

The Professional Certificate in Medical Coding will prepare students for The American Health Information Management Association (AHIMA) certification exam to become a certified coder. Medical coders assign a code to each diagnosis and procedure by using classification systems software. The classification system determines the amount for which health care providers will be reimbursed if the patient is covered by Medicare, Medicaid, or other insurance programs using the system.

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

Program Requirements		30.5 Hours
BIO 103^^	Human Biology	3
CAPP 125^^	Microcomputer Applications	3
HEOC 119^^	Medical Terminology	3
HEOC 135^^	Allied Health Career Development	.5
HIT 100^^	Introduction to Health Information Technology	3
HIT 105^^	Health Care Technologies	3
HIT 204^^	Coding I	3
HIT 206^^	Coding II	3
HIT 208^^	Coding III	3
HIT 215^^	Principles of Health Care Reimbursement	3
HIT 224^^	Human Disease and Conditions	3
<b>Certificate Total</b>		<b>30.5 Hours</b>



## AAS in Health Information Technology

The Health Information Technology (HIT) program will give students the education needed for greater success in their new chosen profession. The value in completing the HIT degree is eligibility to take the national credentialing exam for registered health information technicians. Other benefits for the student are to improve earning potential; open doors for career advancement; reach short-term goals and focus on long-term goals; achieve a foundation of broad and deep understanding of the health information management field; be associated with The American Health Information Management Association's (AHIMA) strong and long-standing reputation of excellence, and connect with a strong network of AHIMA-certified peers.

AHIMA-certified professionals pass a rigorous exam and commit to ongoing continuation of their education. When a student seeks certification, it shows an employer a deep personal commitment and sense of accountability, as well as credibility and confidence in an individual's professional knowledge. A student who carries AHIMA credentials will agree to abide by the AHIMA Code of Ethics that will improve the quality of information and care the patient receives.

Registered HITs may be employed in any organization that uses patient data or health information, such as pharmaceutical companies, law and insurance firms, and health product vendors. Most RHITs work in hospitals but can also be employed in other health care settings including physician practices, nursing homes, home health agencies, and public health agencies.

Once a student has achieved the AAS in Health Information Technology degree, he or she can further enhance skills, open the door to even greater opportunities, and obtain a higher level of education by enrolling in a baccalaureate program for Health Information Administration.

SFCC's HIT program is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

**AAS in Health Information Technology (Continued)***Courses to complete with a grade of C or higher^^*

<b>Written and Oral Communications</b>	<b>6 Hours</b>
COMM 101 Public Speaking	3
ENGL 101 English Composition I	3
<b>Civics</b>	<b>3 Hours</b>
HIST 101 U.S. History Before 1877	3
HIST 102 U.S. History Since 1877	3
POLS 101 American/National Government	3
<b>Mathematical Sciences</b>	<b>3 Hours</b>
MATH 119 Statistical Reasoning	3
<b>Humanities, Sciences, and Fine Arts</b>	<b>3 Hours</b>
BIO 103^^ Human Biology	3

<b>Program Requirements</b>		<b>45.5 Hours</b>
BSMT 108	Principles of Management	3
CAPP 125^^	Microcomputer Applications	3
CIS 124^^	Database Management	3
HEOC 119^^	Medical Terminology	3
HEOC 135	Allied Health Career Development	.5
HIT 100^^	Introduction to Health Information Technology	3
HIT 105^^	Health Care Technologies	3
HIT 115^^	Health Care and the Law	3
HIT 200^^	Health Care Statistics and Data Analysis	3
HIT 204^^	Coding I	3
HIT 206^^	Coding II	3
HIT 208^^	Coding III	3
HIT 215^^	Principles of Health Care Reimbursement	3
HIT 220^^	Health Information Management	3
HIT 224^^	Human Disease and Conditions	3
HIT 275^^	Professional Practice Experience	3
<b>Degree Total</b>		<b>60.5 Hours</b>



## Medical Assisting

Medical Assistants are health science professionals specifically trained to work in settings such as physician offices, clinics, and urgent care facilities. Medical Assistants are vital members of the healthcare team, cross-trained on administrative and clerical duties. A variety of skills are utilized daily and include patient intake and vital signs, administering injections, assisting in minor surgery and physical exams, EKG's, phlebotomy, performing basic laboratory exams, utilizing the electronic medical record, patient communication, referrals, prior authorizations, patient education, scheduling patients, and assisting with health insurance requirements.

### Admissions Processes

Students in the program are admitted to the college on the same basis as other students, but admission to the college does not ensure admission into the program. Enrollment in the program is selective and admission cannot be offered to all qualified applicants. Students must have completed a high school diploma or the equivalent. Students should be able to demonstrate proficiency in English, mathematics and reading based on the college assessment. Students must have basic keyboarding skills. Students must have a minimum of a 2.0 GPA prior to starting the Medical Assisting program.

Only students meeting the minimum requirements and who have submitted a completed application packet prior to the application deadline will be reviewed for acceptance. Applicants will receive a letter regarding admissions status following the admission committee review. Decisions of the admissions committee are final. An informational packet with application materials is available online at [www.sfccmo.edu/medical-assisting](http://www.sfccmo.edu/medical-assisting) or at the nearest SFCC campus. Students must complete all prerequisites PRIOR to entry into program. There will be no substitution of courses in the curriculum unless approved by the program director. Completing courses before beginning the program will not shorten the length of time you are in the certificate program.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.



### Skills Certificate in Medical Assisting

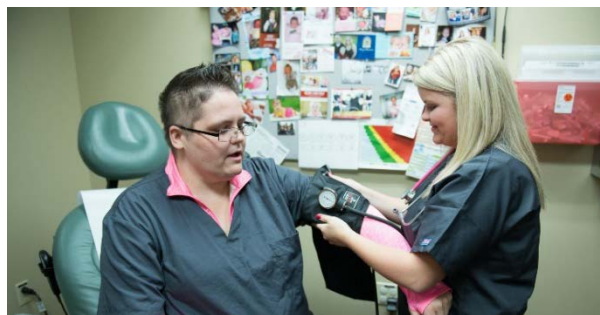
The Skills Certificate in Medical Assisting is an online program with one day a week in a lab or clinical setting on-ground. The program provides theory, laboratory practice, and clinical application to meet student-learning outcomes. Students are introduced to diverse opportunities in medical assisting to achieve entry-level performance as a medical assistant. Students will be cross-trained in administrative and clinical skills, as well as patient privacy, sensitivity and empathy. Skills include patient intake, vital signs, electrocardiograms (EKGs), sterile field, administering injections, assisting with physical exams, scheduling patients and health insurance requirements. Students will take the NHA Certified EKG Technician (CET) credentialing exam before course completion.

The Skills Certificate in Medical Assisting is required before entry into the Professional Certificate in Medical Assisting.

*Courses to complete with a grade of B or higher^*

*Courses to complete with a grade of C or higher^^*

Program Requirements		18.5 Hours
BIO 103^^	Human Biology	3
HEOC 119^^	Medical Terminology	3
MEA 101^	Introduction to Medical Assisting	3
MEA 108^	Medical Assisting Administrative Procedures	3
MEA 112^	Medical Assisting Clinical Procedures	3
MEA 116^	Medical Assisting Laboratory Procedures	3
NURS 102	CPR for Health Care Providers	.5
<b>Certificate Total</b>		<b>18.5 Hours</b>



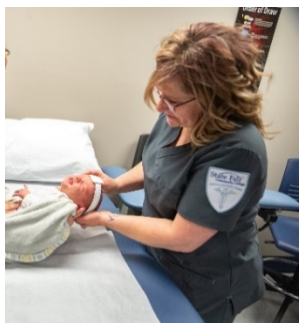
## Professional Certificate in Medical Assisting

The Professional Certificate in Medical Assisting provides seamless transition after completion of the Skills Certificate. Courses are online with one full day each week on-ground learning clinical and laboratory skills. Students must complete a minimum of 160 clinical hours as part of the capstone course. The program provides theory, laboratory practice, and clinical application to meet student learning outcomes. Students are exposed to diverse opportunities in Medical Assisting to build on skills achieved during the Skills Certificate in Medical Assisting. Upon successful completion, credentials will include the NHA Certified Phlebotomy Technician (CPT) and Certified Clinical Medical Assistant (CCMA). In the employment setting, Medical Assisting certification is preferred, and in many cases mandatory.

*Courses to complete with a grade of B or higher^*

*Courses to complete with a grade of C or higher^^*

Program Requirements		34 Hours
BIO 103^^	Human Biology	3
HEOC 119^^	Medical Terminology	3
HEOC 135^^	Allied Health Career Development	.5
MEA 101^	Introduction to Medical Assisting	3
MEA 108^	Medical Assisting Administrative Procedures	3
MEA 110^^	Medical Scribe	2
MEA 112^	Medical Assisting Clinical Procedures	3
MEA 114^	Medical Assisting Advanced Skills	4
MEA 116^	Medical Assisting Laboratory Procedures	3
MEA 190^	Medical Assisting Capstone	6
NURS 102	CPR for Health Care Providers	.5
PHRM 109^^	Pharmacology	3
<b>Certificate Total</b>		<b>34 Hours</b>



## AAS in Medical Assisting

The student interested in an Associate of Applied Science in Medical Assisting will first complete the requirements for the Professional Certificate in Medical Assisting and pass the certification exam in Medical Assisting prior to completion of the rest of the Associate of Applied Science requirements.

*Courses to complete with a grade of B or higher<sup>^</sup>*

*Courses to complete with a grade of C or higher<sup>^^</sup>*

### Written and Oral Communications

**6 Hours**

COMM 101<sup>^^</sup> Public Speaking

3

ENGL 101<sup>^^</sup> English Composition I

3

### Civics

**3 Hours**

HIST 101<sup>^^</sup> U.S. History Before 1877

3

HIST 102<sup>^^</sup> U.S. History Since 1877

3

POLS 101<sup>^^</sup> American/National Government

3

### Mathematical Sciences

**3 Hours**

MATH 110<sup>^^</sup> Intermediate Algebra with Review

5

MATH 112<sup>^^</sup> Intermediate Algebra

3

### Humanities, Sciences, and Fine Arts

**9 Hours**

BIO 103<sup>^^</sup> Human Biology

3

PSY 101<sup>^^</sup> General Psychology

3

SOC 100<sup>^^</sup> General Sociology

3

### Program Requirements

**31 Hours**

HEOC 119<sup>^^</sup> Medical Terminology

3

HEOC 135<sup>^^</sup> Allied Health Career Development

.5

MEA 101<sup>^</sup> Introduction to Medical Assisting

3

MEA 108<sup>^</sup> Medical Assisting Administrative Procedures

3

MEA 110<sup>^^</sup> Medical Scribe

2

MEA 112<sup>^</sup> Medical Assisting Clinical Procedures

3

MEA 114<sup>^</sup> Medical Assisting Advanced Skills

4

MEA 116<sup>^</sup> Medical Assisting Laboratory Procedures

3

MEA 190<sup>^</sup> Medical Assisting Capstone

6

NURS 102 CPR for Health Care Providers

.5

PHRM 109<sup>^^</sup> Pharmacology

3

### Health Care Applications

**9 Hours**

CAPP 125<sup>^^</sup> Microcomputer Applications

3

HIT 105<sup>^^</sup> Health Care Technologies

3

HIT 224<sup>^^</sup> Human Disease and Conditions

3

### Degree Total

**61 Hours**



## AAS in Medical Laboratory Technician

The Missouri Health Professions Consortium (MHPC) Medical Laboratory Technician (MLT) Program curriculum includes on-campus or virtual classroom instruction, on-campus laboratory instruction and an off-campus clinical rotation component encompassing the areas of Hematology and Coagulation, Clinical Microbiology, Parasitology, Mycology and Virology, Immunohematology, Clinical Chemistry and Urinalysis, Immunology and Phlebotomy.

The MHPC MLT program is nationally accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) and upon completion of the program, the graduate will be eligible to sit for a national certification examination such as that offered by the American Society for Clinical Pathology (ASCP). Upon passing the exam, graduates will be recognized nationally as Medical Laboratory Technicians. Graduates of the program will have experience in and be qualified to provide laboratory services to patients in many different health care settings, including, but not limited to, hospitals, clinics and physician offices.

Students accepted into the MLT program must also maintain an overall minimum 2.5 GPA or higher in order to progress to the next semester.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

*Courses to complete with a grade of C or higher^^*

### Program Prerequisites

#### Written and Oral Communications 3 Hours

ENGL 101^^ English Composition I 3

#### Civics 3 Hours

HIST 101^^ U.S. History Before 1877 3

HIST 102^^ U.S. History Since 1877 3

POLS 101^^ American/National Government 3

#### Mathematical Sciences 3 Hours

MATH 114^^ Precalculus Algebra 3

#### Humanities, Sciences, and Fine Arts 16 Hours

BIO 207^^ Human Anatomy with Lab 4

BIO 208^^ Human Physiology with Lab 4

CHEM 101^^ Introduction to Chemistry with Lab (or)

CHEM 123^^ General Chemistry with Lab 5

PHIL 102^^ Ethics (or)

SOC 100^^ General Sociology 3

**Prerequisite Total 25 Hours**

### Program Requirements 35 Hours

MLT 150^^ Introduction to Lab Science Methods 2

MLT 210^^ Immunology 3

MLT 220^^ Clinical Chemistry and Urinalysis 5

MLT 250^^ Hematology and Coagulation 5

MLT 260^^ Phlebotomy 2

MLT 270^^ Immunohematology 5

MLT 280^^ Clinical Microbiology 4

MLT 290^^ Parasitology, Mycology and Virology 1

MLT 291^^ Hematology and Coagulation Practicum 2

MLT 292^^ Clinical Chemistry Practicum 2

MLT 293^^ Clinical Microbiology Practicum 2

MLT 294^^ Clinical Immunohematology Practicum 2

**Degree Total 60 Hours**



## Nursing

The Nursing program is a bi-level program that prepares the student to complete the requirements for the Professional Certificate in Practical Nursing in Year One (Level 1) and the requirements for the Associate of Applied Science in Nursing in Year Two (Level 2). This competency based bi-level curriculum allows students to transition from practical nursing to associate degree nursing in a seamless fashion. An advanced placement option is available for current licensed practical nurses or licensed paramedics into Year Two (Level 2). The program has full approval by the Missouri State Board of Nursing and is accredited by the Department of Elementary and Secondary Education.

Admission to the Nursing program at SFCC is competitive and requires an additional admission application. Nursing program admission information packets contain admission criteria, essential abilities for admission, state licensure requirements, mission and philosophy statements, fee schedules and course sequences. Successful program applicants are subject to background checks and drug tests that could prevent an applicant's progression in the program.

### Mission

The mission of the Associate Degree Nursing Program is to prepare students to become registered professional nurses through a bi-level program. The aim of the educational environment is to provide an accessible, relevant program that uses evidence-based practice to develop clinical reasoning and promotes student success. The program utilizes technology and quality improvement principles to enhance patient care.

Prospective students should be aware that Section 335.066, RSMo of the Missouri Nursing Practice Act may prohibit persons from taking the state nursing licensure exams in cases of prior legal action. Before starting prerequisites or applying to the nursing program, consult with a nursing advisor or refer to the act online at <http://pr.mo.gov/boards/nursing/npa.pdf>.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.



## Professional Certificate in Practical Nursing

*Courses to complete with a grade B or higher^*

*Courses to complete with a grade of C or higher^^*

*Courses can be completed prior to the start of the program\**

### Year One (Level 1)

The successful applicant must have at least a 2.75 GPA for all prerequisite and required courses. An overall GPA of at least 2.5 is required.

All science courses must have been completed within the last 10 years at the time of application to the Nursing program.

### Program Prerequisites

#### Written and Oral Communications 3 Hours

ENGL 101^^	English Composition I	3
ENGL 102^^	English Composition II	3

#### Mathematical Sciences 3 Hours

MATH 110^^	Intermediate Algebra with Review	5
MATH 112^^	Intermediate Algebra	3
MATH 113^^	Mathematical Reasoning and Modeling	3
MATH 114^^	Precalculus Algebra	3
MATH 119^^	Statistical Reasoning	3

#### Humanities, Sciences, and Fine Arts 4 Hours

BIO 207^	Human Anatomy with Lab	4
----------	------------------------	---

#### Prerequisite Total 10 Hours

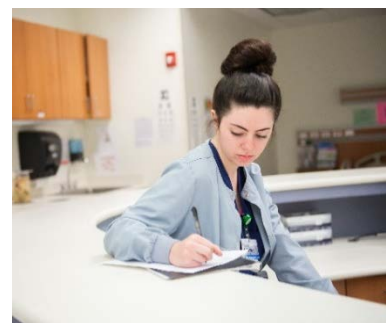
### Program Requirements

**45.5 Hours**

Each eight-week session of nursing must be successfully completed to take the next eight-week courses.

BIO 208**	Human Physiology with Lab	4
HEOC 135^	Allied Health Career Development	.5
NURS 102	CPR for Health Care Providers	.5
NURS 110^	Personal Vocational Concepts	1
NURS 112^	Introduction to Psycho-Social Health	2
NURS 114^	Fundamentals I	2
NURS 117^	Fundamentals II	3
NURS 118	Fundamentals II Clinical	1.5
NURS 119^	Allied Health Pharmacology	3
NURS 122^	Adult Health I	4
NURS 124^	Adult Health II	4
NURS 126	Adult Health Nursing Clinical	3
NURS 128^	Adult Health III	2
NURS 130	Adult Health Care Coordination Clinical	2
NURS 132^	Nutrition	3
NURS 134^	Nursing Care Childbearing Family	2
NURS 136	Childbearing Family Clinical	1.5
NURS 140^	Nursing Care Child Rearing Family	2
NURS 142	Child Rearing Family Clinical	1.5
PSY 101^^	General Psychology	3

#### Certificate Total 55.5 Hours



## AAS in Nursing

Upon successful completion of the Practical Nursing (Year One) coursework and subsequent LPN licensure, students may transition seamlessly into the AAS in Nursing (Year Two) program without having to reapply. In addition, Licensed Practical Nurses and Licensed Paramedics will be eligible to apply for advanced placement in Year Two (Level 2).

*Courses to complete with a grade B or higher<sup>^</sup>*

*Courses to complete with a grade of C or higher<sup>^^</sup>*

*Courses can be completed prior to the start of the program<sup>\*</sup>*

*Advanced Placement credits for LPNs and Licensed Paramedics<sup>\*\*</sup>.*

### Year Two (Level 2) Advanced Placement

The successful applicant must have at least a 2.75 GPA for all prerequisite and required courses. An overall GPA of at least 2.5 is required.

All science courses must have been completed within the last 10 years at the time of application to the Nursing program.

#### Program Prerequisites

<b>Written and Oral Communications</b>	<b>3 Hours</b>
ENGL 101 <sup>^^</sup> English Composition I	3
ENGL 102 <sup>^^</sup> English Composition II	3

<b>Mathematical Sciences</b>	<b>3 Hours</b>
MATH 110 <sup>^^</sup> Intermediate Algebra with Review	5
MATH 112 <sup>^^</sup> Intermediate Algebra	3
MATH 113 <sup>^^</sup> Mathematical Reasoning and Modeling	3
MATH 114 <sup>^^</sup> Precalculus Algebra	3
MATH 119 <sup>^^</sup> Statistical Reasoning	3

<b>Humanities, Sciences, and Fine Arts</b>	<b>7 Hours</b>
BIO 208 <sup>^</sup> Human Physiology with Lab	4
PSY 101 <sup>^^</sup> General Psychology	3

<b>Prerequisite Total</b>	<b>13 Hours</b>
---------------------------	-----------------

#### Year Two (Level 2) Courses required after acceptance for students not bridging directly from Year One (Level 1)

HEOC 135 <sup>^</sup> Allied Health Career Development (required for advanced placement students with PN transcripts from outside Missouri and Paramedics)	.5
NURS 210 <sup>^</sup> Nursing Transition Course (required for advanced placement LPN's only)	2
NURS 211 <sup>^</sup> Paramedic Transition Course (required for advanced placement Paramedics only)	4

#### Program Requirements

**47.5 Hours**

Each eight-week session of nursing must be successfully completed to take the next eight-week courses.

Nursing Competencies <sup>**</sup>	7
BIO 121 <sup>^^</sup> Microbiology	4
COMM 101 <sup>^^</sup> Public Speaking	3
HEOC 135 <sup>^</sup> Allied Health Career Development	.5
HIST 101 <sup>^^</sup> U.S. History Before 1877 (or)	
HIST 102 <sup>^^</sup> U.S. History Since 1877 (or)	
POLS 101 <sup>^^</sup> American/National Government	3
NURS 102 CPR for Health Care Providers	.5
NURS 213 <sup>^</sup> Introduction to Professional Nursing	2
NURS 215 <sup>^</sup> Complex Health: Mental Health	2.5
NURS 216 Complex Health: Mental Health Clinical	2
NURS 219 <sup>^</sup> Complex Health: Elimination	3
NURS 221 <sup>^</sup> Complex Health: Nutrition/Metabolic	2.5
NURS 227 <sup>^</sup> Complex Health: Family	3
NURS 228 Complex Health: Family Clinical	1
NURS 230 <sup>^</sup> Complex Health: Adult Clinical I	1
NURS 231 Complex Health: Adult Clinical II	1
NURS 233 Complex Health: Adult Clinical III	3
NURS 234 <sup>^</sup> Complex Health: Activity and Rest	3
NURS 237 <sup>^</sup> Complex Health: Cognitive/Perceptual	3
NURS 243 Professional Nursing Capstone Clinical	2.5

#### Degree Total

**60.5 Hours**



## AAS in Occupational Therapy Assistant

The Occupational Therapy Assistant program is a one-plus degree program that prepares students to practice as Certified Occupational Therapy Assistants (COTA) after meeting certification and state licensure standards. State Fair Community College (SFCC) is one of five colleges in Missouri Health Professions Consortium (MHPC) currently offering this program. SFCC offers and enrolls students in the general education coursework: sophomore level (professional level) coursework typically originates from a classroom at any of the five campuses and is conveyed to students via interactive television and internet-based technology. Through the combination of general education and professional level coursework, classroom and laboratory practice, and clinical fieldwork experiences, students will learn the profession of occupational therapy assistant. The professional year does not run on a traditional SFCC academic cycle. Classes begin in the fall semester and will run until the next fall semester of the following year. Completion of professional course work takes one full year.

### Accreditation

The MHPC Occupational Therapy Assistant Program is accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA). Following successful completion of coursework and passing of the certification exam, individuals will be a Certified Occupational Therapy Assistant (COTA). Even with successful coursework completion students may be prohibited from sitting for the NBCOT Certification Exam if they have a felony conviction. In Missouri, state licensure is required in order to practice and acquisition of a license is contingent upon passing the NBCOT Certification Exam. For more information regarding accreditation, please contact the American Occupational Therapy Association:

#### ACOTE

c/o Accreditation Department  
American Occupational Therapy Association (AOTA)  
6116 Executive Boulevard, Suite 200  
North Bethesda, MD 20852-4929  
(301) 652-2682 | TDD (800) 377-8555  
accred@aota.org  
www.acoteonline.org

### Admission Process

Enrollment in the MHPC Occupational Therapy Assistant program is selective and an informational packet with application materials is available online or at the Sedalia campus. Students must complete all general education coursework PRIOR to entry into the professional level program. However, students can complete coursework in the semester prior to the start of the program; under these circumstances, program admission would be contingent upon successful completion of general education prerequisite coursework and maintenance of the required 2.5 GPA. Transcript evidence of satisfactory completion of general education/prerequisite coursework must be received with the application packet. SFCC may not be able to offer admission to all qualified applicants. Only students meeting all admission criteria and submitting completed application packets within the established timeframe will be considered. The Selection Committee meetings are conducted the spring before the start of the professional year. Admission decisions of the Selection Committee are final. Applicants will receive a letter regarding admissions status following committee review.

## AAS in Occupational Therapy Assistant (Continued)

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

*All prerequisite requirements require a grade of C or higher and an overall 2.5 GPA maintained<sup>^^</sup>.*

### Program Prerequisites

#### Written and Oral Communications 6 Hours

COMM 101 <sup>^^</sup> Public Speaking	3
ENGL 101 <sup>^^</sup> English Composition I	3

#### Civics 3 Hours

HIST 101 <sup>^^</sup> U.S. History Before 1877	3
HIST 102 <sup>^^</sup> U.S. History Since 1877	3
POLS 101 <sup>^^</sup> American/National Government	3

#### Mathematical Sciences 3 Hours

MATH 110 <sup>^^</sup> Intermediate Algebra with Review	5
MATH 112 <sup>^^</sup> Intermediate Algebra	3
MATH 113 <sup>^^</sup> Mathematical Reasoning and Modeling	3
MATH 114 <sup>^^</sup> Precalculus Algebra	3
MATH 119 <sup>^^</sup> Statistical Reasoning	3

#### Humanities, Sciences, and Fine Arts 14 Hours

BIO 207 <sup>^^</sup> Human Anatomy with Lab	4
BIO 208 <sup>^^</sup> Human Physiology with Lab	4
PSY 101 <sup>^^</sup> General Psychology	3
PSY 210 <sup>^^</sup> Lifespan Development	3

#### General Education Elective<sup>^^</sup> 3 Hours

SOC 100 General Sociology (recommended)	
---	--

#### Other Requirements 3 Hours

HEOC 119 <sup>^^</sup> Medical Terminology	3
--	---

#### Prerequisite Total 32 Hours

*All program requirements require a grade of C or higher and an overall 2.5 GPA maintained<sup>^^</sup>.*

### Program Requirements 48 Hours

OTA 200 <sup>^^</sup> Foundations of Occupational Therapy	4
OTA 205 <sup>^^</sup> Medical Conditions in Occupational Therapy	3
OTA 210 <sup>^^</sup> Analysis of Occupations	2
OTA 215 <sup>^^</sup> Mental Health and Psychosocial Practice	4
OTA 220 <sup>^^</sup> Pediatric and Adolescent Practice	4
OTA 250 <sup>^^</sup> Functional Kinesiology	2
OTA 255 <sup>^^</sup> Physical Disabilities Practice	4
OTA 260 <sup>^^</sup> Community Practice	3
OTA 265 <sup>^^</sup> Ethics, Management, and Leadership	3
OTA 270 <sup>^^</sup> Professional Skills	3
OTA 290 <sup>^^</sup> Level II Fieldwork A	8
OTA 295 <sup>^^</sup> Level II Fieldwork B	8

#### Degree Total 80 Hours



## AAS in Radiologic Technology

The Radiologic Technology program is dedicated to serving the rural communities of western Missouri through the preparation of highly competent, registry-eligible medical imaging professionals. The program provides a solid educational base and a thorough professional preparation that will allow the graduate to competitively enter the workforce, continue their education in advanced imaging technologies, and/or transfer into baccalaureate degree programs in imaging science. Radiologic technologists are educated in image production, radiation protection and image evaluation. Although an interdisciplinary team of radiologists, radiologic technologists and support staff plays a critical role in the delivery of health services, it is the radiologic technologist who performs the radiologic examination that creates the images needed for diagnosis. Admission to the program is selective and an informational packet with an application to the program is available online. Admission criteria can be found in the Radiologic Technology application online at [www.sfccmo.edu/radiologic-technology](http://www.sfccmo.edu/radiologic-technology).

**Note:** If a student has taken an Anatomy and Physiology I (A/P) (4 credit hours) or Anatomy and Physiology II course (A/P) (4 credit hours) from an accredited higher education institution, this does not satisfy the requirements of either Anatomy or Physiology courses that are required by this program. If a student's transcript indicates BOTH A/P I and A/P II courses with a grade of B or higher, this will satisfy the Anatomy and Physiology requirements of this program. If a student takes A/P I and A/P II and one of the grades for these is lower than a grade of B, the student must repeat that course or take State Fair Community College's separate Anatomy and Physiology courses. All required (including prerequisites for the program) science courses must meet the requirement of having been completed within the last 10 years at the time of application to the State Fair Community College Radiologic Technology program.

**Note:** To apply to the program a student must have an overall 2.5 GPA for all college level course work and a 2.75 GPA total for all prerequisites and required general education courses.

**Civics Exam:** HIST 101, HIST 102, POLS 101 or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

Some programs require essential qualifications to be admitted and retained. Visit [www.sfccmo.edu/essential-qualifications](http://www.sfccmo.edu/essential-qualifications). Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

**AAS in Radiologic Technology (Continued)**

*Courses to complete with a grade of B or higher by the end of the spring semester in which the student is applying<sup>^</sup>*  
*Courses to complete with a grade of C or higher by the end of the spring semester in which the student is applying<sup>^^</sup>*  
*Courses can be completed prior to the start of the program<sup>\*</sup>*

<b>Program Prerequisites</b>		<b>Program Requirements</b>		<b>65 Hours</b>
<b>Written and Oral Communications</b>		<b>*Written and Oral Communications</b>		<b>3 Hours</b>
ENGL 101 <sup>^^</sup>	English Composition I	3	COMM 101 <sup>^^</sup> Public Speaking (or)	
ENGL 102 <sup>^^</sup>	English Composition II	3	COMM 190 <sup>^^</sup> Argumentation and Debate	3
<b>Mathematical Sciences</b>		<b>*Civics</b>		<b>3 Hours</b>
MATH 110 <sup>^</sup>	Intermediate Algebra with Review	5	HIST 101 <sup>^^</sup> U.S. History Before 1877	3
MATH 112 <sup>^</sup>	Intermediate Algebra	3	HIST 102 <sup>^^</sup> U.S. History Since 1877	3
MATH 113 <sup>^</sup>	Mathematical Reasoning and Modeling	3	POLS 101 <sup>^^</sup> American/National Government	3
MATH 114 <sup>^</sup>	Precalculus Algebra	3		
MATH 119 <sup>^</sup>	Statistical Reasoning	3	RAD 106 <sup>^^</sup> Clinical Education I	3
<b>Humanities, Sciences, and Fine Arts</b>		<b>8 Hours</b>		
BIO 207 <sup>^</sup>	Human Anatomy with Lab	4	RAD 109 <sup>^^</sup> Clinical Education II	2
BIO 208 <sup>^</sup>	Human Physiology with Lab	4	RAD 111 <sup>^^</sup> Clinical Education III	2
<b>Other</b>		<b>3 Hours</b>		
HEOC 119 <sup>^^</sup>	Medical Terminology	3	RAD 113 <sup>^^</sup> Clinical Education IV	4
<b>Prerequisite Total</b>		<b>17 Hours</b>		
			RAD 115 <sup>^^</sup> Clinical Education V	4
			RAD 120 <sup>^^</sup> Radiographic Procedures I	3
			RAD 122 <sup>^^</sup> Radiographic Procedures II	3
			RAD 124 <sup>^^</sup> Radiographic Procedures III	3
			RAD 128 <sup>^^</sup> Introduction to Radiologic Sciences	
			and Patient Care	3
			RAD 130 <sup>^^</sup> Radiation Production and Characteristics	3
			RAD 134 <sup>^^</sup> Radiographic Exposures and Quality	
			Control	3
			RAD 137 <sup>^^</sup> Radiation Protection	3
			RAD 140 <sup>^^</sup> Radiologic Pharmacology	3
			RAD 142 <sup>^^</sup> Trauma and Advanced Imaging	3
			RAD 144 <sup>^^</sup> Radiation Biology	2
			RAD 146 <sup>^^</sup> Imaging Equipment	3
			RAD 150 <sup>^^</sup> Radiographic Pathology	3
			RAD 152 <sup>^^</sup> Image Analysis	3
			RAD 154 <sup>^^</sup> Sectional Anatomy	3
			RAD 170 <sup>^^</sup> Preparing for Professionalism	3
		<b>Degree Total</b>		<b>82 Hours</b>

## ACCOUNTING

### ACCT 101-Principles of Financial Accounting

#### Credit Hours: 3

Prerequisites: ENGL 070 and MATH 061 with grades of C or higher or equivalent placement scores. Introductory course covering fundamental accounting principles and financial statement preparation. Emphasis on analysis of effects of business transactions on the earnings, financial position and cash flows of business entities.

### ACCT 102-Manual Accounting

#### Credit Hours: 3

Prerequisite: ACCT 101 with a grade of C or higher. Introduction to accounting methods and processes of managerial and cost accounting. Emphasis on developing and using accounting information related to a manufacturing environment, including management control and decision making.

### ACCT 109-Applied Accounting Procedures

#### Credit Hours: 3

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Provides a basic understanding of accounting terminology and procedures used to record, classify and summarize financial data for a sole proprietorship. Designed for those with no previous knowledge of accounting.

### ACCT 125-Computerized Accounting Applications

#### Credit Hours: 3

Prerequisites: ACCT 109 and CAPP 125 with grades of C or higher. Project-intensive approach to accounting and reporting utilizing accounting software currently used in industry. Emphasis on using a microcomputer to process financial accounting data and prepare financial statements and related reports.

### ACCT 135-Business and Federal Taxation

#### Credit Hours: 3

Prerequisite: None. This course is an introduction to the federal and state laws that affect business startup, employment practices, payment of wages and salaries, sales tax compliance, workers compensation and business income and corporate income tax. Emphasis is placed on compliance with federal and state reporting requirements. Computerized methods are used to perform required calculations and prepare state and federal reports and returns, as well as manual preparation and processing.

## AGRICULTURE

### AGRI 101-Ag Leadership and Issues I

#### Credit Hours: 2

Prerequisite: None. An introduction to the agriculture industry including the development of an academic and career plan. Activities include developing career goals using employment survey, team building, problem solving, leadership development, and competency analysis and alignment.

### AGRI 102-Ag Leadership and Issues II

#### Credit Hours: 1

Prerequisite: AGRI 101. A continuation of career plan development. Activities include resume building, creating cover letters, completing employment applications, and mock employment interviews.

### AGRI 103-Ag Leadership and Issues III

#### Credit Hours: 2

Prerequisite: AGRI 102. Additional Career plan development specific to Associate of Applied Science Agriculture majors. Activities include career plan implementation through goal revision, personal competency analysis, industry issues research, mock interviews, and personal growth projects.

### AGRI 104-Ag Leadership and Issues IV

#### Credit Hours: 1

Prerequisite: AGRI 103. A final analysis of career plan and implementation focusing extensively on the process of employment ranging from career searches to interviewing for positions. Activities include guest industry speakers, completion of a personal portfolio and an interview.

### AGRI 106-Global Agriculture

#### Credit Hours: 3

Prerequisite: None. Course introduces the student to economic, political, cultural, and environmental issues that affect food production and distribution in the advancement of societies in developed and developing countries.

### AGRI 108-Animal Science

#### Credit Hours: 3

Prerequisite: None. Presents principles of animal agriculture essential for a basic understanding of the animals that are chief producers of food and fiber for human consumption. Specific breeds, animal behavior, anatomy, physiology, reproduction, and nutrition will be included.

**AGRI 110-Contemporary Issues in Animal Agriculture****Credit Hours: 3**

Prerequisite: None. Introduction to contemporary issues in animal agriculture, including perspectives on animal rights and welfare, effects of agriculture on the environment and controversial production techniques.

**AGRI 112-Livestock and Meat Evaluation****Credit Hours: 3**

Prerequisite: None. Course is a study of livestock selection and meat evaluation used in marketing in the beef, swine and sheep industries.

**AGRI 114-Livestock Management****Credit Hours: 3**

Prerequisite: None. A study of livestock production identifying the essential ingredients needed by producers to raise productive and profitable livestock.

**AGRI 116-Animal Nutrition****Credit Hours: 3**

Prerequisite: MATH 061 or equivalent placement score. Study includes the nutritional needs of livestock and the formulation of feeds, including hormones, antibiotics, minerals, vitamins, and other feed additives.

**AGRI 118-Plant Science****Credit Hours: 3**

Prerequisite: None. Study includes plant and seed development and selection, the cultural practices in the production of common farm crops and seed and plant identification.

**AGRI 119-Soils I with Lab****Credit Hours: 4**

Prerequisite: MATH 061 or equivalent placement score. An introduction to soil sciences focusing on soil formation, composition, uses, conservation, health and improvement. Lab provides real world application of classroom soil theories and concepts. Both AGRI 119 and AGRI 120 cannot be applied to meet any certificate or degree requirement. (3 lecture, 1 lab)

**AGRI 121-Soils II****Credit Hours: 3**

Prerequisite: AGRI 119. An in-depth study of the essential nutrients required by plants for growth and agricultural production and their relationship to soil factors. Course focuses on plant nutrient requirements and the impact of CEC, pH, base saturation, and other environmental conditions on the availability of those nutrients.

**AGRI 123-Soil Erosion and Management****Credit Hours: 3**

Prerequisite: AGRI 119. A training in soil erosion analysis and control through construction of structures and management practices.

**AGRI 125-Natural Resources****Credit Hours: 3**

Prerequisite: None. A study of natural resources as they relate to our existence and their relationship to agriculture and each other.

**AGRI 126-Ornamental Woody Plants****Credit Hours: 3**

Prerequisite: None. Identification and evaluation of trees and shrubs for landscape use.

**AGRI 127-Farm Chemicals****Credit Hours: 3**

Prerequisite: None. A study of the production, distribution, handling, and application of farm chemicals such as insecticides, rodenticides, fungicides, and herbicides.

**AGRI 128-Ornamental Herbaceous Plants****Credit Hours: 3**

Prerequisite: None. Identification and evaluation of annuals, biennials, perennials, ground covers, and bulbs.

**AGRI 129-General Horticulture****Credit Hours: 3**

Prerequisite: None. A study of horticultural crops and the horticulture industry focusing on plant propagation, plant care, growing techniques, and plant sales.

**AGRI 131-Introduction to Agribusiness Systems****Credit Hours: 3**

Prerequisite: None. Introduction to the agribusiness system career pathway. Topics include an overview of the agribusiness industry, economic principles in agribusiness and retail agribusiness sales.

**AGRI 132-Agriculture Economics****Credit Hours: 3**

Prerequisite: None. A study focusing on the factors affecting the income and expenditures of agricultural business and the methods and systems of buying and selling products.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR ECON 102A - Introduction to Microeconomics (Agricultural Economics)

For additional information: <https://dhe.mo.gov/core42.php>

**AGRI 133-Agricultural and Food Policy****Credit Hours: 3**

Prerequisite: None. An introduction to theory and practice in agricultural and food policy creation and implementation. Study includes farm, food, environmental, and economic policies that impact agribusiness.

**AGRI 134-Marketing Farm Commodities****Credit Hours: 3**

Prerequisite: None. A study in theory and practices in marketing agricultural commodities. Course focuses on the use of forward contracts, futures contracts, and options on futures and their use in mitigating price risk in agricultural markets.

**AGRI 136-Ag Credit and Finance****Credit Hours: 3**

Prerequisite: None. A study of general principles associated with the use of capital. Topics include financial documents, cash flows, time value of money, asset valuation, and agricultural credit.

**AGRI 138-Ag Business Management****Credit Hours: 3**

Prerequisite: None. Study includes management functions and economics of agriculture organizations and operations including input-output analysis, efficient allocations of resources, enterprise combinations, and budget analysis.

**AGRI 141-Livestock Breeding****Credit Hours: 3**

Prerequisite: None. A study of genetic factors contributing to animal value, selection criteria for production operations, and mating systems.

**AGRI 143-Livestock Reproduction****Credit Hours: 3**

Prerequisite: None. A study of basic reproductive anatomy and physiology of farm animal species followed by reproduction management options and contemporary reproductive technologies.

**AGRI 149-Chemistry of Soil Additives****Credit Hours: 3**

Prerequisite: AGRI 119. A study of basic principles of soil amendments and fertilization. Topics include plant nutrition, soil nutrient management, fertilizer analysis, and the application of lime, and liquid and granular fertilizers.

**AGRI 151-Landscape Design and Maintenance****Credit Hours: 3**

Prerequisite: None. A comprehensive study of landscaping. Study incorporates computer aided drafting (CAD) software to

design functional and aesthetically pleasing landscapes and landscape maintenance programs.

**AGRI 154-Greenhouse Management with Lab****Credit Hours: 4**

Prerequisite: None. Course presents greenhouse design, environmental control, production equipment, and management practices. Instruction includes principles and practices relative to plant nutrition, pest control, product handling, and marketing greenhouse production. (3 lecture, 1 lab)

**AGRI 168-Commercial Applicator Licensing****Credit Hours: 2**

Prerequisite: MATH 061 or equivalent placement score. A preparation for and completion of exams necessary to obtain a Missouri Commercial Applicator's License.

**AGRI 174-Crop and Insect Scouting****Credit Hours: 2**

Prerequisite: None. A study in weed identification, insect and disease infestations, crop damage symptoms, economic threshold levels, and recommended control alternatives.

**AGRI 175-Occupational Internship****Credit Hours: 2 to 8**

Prerequisite: Consent of program coordinator. Internship is supervised by agricultural staff and designed to assist the student in developing good work habits. Includes training in specific areas unique to the employer and provides basis for career decision for the student.

**AGRI 179-Innovative Horticulture****Credit Hours: 1**

Prerequisite: Consent of instructor. Designed to provide the student an opportunity to apply horticultural knowledge, problem-solving skills and creativity to develop and/or construct a capstone project. Student must have completed at least 55 credit hours in the AAS in Agriculture with emphasis in Horticulture program.

**AGRI 180-Problems in Agriculture****Credit Hours: 1 to 3**

Prerequisite: Consent of program coordinator. Independent study of a special problem in agriculture under the supervision of an agriculture instructor.

---

**ART**


---

**ART 101-Art Appreciation****Credit Hours: 3**

Prerequisite: None. Study of art history from the last of the 19th century through the present. Consists of formal lectures, films, slides, gallery and studio visits, assigned

readings, as well as hands-on experiences with art materials. Includes the evolution of art by focusing on the major art movements of the past 100 years. Encourages appreciation of visual art through the study of content, design, technique, and criticism of art. Students learn how art changed during this period and how it reflects the dynamics of 20th century civilization.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR ARTS 100 - Art Appreciation

For additional information: <https://dhe.mo.gov/core42.php>

### **ART 103-Design I**

#### **Credit Hours: 3**

Prerequisite: None. Entry-level art course required of all art majors. Foundation course introducing the study of the visual elements and principles of design. Emphasis is placed on the student's ability to recognize and manipulate these elements and principles.

### **ART 104-Design II**

#### **Credit Hours: 3**

Prerequisite: ART 103. The second of a two-course sequence required for all art majors. Compositional principles of art are explored through a variety of two- and three-dimensional materials. Emphasis is placed on the student solving specific problems creatively with color.

### **ART 106-Watercolor I**

#### **Credit Hours: 3**

Prerequisite: None. An entry-level course for both art majors and anyone interested in beginning watercolor. This foundation course introduces materials and techniques of aqua media painting, various preparations of paper and use of brushes and other tools. Control of transparent color will be learned through experimentation. Students will be encouraged to experiment with a variety of subject matter and techniques in search for personal identity.

### **ART 107-Watercolor II**

#### **Credit Hours: 3**

Prerequisite: ART 106. Continuation of the search for a personal expressive identity in watercolor. The students will work from sources they have a personal relationship with, such as persons they know, or familiar places and things. In addition to observable sources, the students will be encouraged to respond to the materials used in a creative manner discovering that the process of painting itself suggests images and ideas. Students will advance their personal expressive identity through making decisions and finding solutions while exploring representation, abstraction and non-objective painting.

### **ART 108-Watercolor III**

#### **Credit Hours: 3**

Prerequisite: ART 107. Includes advanced problems and techniques of aqua media painting.

### **ART 110-Printmaking**

#### **Credit Hours: 3**

Prerequisite: None. Course includes exploring and developing personal artistic identity in traditional and contemporary printing methods. Wood block, etching and monoprint methods will be explored.

### **ART 112-Drawing I**

#### **Credit Hours: 3**

Prerequisite: None. Entry-level art course required for all art majors. Foundation course placing emphasis on drawing as an expressive medium. Content is based on a series of perceptual and conceptual assignments designed to force students to reach inside themselves to define, through their work, a sense of artistic self.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 105D - Studio Art -Introduction to Drawing

For additional information: <https://dhe.mo.gov/core42.php>

### **ART 113-Drawing II**

#### **Credit Hours: 3**

Prerequisite: ART 112. The second of a two-course sequence required for all art majors. Foundation course placing emphasis on drawing as an expressive medium. Students search for expression of their own personal artistic identity through a series of process-oriented assignments using various colored media.

### **ART 114-Figure Drawing I**

#### **Credit Hours: 3**

Prerequisite: None. The human figure is analyzed in terms of structure, proportion and form. Emphasis is placed on representative as well as conceptual approaches.

### **ART 115-Figure Drawing II**

#### **Credit Hours: 3**

Prerequisite: ART 114. Continuation of the study of refining the student's technical skills in drawing. Emphasis is placed on technical skills rendering the figure, as well as conceptual approaches and development.

### **ART 116-Painting I**

#### **Credit Hours: 3**

Prerequisite: None. Entry-level art course for both art majors and anyone interested in beginning painting. Foundation course that concentrates on painting as an expressive medium and is designed to allow students to explore a variety

of subject matter and experiment with painting techniques in a search for personal artistic identity.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 105P – Studio Art-Painting

For additional information: <https://dhe.mo.gov/core42.php>

### ART 117-Painting II

**Credit Hours: 3**

Prerequisite: ART 116. Continuation of the search for a personal expressive identity. Students will work from sources they have a personal relationship with, such as persons they know, or familiar places and things. In addition to observable sources, students will be encouraged to respond to the materials used in a creative manner discovering that the process of painting itself suggests images and ideas. Students will advance their personal expressive identity through making decisions and finding solutions while exploring representation, abstraction and non-objective painting.

### ART 118-Painting III

**Credit Hours: 3**

Prerequisite: ART 117 and consent of instructor. Students may concentrate in watercolor, oil, acrylics, or mixed media. Offered by appointment only.

### ART 120-Modern Art History

**Credit Hours: 3**

Prerequisite: None. Emphasis is placed on the creative nature of man and how creativity enriches society and the social, economic and political conditions that influenced and constructed modern art. Study begins with the development of impressionism and moves through the major art movements of the late 19th and 20th centuries.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR ARTS 102 - Art History II

For additional information: <https://dhe.mo.gov/core42.php>

### ART 122-Sculpture I

**Credit Hours: 3**

Prerequisite: None. Develops insight into the principles of sculptural organization and stresses individual development of three-dimensional forms.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 105S – Studio Art-Sculpture

For additional information: <https://dhe.mo.gov/core42.php>

### ART 123-Sculpture II

**Credit Hours: 3**

Prerequisite: ART 122. Continuation of ART 122 with the student developing a body of work that is interrelated. Includes exploration of a variety of materials including: metal, wood and

found objects, with an emphasis placed on individual exploration and development.

### ART 126-Ceramics I

**Credit Hours: 3**

Prerequisite: None. Introduces clay construction techniques, basic ways of glazing and firing systems. Emphasis is placed on students acquiring technical proficiency in a variety of constructive methods and glazing techniques.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 105C- Studio Art-Ceramics

For additional information: <https://dhe.mo.gov/core42.php>

### ART 127-Ceramics II

**Credit Hours: 3**

Prerequisite: ART 126. Continuation of ART 126 with students becoming more proficient in construction techniques that are appropriate for their ideas. Emphasis is placed on students developing a body of work that is interrelated.

### ART 130-Fiber Arts I

**Credit Hours: 3**

Prerequisite: None. Explores a variety of traditional and nontraditional mediums and techniques in the fiber arts. Emphasis is placed upon process and investigation.

### ART 131-Fiber Arts II

**Credit Hours: 3**

Prerequisite: ART 130. Continuation of the study and exploration of traditional and nontraditional mediums and techniques in the fiber arts. Emphasis is placed upon process and further investigation of personal expression as well as development of craftsmanship through the fiber media.

### ART 140-Art History Survey I

**Credit Hours: 3**

Prerequisite: None. Introductory survey of Western architecture, sculpture, painting, decorative arts, and visual culture from prehistory to Medieval Europe. This course focuses on the social, cultural, historical, and religious contexts of the art produced during this time frame.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR ARTS 101 - Art History I

For additional information: <https://dhe.mo.gov/core42.php>

### ART 142-Art History Survey II

**Credit Hours: 3**

Prerequisite: None. Introductory survey of Western architecture, sculpture, painting, decorative arts, and visual culture from the Renaissance to today. This course focuses on the social, cultural, historical, and religious contexts of the art produced during this time frame.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR ARTS 102 - Art History II

For additional information: <https://dhe.mo.gov/core42.php>

### **ART 160-Introduction to Graphic Design**

**Credit Hours: 3**

Prerequisite: None. This is an introductory course in graphic arts and visual communication. This course familiarizes students with traditional printmaking techniques as well as digital imaging and production. This is a hands-on course that students engage basic two-dimensional design processes and techniques through serigraphy, engraving, typography, and computer illustration/ imaging.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 105GA – Studio Art-Graphic Arts

For additional information: <https://dhe.mo.gov/core42.php>

### **ART 162-Digital Photography**

**Credit Hours: 3**

Prerequisite: None. This is an introductory course in basic photographic techniques and processes. Students will learn the foundations of digital imaging editing as well as core photographic concepts such as lighting, exposure, composition, and presentation.

### **ART 165-Web Authoring and Graphic Tools**

**Credit Hours: 3**

Prerequisite: ART 160 or ART 162 with a grade of C or higher. This is a hands-on course centered on teaching students the foundations of web design. Students will learn to create professional and dynamic websites that visually engage today's growing digital community. Students will complete this course with a uniquely individualized digital portfolio that illustrates their own professional discipline to potential employers.

### **ART 180-Problems in Art**

**Credit Hours: 3**

Prerequisite: Consent of instructor. Must complete courses I and II of desired subject area. Independent study of a special problem in art under the supervision of an art instructor. Students will concentrate on a particular medium, subject or source. May be repeated in a different problem area.

## **AUTISM**

### **ATSM 105-Autism Spectrum Disorders**

**Credit Hours: 3**

Prerequisite: None. Examination of the neurological and behavioral characteristics of children with autism spectrum disorders (ASD). Course includes an overview of

characteristics and learning traits, classification systems, assessment strategies, issues, approaches, and interventions related to individuals with ASD. Special emphasis will be given to selecting evidence-based practices and enhancing collaboration among individuals with ASD, their families and supporting professionals.

### **ATSM 110-Communication and Social Competence**

**Credit Hours: 3**

Prerequisite: None. Overview of language development and communication strategies, issues, pragmatics, communication systems, augmentative and alternative communication systems (AAC), social deficits in autism, and approaches for teaching social skills. Includes an emphasis on the development of appropriate communication skills.

## **AUTOMOTIVE**

### **AUTO 102-Introduction to Automotive Industry**

**Credit Hours: 3**

Prerequisite: None. Students will learn the application of math in automotive, i.e., equations for Ohm's Law, bore, stroke and other component measurements, and in specification/out of specification measurements. The application of science in automotive with emphasis in safety of chemical handling, physics associated with inertia, force, and friction; the effect of displacement to power and electro-mechanical hydraulics. Students will also learn proper tool nomenclature, identification and usage. (1.5 lecture, 1.5 lab)

### **AUTO 103-Manual Transmissions, Drivelines and Axles**

**Credit Hours: 5**

Prerequisite: AUTO 104 with a grade of C or higher. Corequisite: AUTO 104. Instruction for the development of skills and knowledge required to diagnose and repair drivelines. This includes clutches, transmissions, drive shafts, differentials, axles, wheels and bearings, transaxles, and four-wheel drive hub assemblies. (2 lecture, 3 lab)

### **AUTO 104-Introduction to Automotive Technology**

**Credit Hours: 4**

Prerequisite: None. Many fundamental principles necessary for laying a foundation in the automotive program are covered, including shop safety; hand tool usage; basic repair skills and techniques; measuring tool applications; and an overview of many of the automotive systems. Real-world fixes and tech tips are included throughout to help illustrate how real problems are solved. Each new topic covers the preventive maintenance requirements for various components and automotive systems, including the purpose, function and operation, as well as how to service each system. (1 lecture, 3 lab)

**AUTO 105-Automatic Transmissions****Credit Hours: 5**

Prerequisite: AUTO 104 with a grade of C or higher.  
 Corequisite: AUTO 104. Designed to develop skills and knowledge required to diagnose and repair automatic transmissions and automatic transaxles and torque converters. Topics include the study of automatic transmission design and theory of operation, along with in and out of vehicle repair and servicing. (2 lecture, 3 lab)

**AUTO 106-Power Train Management****Credit Hours: 5**

Prerequisites: AUTO 104 and AUTO 116 with grades of C or higher. Corequisites: AUTO 104 and AUTO 116. Automotive systems are studied in depth beginning with fundamental principles and quickly advancing to more sophisticated theories and applications. Classroom studies in fuel and emissions systems, computerized engine controls, various input and output devices, ignition, intake and exhaust systems with a lab will enhance the learning experience with hands-on demonstrations and tasks. (2 lecture, 3 lab)

**AUTO 108-Advanced Engine Performance****Credit Hours: 6**

Prerequisites: AUTO 104, AUTO 106, AUTO 116, AUTO 118, and AUTO 120 with grades of C or higher. Corequisite: AUTO 120. Advanced study of automotive diagnostic equipment troubleshooting techniques related to modern vehicle powertrains. Study includes electronic engine controls, including fuel injection, feedback systems, computer-controlled engine management systems, scan tool, digital multimeter, lab scope usage, and diagnostic trouble code retrieval and troubleshooting pinpoint test usage. (1 lecture, 5 lab)

**AUTO 113-Steering, Suspension and Wheels****Credit Hours: 5**

Prerequisite: AUTO 104 with a grade of C or higher.  
 Corequisite: AUTO 104. Study develops skills and knowledge required to diagnose and repair steering and suspension systems, including tire and wheel service, wheel balance, four-wheel alignment, springs and torsion bar suspension, power steering pump, steering gears, rack and pinion steering and TPMS systems. (2.5 lecture, 2.5 lab)

**AUTO 115-Automotive Brakes****Credit Hours: 5**

Prerequisite: AUTO 104 with a grade of C or higher.  
 Corequisite: AUTO 104. Theory of operation, diagnostics and troubleshooting, repairing and servicing of brakes will be taught as well as modern anti-lock brakes and traction control systems. The diagnosis and repair of both drum and disc systems will be explored, including the fabrication of brake lines as a student project. (2.5 lecture, 2.5 lab)

**AUTO 116-Automotive Electrical System Fundamentals****Credit Hours: 3**

Prerequisite: AUTO 104 with a grade of C or higher.  
 Corequisite: AUTO 104. Students will develop skills and knowledge required to understand fundamental principles of electricity and how these principles apply to automotive systems. Study of wiring diagrams, electrical symbols and how to utilize appropriate equipment such as meters and scopes in the troubleshooting process will be included. Students will demonstrate knowledge of automotive electricity by building a graded project board to end the class. (2 lecture, 1 lab)

**AUTO 118-Automotive Electrical Systems****Credit Hours: 3**

Prerequisites: AUTO 104 and AUTO 116 with grades of C or higher. Course provides an in-depth focus and discussion on the understanding and application of automotive electrical and electronic and computer systems as related to modern vehicle systems. (2 lecture, 1 lab)

**AUTO 119-Automotive Heating and Air Conditioning****Credit Hours: 5**

Prerequisites: AUTO 104, AUTO 116, and AUTO 118 with grades of C or higher. Students will develop skills and knowledge required to diagnose and repair problems related to automotive heating and air conditioning systems. Both automatic climate control and manual systems will be studied along with the engine coolant system. (1.5 lecture, 3.5 lab)

**AUTO 120-Advanced Electrical Systems Diagnosis****Credit Hours: 4**

Prerequisites: AUTO 104, AUTO 116 and AUTO 118 with grades of C or higher. This course is lab only to allow students to diagnosis faults previously set in training vehicles and faults in real world customer vehicles using technological advanced industry standard diagnostic equipment and service information. (4 lab)

**AUTO 121-Automotive Engines****Credit Hours: 6**

Prerequisite: AUTO 104 with a grade of C or higher.  
 Corequisite: AUTO 104. Students will develop skills and knowledge required to understand the fundamental principles, servicing, troubleshooting, and repair of modern automotive engines. Study includes diagnosis and troubleshooting; removal and disassembly; cleaning, inspection and repairs; reassembly and installation of engine assemblies. Students work in pairs on project vehicles so that skills learned in the classroom can be exercised in a live environment. (1 lecture, 5 lab)

**AUTO 130-Introduction to Light Duty Diesel****Credit Hours: 3**

Prerequisite: None. To give students a better understanding of how the automotive diesel engine functions, list and recognize the different components of a diesel engine compared to gas engines, discuss the differences in diagnostic procedures for the automotive diesel engine and its complex emission system. (2.1 lecture, .9 lab)

**AUTO 180-Automotive Special Projects****Credit Hours: 1 to 6**

Prerequisite: None. Students will be involved in automotive lab operations, including preventive maintenance and repair on equipment, tool inventory and management, ordering parts and supplies, assisting in lab set-up, recording customer repair orders, inputting data, and conducting industry-specific research. There will be opportunities to work on unique automotive projects as well. (3 lab)

---

**BEHAVIORAL HEALTH SUPPORT**


---

**BHS 200-Introduction to Behavioral Health****Credit Hours: 2**

Prerequisites: None. This course introduces students to the behavioral healthcare profession and the programs and services offered by Community Behavioral Health Centers. Emphasis will be placed on the skills and ethical considerations needed to work with a diverse client population. Topics will include the most prevalent mental health diagnosis, the recovery/resiliency model, family systems, as well as additional philosophies used in the behavioral health support professional role. In addition, students will discuss relevant ethical and legal principles.

**BHS 210-Law and Ethics****Credit Hours: 3**

Prerequisites: BHS 200 with a grade of B or higher and acceptance to the Behavioral Health Support program. This course examines the legal and ethical issues related to services for clients provided by behavioral health professionals and the ethical standards of the field. Topics include laws and policies for guardianship, custody, conservatorship, client rights, abuse, fraud, detention etc.

**BHS 220-Systems of Care****Credit Hours: 3**

Prerequisites: BHS 200 with a grade of B or higher and acceptance to the Behavioral Health Support program. This course provides a holistic approach to care that promote active participation by the client to share in decision-making and self-advocacy. Students practice motivational interviewing and skill-based methods for recovery/resiliency. Students will develop wellness plans and learn to identify support networks.

**BHS 230-Substance Abuse Intervention****Credit Hours: 3**

Prerequisites: BHS 200 with a grade of B or higher and acceptance to the Behavioral Health Support program. This course will provide a study of chemical use and dependency including the cycle of addiction and recovery. Students will study comprehensive substance use treatment and rehabilitation models.

**BHS 240-Client Encounters I****Credit Hours: 3**

Prerequisites: BHS 200 with a grade of B or higher and acceptance to the Behavioral Health Support program. This course introduces the techniques for assuring consistency, accountability, and effectiveness for intake operations. Topics include goals for intake interviews and assessment along with the various tools utilized in assessing, determining risk, and identifying treatment needs. Students will practice skill development by conducting interviews, learn how to build client rapport, and how to elicit required information. In addition, students will utilize proper clinical tools for treatment plan development.

**BHS 250-Chronic Health Support****Credit Hours: 3**

Prerequisites: BHS 200 with a grade of B or higher and acceptance to the Behavioral Health Support program. This course presents the pathophysiology and treatment of chronic diseases including diabetes, hypertension, COPD, and other common disease. Unique patient groups in relation to specific disability, disease, and/or restrictive issues are identified as well as typical medication and treatment protocols.

**BHS 260-Family and Youth Strategies****Credit Hours: 3**

Prerequisites: BHS 200 with a grade of B or higher and acceptance to the Behavioral Health Support program. This course will examine family roles and dynamics and explore dysfunction within the family unit. Students will discuss strategies and interventions for working with family and youth along with preventative practices. During the course, students will have the opportunity to explore the different roles of behavioral support professionals in the community.

**BHS 270-Client Encounters II****Credit Hours: 3**

Prerequisites: BHS 200 and BHS 240 with grades of B or higher and acceptance to the Behavioral Health Support program. This course will teach students skills for effective collaboration with other professionals, conflict resolution, and crisis intervention and de-escalation techniques. Students will practice active listening and effective communication skills and develop the skills needed to adjust working within various

client populations. Students will consider complicated client situations and problem resolutions.

### **BHS 280-Evidence Based Treatment**

#### **Credit Hours: 3**

Prerequisites: BHS 200 with a grade of B or higher and acceptance to the Behavioral Health Support program. Students will be introduced to treatment modalities including cognitive behavioral therapy, parent management training, and parent-child interaction therapy along with other evidence-based practices. They will practice skills used in effective case management.

### **BHS 290-Field Practicum I**

#### **Credit Hours: 4**

Prerequisites: BHS 200 with a grade of B or higher and acceptance to the Behavioral Health Support program. This course is a field placement designed to provide students with observation and practical experience in a behavioral health community center or similar service agency or provider. Students will spend a minimum of 160 hours throughout the course in an agency placement. The course will compare and contrast how various populations are served and how agencies collaborate and integrate services to meet client needs. Students will have the opportunity to practice completing intake, assessments and treatment planning. Passing a background check and drug test is required for this course.

### **BHS 295-Field Practicum II**

#### **Credit Hours: 4**

Prerequisite: BHS 290 with a grade of B or higher. This course provides students with practical experience in Community Behavioral Health Centers and other community service agencies. Students will spend a minimum of 160 hours throughout the course in an agency placement. During that time, students will gain experience working with diverse client populations facing a variety of behavioral issues. Students will conduct functional behavioral interventions plans and make informed decisions when working with clients having behavioral health issues. They will gain an understanding of how agencies coordinate and integrate treatment and how a comprehensive individualized treatment plan is developed.

## **BIOLOGICAL SCIENCE**

### **BIO 100-General Biology**

#### **Credit Hours: 3**

Prerequisite: None. Introduction of biology that develops understanding of basic, unifying concepts in science and biology. Topics include the scientific method, biochemistry, cell biology, metabolism, genetics, evolution, ecology, and human ecology.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR BIOL 100 - Essentials in Biology

For additional information: <https://dhe.mo.gov/core42.php>

### **BIO 103-Human Biology**

#### **Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Introduction to the structure and function of human body systems and human influence on the biosphere. Topics include biochemistry, body organization, homeostasis, structural maintenance of cells, tissues and organ systems of the human body, evolution, ecology, and human influence on the biosphere.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LIFS 100 - Essentials in Human Biology

For additional information: <https://dhe.mo.gov/core42.php>

### **BIO 105-Wildlife Conservation**

#### **Credit Hours: 3**

Prerequisite: ENGL 101 with a grade of C or higher. Integrated study focused on historical, cultural and scientific aspects of wildlife conservation. Topics include ecology, diversity, extinctions and extinction processes, ecosystem degradation and loss, overexploitation, invasive exotics, zoos and gardens, public attitudes and perceptions including social factors, economics and ethics, human impact, and involves modern and historic conservation issues.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR BIOL 100 - Essentials in Biology

For additional information: <https://dhe.mo.gov/core42.php>

### **BIO 112-General Biology with Lab**

#### **Credit Hours: 5**

Prerequisite: None. Introduction of biology that develops an understanding of basic, unifying concepts in science and biology through an investigative laboratory environment. Topics include the scientific method, biochemistry, cell biology, metabolism, genetics, evolution, ecology, and human ecology. (4 lecture, 1 lab)



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR BIOL 100L - Essentials in Biology with Lab

For additional information: <https://dhe.mo.gov/core42.php>

### **BIO 121-Microbiology**

#### **Credit Hours: 4**

Prerequisite: BIO 207 or BIO 208 or CHEM 101. Course presents basic principles of infection, immunity and the study of microorganisms; studying life at the microscopic level

(including eukaryotic cells, protozoa and fungi, prokaryotic cells, bacteria, mycoplasma, and rickettsia; and viruses, prions and infectious agents). Lecture and laboratory sessions consider techniques in conventional culture methods, examination and identification of microorganisms. Topics include microbiological history, environmental constraints, taxonomy, nutritional requirements, biochemical activity, genetic make-up, pathogenicity, virulence, immunology, public health, and medical significance of microbiology. Laboratories will cover aseptic techniques, streak plates and culturing, growth and binary fission, microscopy, biochemical testing, identification, rapid testing, application of critical analysis, and presentations. Designed for Nursing and Health Science majors and other majors who require a foundation in the study of microbiology. (3 lecture, 1 lab)

### **BIO 125-Biology I with Lab**

#### **Credit Hours: 5**

Prerequisites: ENGL 101 with a grade of C or higher and MATH 110 or MATH 112 with a grade of C or higher or equivalent placement score. First semester of a two-semester introduction to biological sciences intended for biology and related majors. Topics include philosophical, historical and social context of biology; scientific method and investigative techniques; biological structure and function at molecular and cellular levels; genetics; and plant form, function and diversity. (3 lecture, 2 lab)



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR BIOL 150L - Biology with Lab

For additional information: <https://dhe.mo.gov/core42.php>

### **BIO 126-Biology II with Lab**

#### **Credit Hours: 5**

Prerequisites: BIO 112 or BIO 125 and ENGL 101 with grades of C or higher and MATH 110 or MATH 112 with a grade of C or higher or equivalent placement score. Second semester of a two-semester introduction to biological sciences intended for biology and related majors. Topics include philosophical, historical and social context of biology; animal morphology, embryology and taxonomy and systematics; life histories; ecology; and evolution. (3 lecture, 2 lab)

### **BIO 130-Topics in Biology**

#### **Credit Hours: 1 to 3**

Prerequisite: None. Study of a major topic in biology and science. Content and topics change and may include ecology, bio-history, evolution, science in science fiction, or history of science. Specific subjects will be announced prior to course offerings.

### **BIO 207-Human Anatomy with Lab**

#### **Credit Hours: 4**

Prerequisites: ENGL 070 with a grade of C or higher or equivalent placement scores and a two-semester high school biology course with a grade of C or higher, or P, earned each semester or a college biology course with a grade of C or higher (BIO 103 is recommended but not required). Study of gross and microscopic anatomy of the human organs, tissues and systems. (2 lecture, 2 lab)



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LIFS 100L - Essentials in Human Biology with Lab

For additional information: <https://dhe.mo.gov/core42.php>

### **BIO 208-Human Physiology with Lab**

#### **Credit Hours: 4**

Prerequisite: BIO 207 with a grade of C or higher, or LPN license, or biology department and program approval if currently enrolled in a PN program and have completed anatomy or anatomy and physiology with a grade of B or higher. Course presents the basic biological functions of the human body from cell to tissue, tissue to organ and organ to organ system with attention to the interrelationships at these levels. (3 lecture, 1 lab)



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LIFS 150L - Human Biology with Lab

For additional information: <https://dhe.mo.gov/core42.php>

### **BIO 210-Principles of Genetics with Lab**

#### **Credit Hours: 4**

Prerequisites: BIO 112 or BIO 125 and ENGL 101 with grades of C or higher and MATH 110 or MATH 112 with a grade of C or higher or equivalent placement score. A comprehensive introduction to fundamental principles of inheritance intended for biology and related majors. Topics include heredity concepts from classical and modern genetics; the physical, biochemical, chromosomal, and cytological basis of inheritance patterns; selection and breeding; and evolution. (3 lecture, 1 lab)

### **BIO 280-Problems in Biology**

#### **Credit Hours: 1 to 3**

Prerequisite: Consent of instructor. Independent course presenting the study of a special problem in biology under the supervision of a science instructor.

## BUSINESS ADMINISTRATION

### **BADM 101-Introduction to Business**

#### **Credit Hours: 3**

Prerequisite: ENGL 060 with a grade of C or higher or equivalent placement scores. Course is an introduction to the principles, practices and problems encountered in the general business environment. Topics include options for organizing a business and the basic functions of accounting, marketing, management, and finance.

### **BADM 103-Legal Environment of Business**

#### **Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Investigation of various legal issues encountered in the business environment. Emphasis is placed on developing an understanding of the court system. Includes specific legal topics such as contracts, torts, employment law, product liability, and consumer protection.

### **BADM 107-Personal Finance**

#### **Credit Hours: 3**

Prerequisites: ENGL 070 and MATH 061 with grades of C or higher or equivalent placement scores. Introduction to personal financial management. Examines the techniques necessary to analyze and make choices concerning major purchases, tax planning, insurance, borrowing, investing, and other personal finance issues.

## BUSINESS MANAGEMENT

### **BSMT 106-Principles of Marketing**

#### **Credit Hours: 3**

Prerequisite: Equivalent reading placement score into ENGL 070. Introduction to the key concepts and issues underlying the modern practice of marketing that impacts today's managers. The marketing process is analyzed through the four main decision areas of products and services, distribution, promotion, and pricing.

### **BSMT 108-Principles of Management**

#### **Credit Hours: 3**

Prerequisite: Equivalent reading placement score into ENGL 070. Introduction to role of management and supervision. Examines the concepts and the practical application of fundamental supervisory skills such as planning, problem solving, motivation, staffing, leadership, training, managing conflict, and providing effective performance reviews.

### **BSMT 110-Salesmanship**

#### **Credit Hours: 3**

Prerequisite: Equivalent reading placement score into ENGL 070. Introduction to the study of selling as a major function of the marketing mix. Topics include developing customer

relationships, social selling, presentation strategies, solutions development, and negotiating skills. Each student will conduct recorded and live role play presentations and an automated role play simulation.

### **BSMT 119-Customer Service Management**

#### **Credit Hours: 3**

Prerequisite: None. Introduction to the customer service function of business. Students will acquire and apply communication skills needed to be successful in today's competitive customer-oriented work environment. Topics include communication, leadership, relationship building, customer retention, problem solving, and measurement of satisfaction.

### **BSMT 122-Digital and Social Media Marketing**

#### **Credit Hours: 3**

Prerequisite: Equivalent reading placement score into ENGL 070. Introduction to the theoretical understanding of the Internet marketplace necessary to adapt to its changes. Topics include web design and analytics, search engine optimization, paid search marketing, display advertising, email marketing, social media marketing, and online reputation management. Each student will work one-on-one with a business owner in the community to review and suggest improvements to the business' digital marketing strategy.

### **BSMT 125-Human Relations**

#### **Credit Hours: 3**

Prerequisite: Equivalent reading placement score into ENGL 070. Introduction to the concept of business organizations as a social system. Topics consist of motivation, perception, communication, behavior theories, and group dynamics. Utilizes activities in the classroom to demonstrate major human relations concepts.

### **BSMT 130-Business Strategies**

#### **Credit Hours: 3**

Prerequisite: Consent of program coordinator. Capstone course that provides business management students with an understanding of the total enterprise system. Students will draw upon prior coursework to solve business problems.

### **BSMT 175-Business Management Internship**

#### **Credit Hours: 3 to 6**

Prerequisite: Consent of program coordinator. On-the-job experience tailored to enforce topics taught within the degree. Student supervision will be the cooperative arrangement between the program coordinator and employer. Progress reports and a final report documenting work experience will be submitted.

**BSMT 185-Project Management****Credit Hours: 3**

Prerequisite: Equivalent reading placement score into ENGL 070. Course will help students understand why organizations have developed a formal project management process to gain a competitive advantage. It covers concepts and skills that are used by managers to propose, plan, secure resources, budget, and lead project teams to successful completion of their projects. The text is structured to meet the needs of those wishing to prepare for the PMP or CAPM certification exams. Same as CIS 185.

**CERTIFIED PRODUCTION TECHNICIAN****CPT 102-Safety****Credit Hours: 3**

Prerequisite: None. Safety training to prepare students for entry-level employment in a production position with the ability to work in a safe and productive manufacturing workplace. Skill areas include: perform safety and environmental inspections; perform emergency drills and participate in emergency teams; identify unsafe conditions and take corrective action; provide safety orientation for all employees; train personnel to use equipment safely; suggest processes and procedures that support safety of work environment; fulfill safety and health requirements for maintenance, installation, and repair; monitor safe equipment and operator performance; and utilize effective, safety-enhancing workplace practices.

**CPT 104-Quality Practices and Measurement****Credit Hours: 3**

Prerequisite: None. Quality skills for the entry-level production employee to participate in periodic internal quality audit activities. Skill areas include check calibration of gages and other data collection equipment; suggest continuous improvements; inspect materials and product/process at all stages to ensure they meet specifications; document the results of quality tests; communicate quality problems; take corrective actions to restore or maintain quality; record process outcomes and trends; identify fundamentals of blueprint reading; and use common measurement systems and precision measurement tools.

**CPT 106-Manufacturing Processes and Production****Credit Hours: 3**

Prerequisite: None. Entry-level production skills include identify customer needs; determine resources available for the production process; set up equipment for the production process; set team production goals; make job assignments; coordinate work flow with team members and other work groups; communicate production and material requirements and product specifications; perform and monitor the process to make the product; document product and process compliance

with customer requirements; and prepare final product for shipping or distribution.

**CPT 108-Maintenance Awareness****Credit Hours: 3**

Prerequisite: None. Prepare the entry-level production worker in the importance and operations of maintenance. Areas of study include: perform preventive maintenance and routine repair; monitor indicators to ensure correct operations; perform all housekeeping to maintain production schedule; recognize potential maintenance issues with basic production systems, including knowledge of when to inform maintenance personnel about problems with electrical, pneumatic, hydraulic, and machine automation systems; lubrication processes; bearings and couplings; and belts and chain drives.

**CHEMISTRY****CHEM 101-Introduction to Chemistry with Lab****Credit Hours: 5**

Prerequisite: ENGL 101 with a grade of C or higher. One semester course for non-science majors designed to acquaint the student with scientific reasoning. A course that introduces the principles of the nature of matter/atom, reactions, reaction pathways, solutions including pH, measurements, instrumentation, nuclear chemistry organic/biological molecules and their applications to current issues. (3 lecture, 2 lab)



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR CHEM 100L – Essentials in Chemistry with Lab

For additional information: <https://dhe.mo.gov/core42.php>

**CHEM 123-General Chemistry I with Lab****Credit Hours: 5**

Prerequisites: ENGL 070 and MATH 114 with grades of C or higher or equivalent placement scores. Intended for the science major and science-oriented fields, course examines the structure of the atom, periodic classification, molecular structures, chemical reactions, aqueous solutions, and chemical energetics. (3 lecture, 2 lab)



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR CHEM 150L - Chemistry I with Lab

For additional information: <https://dhe.mo.gov/core42.php>

**CHEM 124-General Chemistry II with Lab****Credit Hours: 5**

Prerequisite: CHEM 123 with a grade of C or higher. Continuation of CHEM 123 emphasizing chemical energetics, entropy, equilibria, reduction oxidation systems, and reaction pathways in organic/biochemistry. (3 lecture, 2 lab)

**CHEM 180-Problems in Chemistry****Credit Hours: 1 to 3**

Prerequisite: Consent of instructor. Independent study and/or lab investigation of a special problem in chemistry. Instruction varies between 1 to 3 lecture hours and 1 to 3 lab hours.

**CHEM 221-Organic Chemistry I with Lab****Credit Hours: 5**

Prerequisite: CHEM 123 with a grade of C or higher. The first of a two-semester sequence in organic chemistry, course studies the structure, bonding and nomenclature of organic compounds (alkanes, alkenes, alkynes, and conjugated systems); substitution and elimination reaction mechanisms; and identification of organic compounds via UV, VIS, IR, GC, and NMR spectroscopy. (3 lecture, 2 lab)

**CHEM 222-Organic Chemistry II with Lab****Credit Hours: 5**

Prerequisite: CHEM 221 with a grade of C or higher. Continuation of CHEM 221 including the study of the reactions associated with aromatic compounds, carbonyl compounds and polyfunctional natural products. (3 lecture, 2 lab)

**CHEM 265-Elementary Organic and Biochemistry with Lab****Credit Hours: 5**

Prerequisite: Any CHEM course with a grade of C or higher. Introduction to organic chemistry and the fundamental concepts of biochemistry; topics include functional groups, nomenclature, reactivity, organic reaction mechanisms. Course explores molecules associated with life functions, emphasizing physiological, nutritional, and comparative aspects. Required for some nonchemistry degrees; generally does not transfer for chemistry majors. (3 lecture, 2 lab)

---

**COMMUNICATIONS**


---

**COMM 101-Public Speaking****Credit Hours: 3**

Prerequisite: None. Study and practice of basic techniques involved in generating, designing, delivering, and evaluating ideas for speech situations facing adults of our society.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR COMM 110 - Fundamentals of Public Speaking

For additional information: <https://dhe.mo.gov/core42.php>

**COMM 103-Small Group Communication****Credit Hours: 3**

Prerequisite: None. Presents the communication process as it relates to small group behavior, including the study of principles, methods and forms of discussion used in small groups.

**COMM 105-Interpersonal Communication****Credit Hours: 3**

Prerequisite: None. Presents theories, principles and techniques of communication as they apply to one-to-one, small groups and conference interaction.

**COMM 110-Introduction to Mass Communication****Credit Hours: 3**

Prerequisite: None. Presents a basic overview of the scope and role of the mass media in society. Course helps students become informed media consumers or participants and gain cultural and global perspectives on the communication industry.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR COMM 100 – Introduction to Communications

For additional information: <https://dhe.mo.gov/core42.php>

**COMM 112-Introduction to Public Relations****Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Overview of the principles and practice of public relations in private and public organizations. Includes analysis of how various organizations' communication philosophies and practices impact their productivity and effectiveness in society.

**COMM 114-News Reporting I****Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Includes the examination of news value, rights and responsibilities of the press, newsgathering and reporting techniques, leads, interviewing, style, and specialized articles.

**COMM 160-Introduction to Digital Video****Credit Hours: 3**

Prerequisite: None. Basic theoretical understanding and practical application of digital video production techniques including image composition, lighting, field and studio techniques, non-linear editing.

**COMM 180-Problems in Communication****Credit Hours: 1 to 3**

Prerequisite: Consent of instructor. Independent study of a special problem in communications under the supervision of a communications instructor in the department.

**COMM 190-Argumentation and Debate****Credit Hours: 3**

Prerequisite: None. A course in critical thinking and oral communication. Students will learn how to improve their argumentation skills, so they can engage in debates

effectively, productively, and ethically in a variety of situations. More specifically, this class is designed to improve students' abilities to: 1. Recognize and evaluate various forms of arguments, claims, and evidence. 2. Build solid arguments (including the research and planning stages of argument). 3. Engage in productive, ethical argument and debate with others. 4. Engaging in critical thinking, which requires analysis, the use of solid reasoning and evidence, refutation, the avoidance of logical fallacies, and the ability to critique opposing arguments.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR COMM 220 – Argumentation & Debate

For additional information: <https://dhe.mo.gov/core42.php>

### **COMM 201-Writing Across the Media** **Credit Hours: 3**

Prerequisites: ENGL 070 with a grade of C or higher or equivalent placement scores. Focuses on composing for print and electronic media, beginning with the skills necessary to write with clarity and attention to user interactivity. Students will produce polished, published nonfiction work native to new media/new journalism formats. The primary media may include blogs, wikis, white papers, press releases or other developing formats. Students will also learn to support composing in these primary media with other kinds of networked communication. Instruction will focus on developing advanced rhetorical skills appropriate for new media compositions.

### **COMM 215-New Media Communications Applications** **Credit Hours: 3**

Prerequisite: None. Course examines current trends and issues in new media communication while also equipping students with the skills necessary to use various digital applications for internal and external communication strategies and content-delivery. Course examines and identifies various theories and best practices related to a variety of platforms and strategies in view of the creation of digitally/new media-based branding messages.

### **COMM 220-Digital Media Communications Internship** **Credit Hours: 6**

Prerequisite: Consent of program coordinator. On-the-job experience tailored to enforce topics taught within the program for minimum of 200 clock hours on the job site. Student supervision will be the cooperative arrangement between the program coordinator and employer. Progress reports and a final portfolio documenting work experience will be submitted. Recommended to be taken during the last semester of study. Requires six group meetings and several individual conferences with the instructor.

## **COMPUTER APPLICATIONS**

### **CAPP 125-Microcomputer Applications** **Credit Hours: 3**

Prerequisite: None. Keyboarding proficiency is recommended. Learn the operations of personal computers through the use of Microsoft Office Professional software. Applications include fundamentals of word processing, spreadsheets, database management, and presentations.

### **CAPP 160-Word** **Credit Hours: 3**

Prerequisite: CAPP 125 with a grade of C or higher. Course is designed for Windows users who seek further knowledge of the word processing program, Microsoft Word.

### **CAPP 162-Desktop Publishing** **Credit Hours: 3**

Prerequisite: None. Introduction to the basics of electronic page layout using professional publishing software. Valuable skills will be gained in image scanning, manipulation and merging text and graphics.

### **CAPP 166-Excel** **Credit Hours: 3**

Prerequisite: CAPP 125 with a grade of C or higher. Course is designed for Windows users who seek further knowledge of the spreadsheet program, Excel.

## **COMPUTER INFORMATION SYSTEMS**

### **CIS 103-Introduction to CIS** **Credit Hours: 3**

Prerequisite: None. Course teaches the skills necessary to understand the logic of computer programming, design and structure. Students will be presented effective tools needed to enhance their knowledge of using the latest innovations in technology.

### **CIS 120-Programming in Python** **Credit Hours: 3**

Prerequisite: None. Course provides an introduction to programming in Python. The class will focus on problem-solving skills in math processing. Students will learn syntax, loops, conditional statements, graphics, object-oriented design, and functions.

### **CIS 124-Database Management** **Credit Hours: 3**

Prerequisite: None. Course implements the relational database management system tasks. Topics include creation of databases, storing, lists and displays, indexing, report generating, creating labels, constructing screens,

programming skills, control structures, menus, multi-file programming, and special techniques.

### **CIS 145-Visual Basic**

#### **Credit Hours: 3**

Prerequisite: None. Course provides an introduction to programming within a graphical environment. Application development will focus on the process of designing, building and maintaining projects that may be used within a business setting. The end product will increase the efficiency and productivity of the organization. Instruction will include interactive design, game programming and database access.

### **CIS 148-COBOL**

#### **Credit Hours: 3**

Prerequisite: None. Computer programming course that will use the COBOL programming language in a business environment. Instruction will include data editing, arithmetic calculations, if/then structures, loop processing, conditional statements, control level breaks, tables, and evaluate statements.

### **CIS 149-Advanced COBOL**

#### **Credit Hours: 3**

Prerequisite: CIS 148 with a grade of C or higher. Advanced COBOL programming techniques are presented in this course. Instruction covers tables, call statements, multi-file processing, and end-user interaction.

### **CIS 151-DB2 Relational Database**

#### **Credit Hours: 3**

Prerequisite: CIS 148 with a grade of C or higher. Course prepares students for programming in the DB2 environment. DB2 is a relational database. A substantial portion of the course will use SQL statements for maintaining a database.

### **CIS 155-Programming in C#**

#### **Credit Hours: 3**

Prerequisite: None. Programming language C# is introduced as an application programming language. Top-down program development methodologies are discussed. Instruction includes learning the different C# language features to develop application programs.

### **CIS 157-Advanced C#**

#### **Credit Hours: 3**

Prerequisite: CIS 155 with a grade of C or higher. Course presents advanced C# programming techniques. Instruction includes data manipulation, file handling, logic processing, database access, and maintenance through SQL commands.

### **CIS 158-JAVA**

#### **Credit Hours: 3**

Prerequisite: None. Introduction to object-oriented programming with a major emphasis in developing GUI based applications for business settings, web pages and smart devices.

### **CIS 161-Systems Analysis**

#### **Credit Hours: 3**

Prerequisite: CIS 124 with a grade of C or higher. Content includes the analysis and identification of multi-user computer system development. Documentation of systems requirements is stressed.

### **CIS 168-Game Programming**

#### **Credit Hours: 3**

Prerequisite: None. Fundamentals of how to write computer games using the programming languages of C# and Java. Students will learn to program interactive games that may be used on a variety of devices. Student will learn to use programming tools for user interaction, collision detection and animation. No previous knowledge of HTML, Web design or programming is assumed. Students are required to purchase a mass storage device such as a thumb or jump drive.

### **CIS 174-Programming in C# with SQL**

#### **Credit Hours: 3**

Prerequisite: CIS 155 with a grade of C or higher. Course provides an in-depth study of SQL commands, structures, and programming through the software Visual Studio software. Application development will focus on the process of designing, building, and maintaining projects and databases for the business environment. The end product will increase the efficiency and productivity of a business organization.

### **CIS 175-CIS Internship**

#### **Credit Hours: 4 to 8**

Prerequisite: Consent of program coordinator. Includes a minimum of 160 clock hours of supervised work experience that allows the student to apply CIS operation and programming theory. Recommended to be taken during the last year of study.

### **CIS 179-Programming Project**

#### **Credit Hours: 4**

Prerequisite: Consent of instructor. Must be taken during the last semester of study before completion of the CIS degree. Includes individually designed assignments that require students to develop and test a program and document program results.

**CIS 180-Problems in CIS****Credit Hours: 1 to 3**

Prerequisite: Consent of program coordinator. Independent study of a special problem in computer systems arranged under the supervision of a CIS instructor.

**CIS 185-Project Management****Credit Hours: 3**

Prerequisite: Equivalent reading placement score into ENGL 070. Course will help students understand why organizations have developed a formal project management process to gain a competitive advantage. It covers concepts and skills that are used by managers to propose, plan, secure resources, budget, and lead project teams to successful completion of their projects. The text is structured to meet the needs of those wishing to prepare for the PMP or CAPM certification exams. Same as BSMT 185.

---

**CONSTRUCTION TECHNOLOGY**


---

**CNST 105-Construction Materials and Methods****Credit Hours: 3**

Prerequisite: None. Introductory course that provides an overview of the materials and methods used in light framing and building finish systems from floor to roof and from exterior cladding to interior finishes. Includes wood light framing, light gage metal framing, roofing, glass and glazing, cladding systems, windows and doors, interior finishes, ceilings, and floors. This course will focus on development of a fundamental knowledge base through case study and detailed product analysis.

**CNST 106-Construction Estimation****Credit Hours: 3**

Prerequisite: None. Examines the methods used in cost estimating in the construction industry. Skills such as quantity take-off, measurement, quote and bid solicitation, etc., are developed, as well as discussion of strategy involved in bid formulation and submissions. Computerized estimating techniques are explored, as well as manual methods. Course will require completion of a cost estimate for residential, commercial, industrial, or heavy construction projects.

**CNST 113-Construction Management****Credit Hours: 3**

Prerequisite: None. Discusses careers in construction as well as the general business operations involved in the construction industry. Basic overview of the legal structure of businesses, contract terms and the roles of stakeholders in a construction project.

**CNST 138-Construction Planning and Scheduling****Credit Hours: 3**

Prerequisite: None. Discusses methods of organizing work items associated with a construction project into a logical sequence of optimizing efficiency and profitability. Manual and computerized scheduling methods are used in developing project schedules for both real and simulated projects.

**CNST 142-Building Mechanical Systems****Credit Hours: 3**

Prerequisite: None. Introduction to the understanding of components and design of major building mechanical systems. Topics include electrical, plumbing and HVAC systems in buildings. Design calculations for proper sizing of system components are discussed, as well as the various methods and materials used in the construction of such systems.

**CNST 145-Construction Methods I****Credit Hours: 3**

Prerequisite: None. Students will study the methods used to install various construction materials related to the major divisions of the Construction Specification Institute (CSI) format during their first year. Credit is awarded through an articulation agreement with approved career and technical centers.

**CNST 146-Construction Methods II****Credit Hours: 3**

Prerequisite: None. Continuation of CNST 145 for students in their second year. Students will study the methods used to install various construction materials related to the major divisions of the Construction Specification Institute (CSI) format. Credit is awarded through an articulation agreement with approved career and technical centers.

**CNST 148-Construction Codes and Law****Credit Hours: 3**

Prerequisite: None. Overview of legal requirements related to the design and execution of construction projects. The International Building Code is studied, and upon completion of the course, the student will be capable of navigating it and many other similar reference manuals. Other legal aspects of the construction industry are discussed including, but not limited to, contract law as well as liability issues.

**CNST 150-Building Layout and Surveying****Credit Hours: 3**

Prerequisite: MATH 108 or MATH 114 with a grade of C or higher or equivalent placement score. Construction field engineering activities to include surveying, site/building layout and dimensional control. Interpretation of plot books, site plans, and topographic maps is also included.

**CNST 160-Statics and Strength of Materials****Credit Hours: 3**

Prerequisite: MATH 108 or MATH 114 or equivalent placement score. Introduces the fundamentals of structural analysis and design. Materials and structural systems are discussed in terms of load bearing properties as well as economy of construction. Students will gain a greater understanding of how structures work as well as how choices are made regarding the selection of appropriate materials and systems to meet a given need.

**CNST 162-Construction Safety****Credit Hours: 3**

Prerequisite: None. Comprehensive discussion of job safety and best practices as they pertain to the construction industry. A general philosophy of safety awareness is achieved through study of specific hazards and case studies. Students will be required to obtain the OSHA 10-hour certification, understand OSHA regulations as well as legal implications on the construction industry.

**CNST 175-Construction Management Internship****Credit Hours: 4 to 8**

Prerequisite: Consent of program coordinator. Cooperative work experience within the construction industry setting. Student will work as a management-level employee for an established construction related firm. Periodic site visits and employer interviews by the instructor will ensure that student is performing meaningful management level functions and is generally meeting the expectations of the course.

---

**CRIMINAL JUSTICE**


---

**CJ 101-Introduction to Law Enforcement****Credit Hours: 3**

Prerequisite: None. Examines the history of policing in the United States and an overview of the relationship between law enforcement and the American society. Includes an examination of the duties of law enforcement officers, the operations of police agencies, police-community relations, the police subculture, and the need for police objectives to conform to constitutional procedures.

**CJ 102-Introduction to Criminal Justice****Credit Hours: 3**

Prerequisite: None. Examines the history, development and function of the criminal justice system in America. Will examine the three major components of the system: police, courts and corrections, as well as their interrelationships.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR CRJS 101 – Introduction to Criminal Justice

For additional information: <https://dhe.mo.gov/core42.php>

**CJ 103-Traffic Safety and Investigation****Credit Hours: 3**

Prerequisite: None. Introduces traffic control and accident investigation in modern cities; reviews principles of organizing and administering police units for traffic enforcement, accident prevention and safety education; and presents basic techniques of accident investigation, analysis and interpretation.

**CJ 104-Criminal Investigation****Credit Hours: 3**

Prerequisite: None. Course includes theory, methods and procedures of criminal investigation with attention given to its historical origins, the investigator, organization and management of the investigative function; and various investigative methods such as crime scene investigation, techniques of interviewing, collection of evidence, suspect development, and case preparation.

**CJ 105-Criminal Law****Credit Hours: 3**

Prerequisite: None. Examination of criminal, common and statutory law with its application to the criminal justice system. Emphasis will be placed on the classification of crime and criminal behavior including the necessary elements and mental states of criminal acts. Course will also examine criminal acts based on Missouri criminal statutes.

**CJ 107-Criminology****Credit Hours: 3**

Prerequisite: None. Examines the various theories of criminal behavior and crime causation as well as the problems of treatment, corrections and control of crime. Course also looks at patterns of crime, research methods and the response to criminal behavior.

**CJ 109-Juvenile Delinquency****Credit Hours: 3**

Prerequisite: None. Examines the origins, philosophy and objectives of the juvenile justice system in America including the concept of juvenile delinquency and its causes, juvenile case dispositions and juvenile detention procedures. Close attention will be placed on the organization, function and jurisdiction of juvenile justice agencies and the application of the Missouri Juvenile Code.

**CJ 111-Introduction to Corrections****Credit Hours: 3**

Prerequisite: None. Examines the history, development and present components of both institutional and community-based corrections in America.

**CJ 115-Procedural Law****Credit Hours: 3**

Prerequisite: None. Examines the U.S. Constitution, court cases, statutes, and other sources of regulation in the field of criminal procedure. These regulatory documents will be examined and considered as to how they apply to criminal law and the administration of justice. Specific issues to be covered include search and seizure, interrogations and confessions, grand jury investigations, identification procedures, and the right to counsel.

**CJ 118-Criminal Justice Communications****Credit Hours: 3**

Prerequisite: None. Provides direction and guidance for students seeking entry-level careers in law enforcement and corrections with additional examination of written and verbal communications. Provides instruction concerning the reporting of factual information in an accurate and proper format. In addition to reinforcing basic writing tools, course will stress the components of typical police writing formats. Topics such as interviewing and interrogation techniques and courtroom testimony will also be covered.

**CJ 120-Probation and Parole****Credit Hours: 3**

Prerequisite: None. Examination of community based corrections and rehabilitation through probation and parole supervision and its impact of offenders in the criminal justice system.

**CJ 122-Current Events in Criminal Justice****Credit Hours: 3**

Prerequisite: None. Provides an intensive examination of major issues affecting the criminal justice system and their interaction with society and the democratic process. Topics may include capital punishment, terrorism, drug abuse, and serial killers.

**CJ 124-Drugs, Society and Criminal Justice****Credit Hours: 3**

Prerequisite: None. Designed to provide an overview of the relationship between drugs and crime as well as the response of the criminal justice system to illegal drug use. Course includes: current U.S. drug abuse trends and patterns; review of the history of drug abuse and legal attempts to control such abuse; exploration of the physiological, psychological and sociological effects of common abused drugs; and a discussion of the connections between drug abuse and crime.

**CJ 150-Criminal Justice Seminar****Credit Hours: 1**

Prerequisite: Consent of program coordinator. Capstone course for the Associate of Applied Science degree in Criminal Justice. This course must be completed during the last

semester prior to graduation. Course will focus on preparing the student for employment in the criminal justice field including, but not limited to, resume and application development, ethics in criminal justice, preparation for hiring processes in law enforcement, career choice, career search skills, and mock interviews. Students will also be required to complete the NOCTI exam as part of the program and this class.

**CJ 175-Supervised Occupational Experience in Criminal Justice****Credit Hours: 4**

Prerequisites: CJ 102 and consent of program coordinator. Provides students with the opportunity to observe and experience the operation of a selected agency within the criminal justice system. Program will require the student to spend a minimum of 160 hours with the agency during the semester as well as the completion of other requirements. Students will be required to correspond with the instructor.

**CJ 180-Problems in Criminal Justice****Credit Hours: 1 to 3**

Prerequisites: CJ 102 and consent of program coordinator. Independent study of a special problem in criminal justice under the direct supervision of a criminal justice instructor.

---

**DANCE**


---

**DANC 110-Tap I****Credit Hours: 3**

Prerequisite: None. Introduction to fundamentals of tap dance technique including, but not limited to: locomotor movement, basic tap dance steps and phrases, musicality/rhythm, personal interpretation in performance, and common dance vocabulary/terminology. Students will be presented with a range of movement from various tap dance techniques which will be incorporated in the stages of the class: warm-up and floor work, center and locomotor movement skills, and the development of longer, in-depth movement phrases. Students are expected to be focused, enthusiastic, and willing to take risks.

**DANC 120-Jazz I****Credit Hours: 3**

Prerequisite: None. Introduction to fundamentals designed to develop basic skills in jazz technique. Each session will include a warm-up period in which students will focus on alignment, strength building, increasing flexibility, and developing fundamentals for building technique; a section dedicated to technical exercises in the center; jazz progressions across the floor; and finish with extended movement combinations and class dance. An emphasis will be placed on developing skills in musicality, dynamic range and performance quality.

## DENTAL HYGIENE

### DH 102-Dental Radiography

#### Credit Hours: 2

Prerequisite: Acceptance to the Dental Hygiene program.  
Emphasis is on component parts, functions, operations of the dental x-ray unit, and radiation safety. Analyzing relationships between anatomical and radiographic landmarks are included.

### DH 104-Dental Radiography Lab

#### Credit Hours: 1

Prerequisite: Acceptance to the Dental Hygiene program.  
Emphasis is on dental radiation safety, dental radiography equipment, imaging techniques, and image placement. Identifying relationships between anatomical and radiographic features are included. (1 lab)

### DH 106-Dental Clinical Emergencies

#### Credit Hours: 1

Prerequisite: Acceptance to the Dental Hygiene program.  
Course presents procedures to manage common medical and dental emergencies, emergency protocol, and medications used in the dental office. Adult/ child/ infant CPR, choking, and child/ adult AED are included. Upon successful completion of this course, the student will receive certification from the American Heart Association for Health Care Provider CPR/ AED.

### DH 108-Oral Anatomy and Histology

#### Credit Hours: 3

Prerequisite: Acceptance to the Dental Hygiene program.  
Course presents distinguishing characteristics of typical and atypical dentition, head and neck anatomy, and the relationship with tooth development, eruption, and clinical implications (2 lecture, 1 lab).

### DH 111-Pharmacology

#### Credit Hours: 3

Prerequisite: Acceptance to the Dental Hygiene program.  
Course presents basic terminology and principles of drug interactions, routes of administration, adverse reactions, and drugs that alter dental treatment. Emphasis is on knowledge of drugs related to the development of a dental hygiene care plan.

### DH 113-Dental Hygiene Ethics and Legal Issues

#### Credit Hours: 1

Prerequisite: Acceptance to the Dental Hygiene program.  
Course provides the student with knowledge of professional development, ethics, and jurisprudence as related to clinical practice. Topics presented include conflict management, state dental laws and legal liabilities, professional conduct, dental hygiene political involvement, and professional organizational

roles for dental hygiene professionals. The Missouri State Jurisprudence test is included in this course.

### DH 115-Community Dental Health I

#### Credit Hours: 2

Prerequisite: Acceptance to the Dental Hygiene program.  
Course presents an introduction to community dental health problems, epidemiology, research and writing skills, and biostatistics. Emphasis on initial development of a community dental health program is included (1.5 lecture, 0.5 lab).

### DH 117-Community Dental Health II

#### Credit Hours: .5

Prerequisite: Acceptance to the Dental Hygiene program.  
Course presents emphasis on the steps to developing community dental health promotion programs, governmental departments of public health services, and school-based dental health programs. The role of a dental hygienist is applied in evidence-based decision-making strategies in the dental public health setting (0.5 lab).

### DH 118-Principles of Periodontics

#### Credit Hours: 2

Prerequisite: Acceptance to the Dental Hygiene program.  
Course presents an introduction to the supporting structures of the teeth, pathogenesis, histopathology, and therapeutic treatment of periodontal disease. Recognition, prevention, treatment, and maintenance of periodontal disease and health is examined as these concepts relate to the role of the dental hygienist.

### DH 120-Dental Biomaterials with Lab

#### Credit Hours: 2

Prerequisite: Acceptance to the Dental Hygiene program.  
Course will introduce the purpose, chemistry, procedure techniques, dental safety, and patient education of biomaterials. Procedures include personal mouth protection devices, placing a rubber dam, placing sealants, study models, polishing a restoration, impressions, periodontal dressing, and removing sutures. (1 lecture, 1 lab)

### DH 122-General and Oral Pathology

#### Credit Hours: 3

Prerequisite: Acceptance to the Dental Hygiene program.  
Course introduces general terminology and disorders of human systems with focus on pathological conditions of the oral cavity and surrounding structures. Principles of oral-systemic relationships, manifestations of systemic diseases, infectious diseases, and concepts of immunity are included.

### DH 124-Applied Nutrition and Oral Health Education

#### Credit Hours: 2

Prerequisite: Acceptance to the Dental Hygiene program.  
Course presents the biological uses of nutrients and provides

a biochemical foundation for the metabolism of dietary components. Preparation of the dental hygiene student to fulfill his or her role in oral health education as it relates to patient care habits, motivation, and dietary effects on the oral cavity is included.

#### **DH 128-Local Anesthesia**

##### **Credit Hours: 2**

Prerequisite: Acceptance to the Dental Hygiene program. Course prepares dental hygiene students for the safe, effective administration of local anesthesia. Included are content areas in anatomy, physiology, pharmacology, and emergency management. Laboratory sessions provide actual experiences in administration of local anesthetics. (1 lecture, 1 lab)

#### **DH 131-Introduction to Dental Hygiene Theory**

##### **Credit Hours: 2**

Prerequisite: Acceptance to the Dental Hygiene program. Course acquaints students with the professional, educational, and therapeutic services of a dental hygienist and provides the background, and knowledge necessary to function in dental hygiene.

#### **DH 133-Dental Hygiene Theory I**

##### **Credit Hours: 2**

Prerequisite: Acceptance to the Dental Hygiene program. Course introduces the process of scientific literature review with evidence-based decision-making, including concepts of instrumentation, sharpening, and patient education.

#### **DH 134-Dental Hygiene Theory II**

##### **Credit Hours: 1**

Prerequisite: Acceptance to the Dental Hygiene program. Course introduces adjunctive clinical techniques, including principles of air powder polishing, sensitivity management, locally applied antimicrobials, alternative fulcrums, and silver diamine fluoride.

#### **DH 135-Dental Hygiene Theory III**

##### **Credit Hours: 2**

Prerequisite: Acceptance to the Dental Hygiene program. Course focuses on the management of patients with special needs including physical, mental, social, and/or emotional. Additional content relates to patients with medically compromised conditions affecting care.

#### **DH 136-Dental Hygiene Theory IV**

##### **Credit Hours: 2**

Prerequisite: Acceptance to the Dental Hygiene Program. Course involves scientific literature review, test taking strategies, case-based analysis, and dental hygiene review for enhanced recall of material in preparation for the National Dental Hygiene Board Examination (NDHBE).

#### **DH 139-Dental Hygiene Clinic I**

##### **Credit Hours: 4**

Prerequisite: Acceptance to the Dental Hygiene Program. Course emphasizes infection control, periodontal assessing, planning treatment, patient education, and implementing comprehensive dental hygiene care on patients in a clinical setting.

#### **DH 140-Dental Hygiene Pre-Clinic I**

##### **Credit Hours: 4**

Prerequisite: Acceptance to the Dental Hygiene program. Course introduces the basic skills to function in dental hygiene clinical practice. Basic principles of patient education, patient assessment and treatment planning, hand and ultrasonic instrumentation with infection control, and polishing and fluorides using typodonts and student partners.

#### **DH 143-Dental Hygiene Clinic II**

##### **Credit Hours: 3**

Prerequisite: Acceptance to the Dental Hygiene program. Course continues skill development in dental hygiene care. Procedures include assessment, analysis of risk factors, sequencing care strategies, implementing comprehensive dental hygiene care, and developing follow-up recommendations for patients in a clinical setting.

#### **DH 144-Dental Hygiene Clinic III**

##### **Credit Hours: 6**

Prerequisite: Acceptance to the Dental Hygiene Program. Course continues skill development in dental hygiene care management. Students continue clinical skill development by identifying advanced periodontal cases, planning course of treatment, implementing comprehensive dental hygiene care, identifying and managing patient referral needs. Clinical emphasis is on the treatment of advanced periodontal cases.

#### **DH 145-Dental Hygiene Clinic IV**

##### **Credit Hours: 6**

Prerequisite: Acceptance to the Dental Hygiene Program. Course is for advanced dental hygiene student skills. Students continue skill development by assessing, treatment planning, implementing comprehensive dental hygiene care, managing patient referral needs, and identifying licensure requirements for dental hygiene clinical practice.

## **DIAGNOSTIC MEDICAL SONOGRAPHY**

#### **DMS 102-Patient Care and Health Care Communication**

##### **Credit Hours: 2**

Prerequisite: Acceptance to the Diagnostic Medical Sonography program. Entry-level patient care, professionalism and critical thinking skills utilized in the daily responsibilities of an imaging professional are presented in preparation for student clinical rotations. Best practice verbal and nonverbal

communication skills within the health care setting are introduced. Students will learn ergonomic ultrasound imaging and patient transfer techniques. Standard precautions and infection control measures are taught.

### **DMS 103-Cardiac Ultrasound I**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Diagnostic Medical Sonography program or consent of program director. Introduction to cardiac ultrasound fundamentals including principles of imaging, scan modes, cardiac anatomy and physiology, embryology, evaluation methods and hemodynamics. Discusses diagnostic adult cardiac ultrasound including normal appearance, scanning techniques, patient care, and an introduction to pathology.

### **DMS 107-Ultrasound Scanning Lab I**

#### **Credit Hours: 4**

Prerequisite: Acceptance to the Diagnostic Medical Sonography program. Instructional lab consisting of instructor-guided hands-on scanning sessions in the Diagnostic Medical Sonography lab. Students will learn and perform ultrasound scanning protocols and image optimization techniques. Practical basic preparation for student's first clinical education experience.

### **DMS 108-Seminar in Sonography**

#### **Credit Hours: 2**

Prerequisite: Acceptance to the Diagnostic Medical Sonography program. This writing intensive research-based course facilitates a comprehensive overview of sonography as part of the larger health care apparatus. Ethical, social, cultural, legal, and billing issues in health care are discussed.

### **DMS 113-Cardiac Ultrasound II**

#### **Credit Hours: 3**

Prerequisite: DMS 103 with a grade of B or higher or consent of program director. Continuation of DMS 103. Cardiac ultrasound fundamentals including principles of imaging, scan modes, cardiac anatomy and physiology, embryology, evaluation methods, and hemodynamics. Discusses diagnostic adult cardiac ultrasound including normal appearance, scanning techniques, patient care, and pathology.

### **DMS 120-Sonography Principles and Instrumentation I**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Diagnostic Medical Sonography program or consent of program director. Comprehensive instruction on acoustic physics, Doppler ultrasound principles, hemodynamics, and ultrasound instrumentation. Bioeffects, safety and the interactions between ultrasound and tissues will be presented. Quality

assurance, quality improvement and sonography department protocols will also be covered.

### **DMS 122-Sonography Principles and Instrumentation II**

#### **Credit Hours: 3**

Prerequisite: DMS 120 with a grade of C or higher or consent of program director. Continuation of DMS 120.

Comprehensive instruction on acoustic physics, Doppler ultrasound principles, hemodynamics, and ultrasound instrumentation. Bioeffects, safety and the interactions between ultrasound and tissues will be presented. Quality assurance, quality improvement and sonography department protocols will also be covered. This course will include Sonography Principles and Instrumentation (SPI) registry review material and mock exams.

### **DMS 123-Cardiac Ultrasound III**

#### **Credit Hours: 3**

Prerequisite: DMS 113 with a grade of B or higher or consent of program director. Continuation of DMS 113. Cardiac ultrasound fundamentals including principles of imaging, scan modes, cardiac anatomy and physiology, embryology, evaluation methods, and hemodynamics. Discusses diagnostic adult cardiac ultrasound including normal appearance, scanning techniques, patient care, and pathology.

### **DMS 127-Ultrasound Lab II**

#### **Credit Hours: 4**

Prerequisite: DMS 107 with a grade of B or higher or consent of program director. Continuation of DMS 107. Instructional lab consisting of instructor-guided hands-on scanning sessions in the Diagnostic Medical Sonography lab. Students will learn and perform ultrasound scanning protocols and image optimization techniques. Practical basic preparation for student's first clinical education experience. In addition to lab contact hours the student may be assigned to complete 2 to 16 hours in a clinical setting. (4 lab)

### **DMS 130-General Sonography I**

#### **Credit Hours: 2**

Prerequisite: Acceptance to the Diagnostic Medical Sonography program or consent of program director. Course includes a brief review of the anatomy, physiology and sectional anatomy of the human abdomen, superficial structures, and non-cardiac chest. Pathology and pathophysiology specific to the general concentration will be presented. Recognition of the normal and abnormal sonographic appearances of the human thoracic, abdominal and superficial anatomy will be taught. Best practice examination methods utilizing ultrasound technology are presented. Basic exam protocols will be discussed.

**DMS 132-General Sonography II****Credit Hours: 2**

Prerequisite: DMS 130 with a grade of B or higher or consent of program director. Continuation of DMS 130. Course includes a brief review of the anatomy, physiology and sectional anatomy of the human abdomen, superficial structures and non-cardiac chest. Pathology and pathophysiology specific to the general concentration will be presented. Recognition of the normal and abnormal sonographic appearances of the human thoracic, abdominal and superficial anatomy will be taught. Best practice examination methods utilizing ultrasound technology are presented. Basic exam protocols will be discussed.

**DMS 133-Cardiac Ultrasound IV****Credit Hours: 3**

Prerequisite: DMS 123 with a grade of B or higher or consent of program director. Continuation of DMS 123. Cardiac ultrasound fundamentals including principles of imaging, scan modes, cardiac anatomy and physiology, embryology, evaluation methods, and hemodynamics. Discusses diagnostic adult cardiac ultrasound including normal appearance, scanning techniques, patient care, and pathology. This course includes cardiac registry review material and mock registry exams.

**DMS 134-General Sonography III****Credit Hours: 2**

Prerequisite: DMS 132 with a grade of B or higher or consent of program director. Continuation of DMS 130 and DMS 132. Course includes a brief review of the anatomy, physiology and sectional anatomy of the human abdomen, superficial structures and noncardiac chest. Pathology and pathophysiology specific to the general concentration will be presented. Recognition of the normal and abnormal sonographic appearances of the human thoracic, abdominal and superficial anatomy will be taught. Best practice examination methods utilizing ultrasound technology are presented. Basic exam protocols will be discussed. This course will include Abdominal Sonography registry review material and mock exams.

**DMS 140-OB/GYN Sonography I****Credit Hours: 2**

Prerequisite: Acceptance to the Diagnostic Medical Sonography program or consent of program director. Course includes a brief review of the anatomy, physiology and sectional anatomy of the human gravid and nongravid pelvis. Pathology and pathophysiology specific to the obstetrics and gynecology concentration will be presented. Recognition of the normal and abnormal sonographic appearances of the female human gravid and nongravid pelvis will be taught. Best practice examination methods utilizing ultrasound technology

are presented. Basic exam protocols will be discussed. Human embryology as appropriate will be presented.

**DMS 142-OB/GYN Sonography II****Credit Hours: 2**

Prerequisite: DMS 140 with a grade of B or higher or consent of program director. Continuation of DMS 140. Course includes a brief review of the anatomy, physiology and sectional anatomy of the human gravid and nongravid pelvis. Pathology and pathophysiology specific to the obstetrics and gynecology concentration will be presented. Recognition of the normal and abnormal sonographic appearances of the female human gravid and nongravid pelvis will be taught. Best practice examination methods utilizing ultrasound technology are presented. Basic exam protocols will be discussed.

**DMS 144-OB/GYN Sonography III****Credit Hours: 2**

Prerequisite: DMS 142 with a grade of B or higher or consent of program director. Continuation of DMS 140 and DMS 142. Course includes a brief review of the anatomy, physiology and sectional anatomy of the human gravid and nongravid pelvis. Pathology and pathophysiology specific to the obstetrics and gynecology concentration will be presented. Recognition of the normal and abnormal sonographic appearances of the female human gravid and nongravid pelvis will be taught. Best practice examination methods utilizing ultrasound technology are presented. Basic exam protocols will be discussed. Human embryology as appropriate will be presented. This course will include OB/GYN registry review material and mock exams.

**DMS 145-Sonography Clinical I****Credit Hours: 4**

Prerequisite: DMS 127 with a grade of B or higher or consent of program director. Beginning internship of the Diagnostic Medical Sonography profession. Students will be assigned to a clinical site(s) and will actively participate in the daily activities and patient examinations of an ultrasound department under the direct supervision of a registered sonographer. Students will begin obtaining scan competencies in this course. They must properly document hours spent in the clinical site and log all observed and performed exams. Students must complete assigned clinical hours and scanning competencies as outlined in the DMS Student Handbook.

**DMS 150-Vascular Sonography I****Credit Hours: 2**

Prerequisite: Acceptance to the Diagnostic Medical Sonography program or consent of program director. Course includes a brief review of the anatomy, physiology and sectional anatomy of the human venous and arterial systems. Pathology and pathophysiology specific to the vascular concentration will be presented. Recognition of the normal and

abnormal sonographic appearances of human vascular anatomy will be taught. Best practice direct and indirect examination methods utilizing ultrasound technology are presented. Basic exam protocols will be discussed.

### **DMS 152-Vascular Sonography II**

#### **Credit Hours: 2**

Prerequisite: DMS 150 with a grade of B or higher or consent of program director. Continuation of DMS 150. Course includes a brief review of the anatomy, physiology and sectional anatomy of the human venous and arterial systems. Pathology and pathophysiology specific to the vascular concentration will be presented. Recognition of the normal and abnormal sonographic appearances of human vascular anatomy will be taught. Best practice direct and indirect examination methods utilizing ultrasound technology are presented. Basic exam protocols will be discussed.

### **DMS 154-Vascular Sonography III**

#### **Credit Hours: 2**

Prerequisite: DMS 152 with a grade of B or higher or consent of program director. Continuation of DMS 150 and DMS 152. Course includes a brief review of the anatomy, physiology and sectional anatomy of the human venous and arterial systems. Pathology and pathophysiology specific to the vascular concentration will be presented. Recognition of the normal and abnormal sonographic appearances of human vascular anatomy will be taught. Best practice direct and indirect examination methods utilizing ultrasound technology are presented. Basic exam protocols will be discussed. This course will include Vascular Sonography registry review material and mock exams.

### **DMS 155-Sonography Clinical II**

#### **Credit Hours: 7**

Prerequisite: DMS 145 with a grade of B or higher or consent of program director. Internship of the Diagnostic Medical Sonography profession. Students will be assigned to a clinical site(s) and will actively participate in the daily activities and patient examinations of an ultrasound department under the supervision of a registered sonographer. Students will obtain scan competencies in this course. They must properly document hours spent in the clinical site and log all observed and performed exams. Students must complete assigned clinical hours and scanning competencies as outlined in the DMS Student Handbook.

### **DMS 165-Sonography Clinical III**

#### **Credit Hours: 7**

Prerequisite: DMS 155 with a grade of B or higher or consent of program director. Final internship of the Diagnostic Medical Sonography profession. Students will be assigned to a clinical site(s) and will actively participate in the daily activities and patient examinations of an ultrasound department under the

supervision of a registered sonographer. Students will obtain scan competencies in this course. They must properly document hours spent in the clinical site and log all observed and performed exams. Students must complete assigned clinical hours and scanning competencies as outlined in the DMS Student Handbook.

## **EARLY CHILDHOOD DEVELOPMENT**

### **ECD 101-Introduction to Early Childhood**

#### **Credit Hours: 3**

Prerequisites: EDUC 108 and the successful completion of an approved background screening. Course is an overview of early childhood programs and curricula, historical and present, and an examination of qualities and skills necessary for working with young children. Observation of young children in various classroom settings will be incorporated into the course.

### **ECD 103-Child Growth and Development**

#### **Credit Hours: 3**

Prerequisites: EDUC 108 and the successful completion of an approved background screening. Provides a general understanding of the physical, social, emotional, language, and cognitive development of early childhood, and the importance of the environment and interrelationships on development.

### **ECD 107-Child Nutrition, Health and Safety**

#### **Credit Hours: 3**

Prerequisites: EDUC 108 and the successful completion of an approved background screening. Presents basic factors that affect child health including basic nutrition, clothing habits, health routines, hygiene, childhood diseases, first aid, and safety. Curriculum includes care facilities factors such as a safe, challenging learning environment and licensing requirements.

### **ECD 109-Observation and Planning Assessment**

#### **Credit Hours: 3**

Prerequisites: EDUC 108 and the successful completion of an approved background screening. Course provides the student with opportunity to understand methods of observing children from birth to age 8, how to plan after observation, and make enhancements to curriculum based on assessment.

### **ECD 111-Language Development Early Literacy**

#### **Credit Hours: 3**

Prerequisite: None. Presents the basic use of tools and materials that stimulate imagination, reasoning and concept formation in language developments. Students are given an overview of literacy experiences for young children throughout the day, the continuum of reading and writing development

from birth and beyond, and specific ways to incorporate literacy into playing, reading, talking, writing, and learning.

### **ECD 115-Child Social/Emotional Development**

#### **Credit Hours: 3**

Prerequisites: None. Course is an overview of childhood behavior, interaction and relationships, environments and its effects on social and emotional development. Behavior and guidance concerns of children and problems facing adolescents and adults are addressed.

### **ECD 117-Creative Expression and Play**

#### **Credit Hours: 3**

Prerequisites: EDUC 108 and the successful completion of an approved background screening. Presents the development of creative expressions in the young child through activities such as music, art and dance, and their incorporation into the daily curriculum. The value of children's play and discovery as learning opportunities will be emphasized.

### **ECD 121-Curriculum Strategies for Early Childhood Credit Hours: 3**

Prerequisites: EDUC 108 and the successful completion of an approved background screening. Course is an examination of techniques, learning activities and materials used to teach young children with an emphasis on planning and implementing a developmentally appropriate curriculum utilizing the Constructivist Theory.

### **ECD 125-Introduction to Special Individuals**

#### **Credit Hours: 3**

Prerequisites: EDUC 108 and the successful completion of an approved background screening. Presents an introduction to characteristics of exceptional individuals and educational history and theories with exceptional individuals, especially children. Study will include effects of disability on adjustment to home, school, community, and on families of young children. Includes an overview of federal and state systems of support for children with special needs.

### **ECD 127-Parent/Teacher Interaction**

#### **Credit Hours: 3**

Prerequisite: None. Course presents the principles of child development with family relationships applied to group and individual work with parents. It is intended to help providers in developing skills that will help them effectively relate to parents. Topics will include: communication techniques, children's fears, discipline, nutrition, and school and community resources.

### **ECD 129-Administration in Early Childhood Care**

#### **Credit Hours: 3**

Prerequisites: EDUC 108 and the successful completion of an approved background screening and consent of program

coordinator. Course presents the operation of a child care facility including staff relations, budgeting, ordering, planning, and evaluating center operations. Early childhood care center ethics, funding opportunities, licensing, curriculum, and parent involvement are also incorporated into this course.

### **ECD 131-Child Development Portfolio/Assessment Preparation**

#### **Credit Hours: 3**

Prerequisites: EDUC 108 and the successful completion of an approved background screening and ECD 101 and ECD 107 with grades of C or higher and consent of program coordinator. Corequisites: ECD 101 and ECD 107. Course provides a step-by-step approach of the activities necessary to complete the degree requirements. Course is a review of the functional areas along with an emphasis on the general understanding of the physical, social, emotional, language, and cognitive development of early childhood. The competencies required and the assessment processes are considered important components of this course.

### **ECD 175-Child Care Practicum**

#### **Credit Hours: 3**

Prerequisites: EDUC 108 and the successful completion of an approved background screening and ECD 101 through ECD 129 with grades of C or higher. Course presents the operation of a child care facility including staff relations, budgeting, ordering, planning, and evaluating center operations. Early childhood care center ethics, funding opportunities, licensing, curriculum, and parent involvement are also incorporated into this course.

## **EARTH SCIENCE**

### **EASC 101-Introduction to Earth Sciences with Lab**

#### **Credit Hours: 5**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Introduction to earth science that concentrates on understanding the earth's dynamic environments through the scientific study of processes and physical and human interactions related to geology, meteorology and astronomy. Lab topics include introduction to minerals and rocks, plate tectonics, geologic time, maps, earthquakes, weather, and basic astronomy. (4 lecture, 1 lab)



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR GEOL 100L - Geology with Lab

For additional information: <https://dhe.mo.gov/core42.php>

### **EASC 106-Physical Geology with Lab**

#### **Credit Hours: 5**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Provides an understanding of the forces that were active in the formation of the Earth, the

processes whereby the surface of the Earth is sculptured, the identity of Earth materials, and the location and value of the Earth's resources. Topics include history of geology, plate tectonics, matter and minerals, rocks, volcanoes, weathering and soil, geologic time, earthquakes, plate boundaries, water and energy. Rock and mineral identification is a large part of the lab section of this course. Labs include identification of rocks and minerals, plate tectonics and geologic time. (4 lecture, 1 lab)



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR GEOL 100L - Geology with Lab

For additional information: <https://dhe.mo.gov/core42.php>

### EASC 118-Environmental Geology

#### Credit Hours: 3

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Focuses on natural hazards and the human consequences associated with geologic processes. Topics include the study of plate tectonics, earthquakes, volcanoes, floods, storms, wildfires, pollution, climate change, and global warming. Emphasis is placed on how those hazards affect humans and how human activity affects Earth's environment.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR GEOL 100 - Geology

For additional information: <https://dhe.mo.gov/core42.php>

### EASC 120-Introduction to Astronomy

#### Credit Hours: 3

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Introduction to our present knowledge of the universe. Topics include the solar system, stellar astronomy and the structure of the universe.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR ASTR 100 - Astronomy

For additional information: <https://dhe.mo.gov/core42.php>

## ECONOMICS

### ECON 101-Principles of Macroeconomics

#### Credit Hours: 3

Prerequisites: ENGL 070 and MATH 061 with grades of C or higher or equivalent placement scores. Examines the economy as a whole with an emphasis on how scarcity affects a nation. Topics include understanding and measuring economic growth, inflation, unemployment, monetary and fiscal policy, and exchange rates.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR ECON 101 - Introduction to Macroeconomics

For additional information: <https://dhe.mo.gov/core42.php>

### ECON 102-Principles of Microeconomics

#### Credit Hours: 3

Prerequisites: ENGL 070 and MATH 061 with grades of C or higher or equivalent placement scores. Examines the price system and resource allocation, markets and efficiency, production costs, wage determination, market structures, and the role of government in regulating and supplementing the pricing system.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR ECON 102 - Introduction to Microeconomics

For additional information: <https://dhe.mo.gov/core42.php>

### ECON 180-Problems in Economics

#### Credit Hours: 1 to 3

Prerequisite: Consent of instructor. Independent study of a special problem in economics under the supervision of an economics instructor.

## EDUCATION

### EDUC 108-Introduction to the Field of Education

#### Credit Hours: .5

Prerequisite: None. Course is a prerequisite requirement for all potential students seeking an AAT degree in Elementary Education or an AAS in Early Childhood Development. Topics will include professionalism in the field, mandatory background screenings, health requirements, membership in professional organizations, observations and participation in classroom experiences, exit exams, and employment opportunities. The Department of Elementary and Secondary Education standards will be introduced along with state certification and transfer degree options. This is a pass/fail course.

### EDUC 110-Introduction to Physical Education in the Elementary School

#### Credit Hours: 2

Prerequisites: EDUC 108 and the successful completion of an approved background screening. Recommended for sophomore physical education majors and elementary education majors. Study of special methods and materials to be used in the teaching of elementary school physical education. Topics include course organization, teaching procedures and opportunities for integrating the physical education program with the school curriculum.

**EDUC 147-Introduction to Teaching Online****Credit Hours: 2**

Prerequisite: Consent of instructor. Introductory course designed to assist faculty in developing courses that are either web-based or web-assisted. Provides instruction for very basic course planning and will focus on topics such as methods, strategies, techniques, trends, and terminology used in instruction in general and online education in particular. Articles will be assigned for reading and discussion, and preliminary documents for teaching online courses will be created. Course is restricted to SFCC faculty.

**EDUC 149-Teaching with LMS Software****Credit Hours: 2**

Prerequisite: Consent of instructor. Introductory course is designed to assist faculty in learning how to use the campus learning management system for facilitating web-based and web-assisted courses. Topics will include using the various components of the software as well as uploading and editing documents, getting technical assistance and managing information. In addition, issues pertinent to online education will be discussed. Course is restricted to SFCC faculty.

**EDUC 180-Problems in Teacher Education****Credit Hours: 1 to 3**

Prerequisite: Consent of program coordinator. Independent study of a special problem in teacher education under the supervision of the program coordinator.

**EDUC 205-Teaching Profession with Field Experience****Credit Hours: 3**

Prerequisites: EDUC 108 and the successful completion of an approved background screening and ENGL 101 with a grade of C or higher. Course provides an opportunity to observe teaching and learning for 30 hours or more in pre K-12 classrooms. Students are introduced to the requirements for teacher preparation and certification. Students will examine characteristics of effective teaching. Course is designed to assist students in determining if a career in teaching is an appropriate goal.

**EDUC 209-Foundations of Education in a Diverse Society****Credit Hours: 3**

Prerequisite: ENGL 101 with a grade of C or higher. Course examines the historical, philosophical, sociological, political, economic, and legal foundations of the American public education system. Students will explore the nature of school environments, design and organization of school curricula, characteristics of effective schools, and instruction in grades pre K-12. Educational structures, practices and projections for the future will be studied.

**EDUC 212-Educational Technology****Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Students will learn to integrate instructional technology into the pre K-12 classrooms. Students will study a variety of software programs, presentation technology and telecommunication tools. Focus will also be on social, ethical, legal, and human issues surrounding the use of technology.

**EDUC 218-Children's Literature****Credit Hours: 3**

Prerequisites: EDUC 108 and the successful completion of an approved background screening and ENGL 070 with a grade of C or higher or equivalent placement scores. Intensive introduction to various genres of literature for children and ways of presenting literature in preschool, elementary or middle school.

**EDUC 220-Educational Psychology****Credit Hours: 3**

Prerequisite: PSY 101 or PSY 102 with a grade of C or higher. Course is designed to help students relate the application of psychological principles to teaching, learning and assessment, and the educational practice in pre K-12 classrooms. It will focus on the learner and the learning process, teacher characteristics and classroom processes that increase student motivation. Student diversity and appropriate instructional strategies for students with special needs will also be introduced. Writing papers in APA format is required.

**EDUC 228-Education of Exceptional Learners****Pre K-12****Credit Hours: 3**

Prerequisites: EDUC 108 and the successful completion of an approved background screening and ENGL 070 with a grade of C or higher or equivalent placement scores. Survey course is an introduction to the exceptional learners and their education in grades pre K-12. Students will attain knowledge, skills and dispositions that will enable them to work effectively with exceptional learners in general education or special education. Course will cover the adaptations of daily activities in inclusive classrooms.

**EDUC 240-Multicultural Education****Credit Hours: 3**

Prerequisite: ENGL 101 with a grade of C or higher. Course is designed to examine the multicultural context of education and prepare students to understand and teach learners from diverse backgrounds, with diverse characteristics, and with differing social identities. The course will address issues of educational equity, sociocultural influences on teaching and learning, and how teachers and schools can contribute to

interpersonal and intercultural understanding and respect, social justice, and democratic citizenship.

### **EDUC 250-Paraprofessional Educator Practicum**

#### **Credit Hours: 3**

Prerequisites: EDUC 108 and the successful completion of an approved background screening, ENGL 101 with a grade of C or higher and consent of program coordinator. Students will actively participate, under supervision, in a paraprofessional setting for a total of 60 hours. Students will be responsible for implementation of duties assigned by the internship supervisor.

## **ENGINEERING DESIGN TECHNOLOGY**

### **EDT 105-Print Reading for Construction**

#### **Credit Hours: 3**

Prerequisite: None. Course introduces the concepts of sketching, technical drawing, measurement, scale, format, and how they are applied to reading drawings of mechanical, architectural, civil, structural, and electrical fields. The relationship between the intent of the drawings, trade practices, American Society of Mechanical Engineers (ASME) standards, and the ability to extract and utilize information found on various kinds of drawings will be emphasized.

### **EDT 111-Introduction to Engineering Design**

#### **Credit Hours: 3**

Prerequisite: None. Course will involve the production of 2D technical drawings that meet industry standards using software. Emphasis will be placed on precision, accuracy and productivity. The use of symbols, line types, line weights, orthographic projection, multi-view placement, text format, dimensions, section views, auxiliary views, isometric views, plotting accuracy, and a variety of design fields will be reviewed.

### **EDT 115-Advanced Engineering Design**

#### **Credit Hours: 3**

Prerequisite: EDT 111 with a grade of C or higher. Course presents topics required for creating accurate two-and three-dimensional geometry. Study will include development of dimension styles, use of annotative objects and management of external references, blocks, attributes, and other advanced aspects of the software to maximize productivity.

### **EDT 120-Architectural Design**

#### **Credit Hours: 3**

Prerequisite: None. Course offers the fundamentals of architectural design as it relates to light wood construction consistent with, but not limited to, residential construction. This course introduces building elements, Building Information Modeling (BIM) techniques, building code requirements, and professional and regional influences.

### **EDT 125-Architectural Applications**

#### **Credit Hours: 3**

Prerequisite: EDT 120 with a grade of C or higher. Course will introduce students to architectural software widely used in the commercial field to produce architectural models and working drawings. Building Information Management (BIM), design development, construction documentation, and planning techniques relating to the software will be emphasized.

### **EDT 130-Manufacturing Design I**

#### **Credit Hours: 3**

Prerequisite: None. Course will introduce students to the fundamentals of Solid Modeling software to produce parametric models, assemblies, presentations, and drawings for the manufacturing industry. Topics will include sketches, reference planes, relations, part modeling techniques, constraints, mates, evaluation tools, redesign, and presentation techniques.

### **EDT 132-Manufacturing Design II**

#### **Credit Hours: 3**

Prerequisite: EDT 130 with a grade of C or higher. Advanced course presents different 3D and parametric solid modeling applications using Solid Modeling software. Studies include the development and generation of advanced 2D and 3D sketches, solid models, assemblies, presentations, and creating complex and detailed drawings, analyzing and testing solid models, and developing physical models with rapid prototyping equipment. Each student will complete an individual design project involving a mechanical assembly with appropriate documentation.

### **EDT 140-Engineering Design for Industry**

#### **Credit Hours: 3**

Prerequisite: EDT 111 with a grade of C or higher. This course will provide students with relevant, real world, drafting/design work, through previously completed projects provided by Industry Partners; these partners will periodically visit the classroom to explain projects and different complications that arise during the design process.

### **EDT 175-EDT Internship**

#### **Credit Hours: 4**

Prerequisites: EDT 115 with a grade of C or higher and consent of program coordinator. Course offers a cooperative work experience within an industry setting for Engineering Design Technology students. Students work under the supervision of an approved professional or specialist in the engineering design field. The instructor is a coordinator between the student and the employer and monitors the internship. A minimum of 160 work (clock) hours on the job site is required for successful completion of the course.

Students will submit progress reports and a final report documenting the work experience.

### **EDT 180-Problems in EDT**

#### **Credit Hours: 3**

Prerequisites: EDT 115 with a grade of C or higher and consent of program coordinator. Course includes the study of special problems and/or projects in Engineering Design Technology. The student works with industry and/or the instructor to solve a specific problem and/or complete project.

### **EDT 190-EDT Capstone**

#### **Credit Hours: 3**

Prerequisites: EDT 115 with a grade of C or higher and consent of program coordinator. Student will complete a complex independent study project in an architectural, civil, mechanical, or another engineering design-related field with instructor input and guidance. The capstone course will promote critical thinking skills and technical resourcefulness while allowing students to broaden and show mastery of their engineering design skills.

## **ENGLISH**

### **ENGL 005-Intensive English for Non-Native Speakers**

#### **Credit Hours: 3**

Prerequisite: None. Course is for students whose primary language is not English. Course will cover basic English grammar and usage for academic purposes, as well as speaking, listening, reading, and writing skills necessary for academic success. Does not apply toward a degree or certificate.

### **ENGL 060-Foundations of English I**

#### **Credit Hours: 3**

Prerequisite: Equivalent placement scores. Course is designed to develop students' critical reading and writing skills. Students will learn how to independently read and understand academic texts and respond to the ideas presented in those texts through well-written paragraphs. Successful completion requires a 70 percent in the course. Does not apply toward a degree or certificate.

### **ENGL 070-Foundations of English II**

#### **Credit Hours: 3**

Prerequisite: ENGL 060 with a grade of C or higher or equivalent placement scores. Corequisite: ENGL 101. Course focuses on applying critical reading and writing skills for organizing, analyzing and retaining material and developing written work appropriate to the audience, purpose, situation, and length of the assignment. Students will learn how to independently read and understand academic texts and critically respond to the ideas presented in those texts via well-organized essays. Successful completion requires a 70

percent in the course. Does not apply toward a degree or certificate.

### **ENGL 101-English Composition I**

#### **Credit Hours: 3**

Prerequisite: ENGL 070 as a corequisite or with a grade of C or higher or equivalent placement scores. Emphasizes planning, drafting and revising along with critical thinking and information management skills and their role in communicating concise written ideas to a range of audiences for a variety of purposes. Basic computer skills are essential for successful completion.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR ENGL 100 - Composition I

For additional information: <https://dhe.mo.gov/core42.php>

### **ENGL 102-English Composition II**

#### **Credit Hours: 3**

Prerequisite: ENGL 101 with a grade of C or higher. Combines the process writing techniques acquired in ENGL 101 with higher-order reasoning and advanced research skills to communicate ideas in meaningful and effective writing. Basic computer skills are essential for successful completion.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR ENGL 200 - Composition II

For additional information: <https://dhe.mo.gov/core42.php>

### **ENGL 106-Creative Writing**

#### **Credit Hours: 3**

Prerequisite: None. Study and practice in the techniques of writing poetry, fiction, nonfiction and/or drama. Emphasis is placed on the recognition of those techniques in published works and their utilization in original work. Peer evaluation and individual conferences with the instructor are employed.

### **ENGL 110-Communication for Business and Industry**

#### **Credit Hours: 3**

Prerequisite: ENGL 060 with a grade of C or higher or equivalent placement scores. In-depth study of effective communication techniques and demeanor as applied in business and industry situations.

### **ENGL 130-Scriptwriting**

#### **Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Course explores the fundamental process of writing short scripts for film, theatre, and television. Students will learn to develop plot, style, characters, dialogue, setting, mood, and formatting as they draft and revise 10 to 15 minute scripts for reading in class and potential production. Course includes lecture, group work and presentations.

## FIRE SCIENCE

### **FIRE 130-Firefighter I**

#### **Credit Hours: 6**

Prerequisite: None. Course places emphasis on those skills and related information necessary to develop a recruit firefighter into a usable member of the firefighting team. Recruit firefighters will gain essential knowledge through both lecture and practical skill development. Topics include: fire behavior, building construction, firefighter safety, rescue, extrication, fire control, hazardous materials, and EMS. Successful completion of this course and FIRE 131 will prepare recruit firefighters for the Missouri Fire Fighter certification exam.

### **FIRE 131-Firefighter II**

#### **Credit Hours: 6**

Prerequisite: None. Course places emphasis on those skills and related information necessary to develop a recruit firefighter into a usable member of the firefighting team. Recruit firefighters will gain essential knowledge through both lecture and practical skill development. Topics include: fire behavior, building construction, firefighter safety, rescue, extrication, fire control, hazardous materials, and EMS. Successful completion of FIRE 130 and this course will prepare recruit firefighters for the Missouri Fire Fighter certification exam.

### **FIRE 132-Introduction to Emergency Services**

#### **Credit Hours: 3**

Prerequisite: None. Course provides an overview of fire protection, career opportunities in fire protection and related fields, philosophy and history of fire protection/service, fire loss analysis, organization and function of public and private fire protection services, fire departments as part of local government, laws and regulations affecting the fire service, fire service nomenclature, specific fire protection functions, basic fire chemistry and physics, introduction to fire protection systems, introduction to fire strategy and tactics.

### **FIRE 133-Fire Behavior and Combustion**

#### **Credit Hours: 3**

Prerequisite: None. Categorizes the components of fire and explains the physical and chemical properties of fire. Provides an understanding of basic fire chemistry, the fire combustion process, general fire behavior, the development of a compartment fire, and how fire behavior impacts the safety of firefighters.

### **FIRE 134-Fire Prevention**

#### **Credit Hours: 3**

Prerequisite: None. Course provides fundamental information regarding the history and philosophy of fire prevention, organization and operation of a fire prevention bureau, use of

fire codes, identification and correction of fire hazards, and the relationships of fire prevention with built-in fire protection systems, fire investigation, and fire and life-safety education.

### **FIRE 135-Fire Safety and Survival**

#### **Credit Hours: 3**

Prerequisite: None. Course introduces the basic principles and history related to the national firefighter life safety initiatives, focusing on the need for cultural and behavioral change throughout the emergency services.

### **FIRE 136-Building Construction for Fire**

#### **Credit Hours: 3**

Prerequisite: None. Course provides the components of building construction that relate to fire and life safety. The focus of this course is on firefighter safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies.

### **FIRE 137-Fire Protection Systems**

#### **Credit Hours: 3**

Prerequisite: None. Course provides information relating to the features of design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers.

### **FIRE 138-Fire Investigations**

#### **Credit Hours: 3**

Prerequisite: None. Course is intended to provide the student with the fundamentals and technical knowledge needed for proper fire scene analysis and interpretations, including recognizing and conducting origin and cause, preservation of evidence, evidence collection, scene documentation, scene security, motives of the fire setter, and types of fire causes.

### **FIRE 139-Tactics and Strategies**

#### **Credit Hours: 3**

Prerequisite: None. Course provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground. The course will cover aspects of incident command, company operations, special situations and occupancies, and post incident activities.

### **FIRE 140-Hydraulics and Water**

#### **Credit Hours: 3**

Prerequisite: None. Course provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment, and extinguishing agents on the fire ground. The course will cover aspects of incident command, company operations, special situations and occupancies, and post incident activities.

**FIRE 141-Fire Leadership****Credit Hours: 3**

Prerequisite: None. Course introduces the student to the organization and management of a fire department and the relationship of government agencies to the fire service. Emphasis will be placed on fire service leadership from the perspective of various positions.

**FIRE 175-Fire Internship****Credit Hours: 3**

Prerequisite: Consent of program coordinator. Provides students with the opportunity to observe and experience the operation of a selected agency within the criminal justice system. Program will require the student to spend a minimum of 120 hours with the agency during the semester as well as the completion of other requirements.

**FRENCH****FREN 101-Elementary French I****Credit Hours: 3**

Prerequisite: None. Begins the four basic skills of language communication: listening, speaking, reading, and writing. Includes an introduction to the French culture.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LANG 101 - French I

For additional information: <https://dhe.mo.gov/core42.php>

**FREN 102-Elementary French II****Credit Hours: 3**

Prerequisite: FREN 101 with a grade of C or higher. Continuation of FREN 101 for further development of the four basic skills of language communication: listening, speaking, reading, and writing. Continues study of French culture.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LANG 102 - French II

For additional information: <https://dhe.mo.gov/core42.php>

**FREN 201-Intermediate French I****Credit Hours: 3**

Prerequisite: FREN 102 with a grade of C or higher. Course continues the study of French language and culture with a focus on communication and proficiency.

**FREN 202-Intermediate French II****Credit Hours: 3**

Prerequisite: FREN 201 with a grade of C or higher. Course continues the study of French language and culture with a focus on communication and proficiency.

**FREN 210-Special Topics in French****Credit Hours: 1 to 3**

Prerequisites: FREN 101, FREN 102, FREN 201, and FREN 202 with grades of C or higher. Independent study under the supervision of a French instructor.

**GEOGRAPHY****GEOG 101-World Geography****Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. This introductory geography course surveys the processes of the earth's formation, climates and biomes, human culture and institutions, global environmental issues, and interactions within the global village. Designed for prospective elementary and social studies teachers, as well as general education students.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR GEOG 101 - World Regional Geography

For additional information: <https://dhe.mo.gov/core42.php>

**GERMAN****GERM 101-Elementary German I****Credit Hours: 3**

Prerequisite: None. Begins the four basic skills of language communication: listening, speaking, reading, and writing. Includes an introduction to the German culture. Concentrates on the present indicative tense with the course conducted primarily in German.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LANG 105 – Foreign Language I

For additional information: <https://dhe.mo.gov/core42.php>

**GERM 102-Elementary German II****Credit Hours: 3**

Prerequisite: GERM 101 with a grade of C or higher. Continuation of GERM 101 for further development of the four basic skills of language communication: listening, speaking, reading, and writing. Continues study of the German culture.

**HEALTH****HLTH 101-Personal Health and Fitness****Credit Hours: 2**

Prerequisite: None. Presents a basic knowledge of physical fitness and personal fitness; the human body, personal hygiene, food and nutrition, diet and weight control, and mental health; alcohol, narcotics and drug abuse education; and protection against communicable diseases and other health hazards.

**HLTH 102-First Aid****Credit Hours: 2**

Prerequisite: None. Prepares the student to make appropriate decisions regarding first aid care in minor or life-threatening situations. Course focuses on basic first aid techniques and when to call emergency medical services. Cardiopulmonary resuscitation (CPR) and relief of airway obstruction of the adult, child and infant, as well as use of the automated external defibrillator (AED) for the adult and child, are included in the course. American Red Cross certification cards are given for First Aid and CPR upon completion of the course.

**HEALTH INFORMATION TECHNOLOGY****HIT 100-Introduction to Health Information Technology****Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Introduction to the health care field and health information management. The health record is analyzed for content and use as it relates to documentation requirements, health care personnel responsibility, security, and organizational structure. Addresses the current and future direction of health information management.

**HIT 105-Health Care Technologies****Credit Hours: 3**

Prerequisite: CAPP 125 with a grade of C or higher. Covers the basics of electronic health records, general healthcare computer systems, data retrieval, and other EHR system topics with a focus on how these systems and issues affect healthcare.

**HIT 115-Health Care and the Law****Credit Hours: 3**

Prerequisite: HIT 100 with a grade of C or higher. Corequisite: HIT 100. Course covers medical records as legal documents focusing on procedures involved in court disclosure of medical records; laws pertaining to release of information from medical records; and medical record requirements for accrediting, approving, licensing, and certifying agencies. Covers laws and regulations governing preparation and use of medical records, responsibilities of physician, risk of malpractice, and physician's role in the hospital.

**HIT 200-Health Care Statistics and Data Analysis****Credit Hours: 3**

Prerequisites: CAPP 125 with a grade of C or higher and MATH 119 with a grade of C or higher or equivalent placement score. Course covers the practical applications of health information management concepts as they apply to health care data collection, calculating inpatient hospital statistics, analyzing statistical outcomes, comparing and benchmarking facility data to national statistics, and other providers of service. Students will also demonstrate

management skills in presenting data making recommendations based on statistical outcomes.

**HIT 204-Coding I****Credit Hours: 3**

Prerequisites: BIO 103, HEOC 119 and HIT 224 with grades of C or higher. Corequisite: HIT 224. Overview of the (International Classification of Diseases, 10th Division, Clinical Modification) ICD-10-CM code book with basic coding assignment/guidelines instructions and the basic reimbursement methodologies, specifically diagnosis related groups (DRGs). Initial preparation for CCA Exam - AHIMA.

**HIT 206-Coding II****Credit Hours: 3**

Prerequisite: HIT 204 with a grade of C or higher. Continuation of HIT 204 with the overview of the (International Classification of Diseases, 10th Division, Procedure Coding System) ICD-10-PCS code book with basic coding assignment / guidelines instructions and the basic reimbursement methodologies, specifically diagnosis related groups (DRGs). Intense simulation of actual coding practices on all major body systems. Continuation of preparation for CCA Exam - AHIMA.

**HIT 208-Coding III****Credit Hours: 3**

Prerequisites: HIT 206 and HIT 224 with grades of C or higher. Continuation of HIT 204 and HIT 206 corresponding with the overview of the CPT code book and the outpatient coding guidelines, reimbursement with major emphasis on current procedural terminology (CPT) coding. The focus is on all health information management domains. Student will study for and complete the CCA exam through AHIMA; upon passing, student will be eligible for CCA credential.

**HIT 215-Principles of Health Care Reimbursement****Credit Hours: 3**

Prerequisites: ENGL 070 with a grade of C or higher or equivalent placement scores and HIT 206 with a grade of C or higher. Course provides an understanding of the various payment systems and how reimbursement affects providers, payers, consumers, and policy makers. Explanation will be given of the managed care, commercial insurance, and government-sponsored payment systems. The student will compare and contrast systems and how to use related resources for accurate reimbursement.

**HIT 220-Health Information Management****Credit Hours: 3**

Prerequisites: BSMT 108 and HIT 100 with grades of C or higher. Course covers concepts of management as it applies to the health information management profession. Course will introduce management policies as they relate to the delivery of health care; accounting methodologies, policies and

practices that support an ethical and culturally diverse workforce; managing and leading during organizational change; and process improvement.

### **HIT 224-Human Disease and Conditions**

#### **Credit Hours: 3**

Prerequisites: BIO 103 and HEOC 119 with grades of C or higher. Introduction to the nature of disease and its effects on body systems. Course deals with the disease processes of the more common clinical disorders. Signs, symptoms, diagnosis, treatment, and preventions are covered. Students will identify most commonly used laboratory and diagnostic tests, as well as prescribed drugs used in the treatment of diseases.

### **HIT 275-Professional Practice Experience**

#### **Credit Hours: 3**

Prerequisite: Consent of program coordinator. Field-based professional practice experience in a hospital, physician's office, clinic, or other health care setting with directed projects common to a health information technologist on the job. Students will be assigned specific professional practice projects to be completed at the site and will participate in management and administrative activities. This is an unpaid work experience requiring 80 to 120 hours of participation. Student will study for and complete the RHIT exam through AHIMA; upon passing, student will be eligible for RHIT credential.

## **HEALTH OCCUPATIONS**

### **HEOC 119-Medical Terminology**

#### **Credit Hours: 3**

Prerequisite: None. Acquire a medical terminology vocabulary related to body systems necessary to communicate information in a health care environment. Focuses on the principles of medical word formation, including the basic rules of building medical words, identifying suffixes, prefixes, and combining forms related to the structure and function of the associated systems of the body. Concentration is on pronunciation, spelling and definitions of medical terms.

### **HEOC 122-Medical Terminology II**

#### **Credit Hours: 3**

Prerequisite: HEOC 120 with a grade of C or higher. Focuses on identifying suffixes, prefixes, and combining forms related to the structure and function of the associated systems of the body (integumentary, nervous, sensory, endocrine, blood, lymphatic, and female reproductive).

### **HEOC 135-Allied Health Career Development**

#### **Credit Hours: .5**

Prerequisite: None. Focuses on developing health care career potential. The job search process is presented step-by-step. Guest speakers, group activities and mock interviews will be

utilized, and resumes will be constructed. Internet sites to assist in resume writing and job searches will be explored.

### **HEOC 140-Technology and Health Care**

#### **Credit Hours: 3**

Prerequisite: None. Provides an introduction to information technology, including hardware, software, telecommunications, medical informatics, administrative applications, and telemedicine in different care delivery areas. Addresses computer-assisted instruction, online health information, and security and privacy issues. Examines using technology to improve the quality of health care as it is delivered to the client, utilized by the provider and needed to meet the mission of an institution.

### **HEOC 146-Phlebotomy**

#### **Credit Hours: 6**

Prerequisite: Consent of program coordinator. Course is designed to provide students with knowledge, skills and techniques necessary to perform as a phlebotomist in the clinical setting. Students will learn various procedures and laboratory techniques in handling human blood and/or body fluids. Students must satisfactorily perform in a laboratory setting as well as pass written tests.

### **HEOC 152-Certified Nurse Assistant**

#### **Credit Hours: 6**

Prerequisite: Consent of program coordinator. Corequisite: HEOC 155. Certified Nurse Assistant training prepares individuals for employment in a long-term care facility while teaching skills in resident care under the direct supervision of a licensed nurse. CNA and CNA Clinical will meet state requirements for CNA training. Additional state mandated requirements may be required to be employed as a CNA in a long-term care facility. Note: If a student passes HEOC 152 but does not pass HEOC 155, the student will have one additional semester to retake HEOC 155 from a regularly scheduled State Fair Community College course. Any retake of HEOC 155 after one semester will require that HEOC 152 be retaken.

### **HEOC 155-Certified Nurse Assistant Clinical**

#### **Credit Hours: 2**

Prerequisite: Consent of program coordinator. Corequisite: HEOC 152. Clinical provides 100 hours of on-the-job training with state-approved clinical supervisors in a long-term care facility. At the conclusion of the clinical sessions, a two-part, state-approved final examination must be passed. The two-part final examination includes a written or oral assessment and a practicum examination. This is a pass/fail course.

**HEOC 158-Certified Medication Technician****Credit Hours: 4**

Prerequisites: Consent of program coordinator and an active listing on the Missouri CNA Registry. Corequisite: HEOC 160. This Certified Medication Technician training program prepares individuals for employment in a long-term care facility. Skills are taught in administration of nonparenteral medications to assist licensed practical nurses (LPNs) or registered nurses (RNs) in medication therapy. Training consists of at least 60 hours of classroom instruction. Upon successful completion of both this course and HEOC 160, the student will be eligible to take the final exam to become a certified medication technician through the Missouri Department of Health and Senior Services.

**HEOC 160-Certified Medication Technician Clinical****Credit Hours: 1**

Prerequisite: Consent of program coordinator. Corequisite: HEOC 158. Training includes at least 15 hours of clinical practice under direct supervision. The student will participate in administering nonparenteral medications in a long-term care facility. This is a pass/fail course.

**HEOC 169-Social Services Director/Activities Director****Credit Hours: 3**

Prerequisite: None. The Social Services Director/Activity Director training program provides an introduction to the long-term care setting and the various methods of providing recreation and social services in this setting. It includes information that provides understanding of the regulatory process and the quality assurance system in this setting. It will include study of human aging, an overview of social work practice, an introduction to recreation service provisions, and federal and state regulations. At the end of the training, the successful student will be qualified to hold a position as an activity director or social services director in a long-term care facility.

**HEOC 180-Problems in Health Occupations****Credit Hours: 1 to 3**

Prerequisite: Consent of instructor. Independent study of a special problem in health care under the supervision of a Health Sciences instructor.

**HISTORY****HIST 101-US History Before 1877****Credit Hours: 3**

Prerequisite: ENGL 070 or ENGL 110 with a grade of C or higher or equivalent placement scores. Survey of the political, economic and social development of the United States from its European origins through the reconstruction process. A study of the Missouri Constitution is included to meet the state's requirements in Senate Bill No. 4. Students will also pass the

Missouri Higher Education Civics Exam with a 70 percent or higher in compliance with Senate Bill No. 807.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR HIST 101 - American History I

For additional information: <https://dhe.mo.gov/core42.php>

**HIST 102-US History Since 1877****Credit Hours: 3**

Prerequisite: ENGL 070 or ENGL 110 with a grade of C or higher or equivalent placement scores. Survey of the political, economic, social, and military development of the United States from 1877 to the present. A study of the Missouri Constitution is included to meet the state's requirements in Senate Bill No. 4. Students will also pass the Missouri Higher Education Civic Exam with a 70 percent or higher in compliance with Senate Bill No. 807.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR HIST 102 - American History II

For additional information: <https://dhe.mo.gov/core42.php>

**HIST 108-World History Before 1500****Credit Hours: 3**

Prerequisite: ENGL 070 or ENGL 110 with a grade of C or higher or equivalent placement scores. Survey of the political, social, military, cultural, and religious history of Europe, Asia and Africa from early human societies to 1500.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR HIST 201 - World History I

For additional information: <https://dhe.mo.gov/core42.php>

**HIST 109-World History After 1500****Credit Hours: 3**

Prerequisite: ENGL 070 or ENGL 110 with a grade of C or higher or equivalent placement scores. Survey of the political, social, military, cultural, economic, and ideological history of Europe, Asia, the Americas, and Africa from 1500 to the end of the Cold War.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR HIST 202 - World History II

For additional information: <https://dhe.mo.gov/core42.php>

**HIST 180-Problems in History****Credit Hours: 1 to 3**

Prerequisites: ENGL 070 with a grade of C or higher or equivalent placement scores and consent of instructor. Independent study of a special problem in history under the supervision of the lead history instructor.

## INDUSTRIAL TECHNOLOGY

### INDT 140-Mechanical and Fluid Power Principles

#### Credit Hours: 3

Prerequisite: None. Course includes industrial technology principles and applications involving tools, hardware, mechanical advantage, bearings, belt and gear drives, lubrication, alignment, vibration, as well as fluid power systems, pressure, flow and directional controls, actuators, conduits, pumps, fluid conditioning, and a minor emphasis on maintenance/troubleshooting.

### INDT 142-Principles of Electricity

#### Credit Hours: 3

Prerequisite: None. Course includes industrial technology principles and applications involving electrical topics of direct current, alternating current and electrical quantities and values. Topics also include Ohm's Law, electric generation, energy conversion, magnetism, electromagnetism, as well as series, parallel and combination circuits, inductance, capacitance, reactance, power factor, the application of electrical power in industry, single and poly-phase transformers, and wye and delta systems.

### INDT 144-Machine Controls

#### Credit Hours: 3

Prerequisite: None. Course includes industrial technology principles and applications involving the devices and components of industrial automation; relays, sensors and switches; fluid power components, motor starters and drives; combination of technologies in the systems of manufacturing and industrial processes; and an introduction to line diagrams of control circuits and troubleshooting.

## INDUSTRIAL ELECTRICAL MAINTENANCE

### ITEM 102-Electric Fundamentals

#### Credit Hours: 3

Prerequisite: None. Introduction to electrical theory. Topics include direct current, alternating current, electrical quantities and values, Ohm's Law, electric generation, energy conversion, magnetism, electromagnetism, series, parallel, and combination circuits.

### ITEM 104-Electrical Power

#### Credit Hours: 3

Prerequisite: ITEM 102 with a grade of C or higher. Continuation of electrical studies in alternating current (AC), inductance, capacitance, reactance, power factor, and the application of electrical power in industry, single and poly-phase transformers, and wye and delta systems.

### ITEM 106-Industrial Mechanics

#### Credit Hours: 3

Prerequisite: None. Course includes principles and applications of industrial mechanics, including tools, hardware, installation and maintenance of bearings, gear systems, belt drives, mechanical drives, principles of lubrication, vibration, and alignment.

### ITEM 107-Introduction to Robotics

#### Credit Hours: 3

Prerequisite: None. Course is designed for someone who has no experience with robotics and has little to no experience with electronics, electricity and motors. Course breaks down the physical components that make up a robot, terminology and mathematical equations for basic design needs. The course will cover safety, understanding a robot's operational umbrella, tooling designs and applications, end of arm tooling (EOAT), power transmission systems, and basics of programming, troubleshooting and maintenance. Course will provide hands-on exposure using an industrial robot(s).

### ITEM 108-Fluid Power Technology

#### Credit Hours: 3

Prerequisite: None. Course covers principles and applications of fluid power technology in industrial systems including operating, troubleshooting and maintaining hydraulic and pneumatic pressure; flow, directional control, and electrical devices; conduits, pumps, compressors, actuators, and ancillary devices; and conditioning and filtration of fluids. Critical thinking and analytical skills are emphasized.

### ITEM 109-Robotics Automation Technician I

#### Credit Hours: 3

Prerequisite: ITEM 107 with a grade of C or higher. Course is designed to provide more hands on experience and exercise for programming six axis robotic arms. Students will learn the programming functions beyond basics, and explore more operational performance features of robotics using an input sensory systems. Course will provide hands on exposure using an industrial robot(s).

### ITEM 110-Digital Principles and Applications

#### Credit Hours: 3

Prerequisite: ITEM 102 with grade of C or higher. Study of decimal, binary and hexadecimal numbering systems; Boolean algebra, basic logic and truth tables; digital/discrete logic circuits; flip-flops, timers counters; and registers.

### ITEM 112-Control Circuit Troubleshooting

#### Credit Hours: 3

Prerequisite: ITEM 104 with a grade of C or higher. Introduction to the devices and components of industrial automation, sensors, switches, fluid power components, and combination of technologies in manufacturing systems and industrial

processes. Primary emphasis on interpreting line diagrams and troubleshooting control circuits.

### **IEM 114-Motor Controls**

#### **Credit Hours: 3**

Prerequisite: IEM 112 with a grade of C or higher. Course is designed to teach students how to construct, troubleshoot and isolate malfunctions in various types of control circuits and motor starters and understand application and installation of control devices and basic principles, operation, components, and application of AC drives.

### **IEM 116-Solid State Devices**

#### **Credit Hours: 3**

Prerequisite: IEM 104 with a grade of C or higher. Comprehensive overview of solid state devices and their basic principles and applications; the composition and operating characteristics of diodes, transistors, SCRs, DIACs, TRIACs, and solid state transducers; and the application of solid state devices in rectification of alternating current (AC) into direct current (DC), power supply filters, voltage regulation, industrial relays, sensors, and alarm systems.

### **IEM 118-Analog/Digital**

#### **Credit Hours: 3**

Prerequisite: IEM 116. Covers the basic principles involving the use of analog integrated operational amplifiers in signal generation applications; integrated A/D, D/A converters and their applications; shift registers and their applications; and control and timing circuits and their applications.

### **IEM 122-Introduction to PLCs**

#### **Credit Hours: 3**

Prerequisite: None. Introduction to hardware and software of programmable logic controllers (PLCs). Course is designed to instruct students in the operating system of PLCs, configuration of hardware and communications, number systems, logic circuits, and basic programming. The ability to perform basic computer operations is necessary.

### **IEM 124-Intermediate PLCs**

#### **Credit Hours: 3**

Prerequisite: IEM 122 with a grade of C or higher. Study of the interface between machine and controller, advanced programming functions and troubleshooting. Emphasis is on developing programs and interfacing with industrial type devices.

### **IEM 126-Industrial Safety**

#### **Credit Hours: 3**

Prerequisite: None. Comprehensive study of requirements and programs of 29 Code of Federal Regulations (CFR) 1910. Application of safe work practices to industrial maintenance and manufacturing, including machine guarding, confined

space, lockout/tagout, hazardous communication, electrical and fire safety, personal protective equipment, and more. Additional topics selected based on student interest and industry emphasis.

### **IEM 128-Maintenance Management**

#### **Credit Hours: 3**

Prerequisite: None. Study of contemporary maintenance management practices, statistical applications, total productive maintenance, reliability-based procedures, predictive (PDM) and preventive (PM) maintenance, coordinate measuring machine (CMM) systems, nondestructive testing, and project management.

### **IEM 130-Principles of Refrigeration**

#### **Credit Hours: 3**

Prerequisite: None. Study of the principles of refrigeration, refrigerants, components, types of systems, operation, electrical controls, troubleshooting, servicing, and maintenance. Critical thinking and analytical skills are emphasized.

### **IEM 132-Advanced PLCs**

#### **Credit Hours: 3**

Prerequisite: IEM 124 with a grade of C or higher. Study of the hardware that is programmed with RSLogix 5000. Course is designed for students who already understand RSLogix 500 and are ready to advance to Tag based programming.

### **IEM 134-PLC Networks**

#### **Credit Hours: 3**

Prerequisite: IEM 132 with a grade of C or higher. Course will cover the installation, operation, inspection, and maintenance of industrial communication networks using serial RS232, Ethernet and data bus. Examines various interface devices used in communication and integration of these devices with computers, PLCs and web-enabled technology.

### **IEM 136-General NEC Requirements**

#### **Credit Hours: 3**

Prerequisite: IEM 104 with a grade of C or higher. Students learn to understand and apply the code to general industrial applications, wiring and protection, wiring methods and materials, and general equipment. Based on the general requirements of the National Electrical Code (NEC).

### **IEM 138-Power Distribution and Switchgear**

#### **Credit Hours: 3**

Prerequisite: IEM 136. Course will cover the installation, operation, inspection, and maintenance of industrial electrical power systems, and motor control centers; voltage, current and instrument transformers; feeder circuits and busways; switches and circuit breakers; protective devices; regulating

devices; and neutral and grounding systems using the National Electric Code (NEC) as a reference.

### **IEM 140-Transformers and Motors**

#### **Credit Hours: 3**

Prerequisite: IEM 104 with a grade of C or higher. Course examines the principles, construction, types, and applications of transformers and motors, including DC generators and motors, alternators and AC motors. Transformers and AC motors applications include single-phase and poly-phase, wye and delta.

### **IEM 146-Quality Management and Control**

#### **Credit Hours: 3**

Prerequisite: None. Study of quality management principles and quality control procedures. Students will study quality management from a historical perspective as well as current quality management techniques. Production quality control methods such as sampling, inspecting and testing used to insure accuracy and high standards in production quality will be studied.

### **IEM 150-Applications in IEM Problem Solving**

#### **Credit Hours: 1 to 4**

Prerequisite: None. Designed to allow a company to utilize an instructor to facilitate an actual problem or improvement project with a group of students or company employees and for individualized special instruction by the instructor.

### **IEM 175-IEM Internship**

#### **Credit Hours: 4 to 8**

Prerequisites: Completion of 30 technical credit hours and consent of program coordinator. Application of work skills in a supervised work environment. Companies that sponsor internships provide the supervision. The college provides general guidance and works with the sponsoring company in developing an outline of the work experiences unique to the site. Course is designed to provide the student an opportunity to demonstrate work skills, work ethics and the ability to work with others. In addition to completing the training plan, the student must submit four to eight written technical reports.

## **LITERATURE**

### **LIT 101-Introduction to Literature**

#### **Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Study of fiction, poetry and drama. Special attention is given to literary terminology and critical analysis. Recommended but not required as a preparation for other courses in literature.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LITR 100 - Introduction to Literature

For additional information: <https://dhe.mo.gov/core42.php>

### **LIT 107-American Literature**

#### **Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Study of major American authors and works from the Colonial Period to the present, emphasizing development of concepts that have shaped American life and literature.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LITR 101 - American Literature

For additional information: <https://dhe.mo.gov/core42.php>

### **LIT 109-British Literature**

#### **Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Study of major English authors, genres and works from Beowulf to the present, emphasizing the development of concepts that have shaped English life and literature.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LITR 102 - British Literature

For additional information: <https://dhe.mo.gov/core42.php>

### **LIT 112-World Literature**

#### **Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Students will examine selected works of various Asian, African and European literature in translation from the ancient world to the 20th century.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LITR 200 - World Literature

For additional information: <https://dhe.mo.gov/core42.php>

### **LIT 114-Topics in Literature**

#### **Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Study of a major writer, a literary type or a theme in literature. Specific subjects are announced each semester in which the course is offered.

## **MACHINE TOOL**

### **MACH 101-Introduction to Machining**

#### **Credit Hours: 4**

Prerequisite: None. Introduction to measuring tools used for work in machining or inspection processes. Introduces the proper setup and use of drilling machines, band saws and lathes. Theories will include use of tools and tool holders, cutting tool applications and facing and turning on the lathe. Areas of study include safety, blueprint interpretation, hand

tools, layout, and various gages and precision measuring instruments used to complete and inspect a machined part. (1 lecture, 3 lab)

### **MACH 102-Lathe and Milling Machine Operations**

#### **Credit Hours: 4**

Prerequisite: MACH 101 with a grade of C or higher.

Continuation in the application of lathe operations including: inner and outer (ID/OD) diameter turning, threading, boring, and tapering. Introduces the proper use and setup of the vertical milling machine. Applications include squaring the machine and indicating angle pieces. Areas of study include safety, blueprint interpretation and the selection of cutters, feeds and speeds. (1 lecture, 3 lab)

### **MACH 103-Milling and Grinding Machine Applications**

#### **Credit Hours: 4**

Prerequisite: MACH 102 with a grade of C or higher.

Corequisite: MACH 102. Continuation of milling machine operations including dividing heads, precise movement of machines, turntable operations, and keyways. Introduces surface grinders, including wheel selections, truing and dressing, work holders, and solutions in surface grinding. Areas of study include safety, blueprint interpretation and proper setup and use of milling and grinding attachments. (1 lecture, 3 lab)

### **MACH 104-Advanced Machining**

#### **Credit Hours: 4**

Prerequisite: MACH 103 with a grade of C or higher.

Introduces the use of the sine bar and sine plates on milling machines and surface grinders. Course presents advanced applications of lathes, mills and surface grinders. Advanced projects will be timed. Areas of study include estimation of project time and bidding process, quality control and International Standards Organization (ISO). (1 lecture, 3 lab)

### **MACH 105-Metrology**

#### **Credit Hours: 4**

Prerequisite: None. Metrology consists of three major measurement components: Dimensional Metrology (the science of calibrating and using physical measurement equipment to quantify the physical size of or distance from any given object.) Metallurgy Metrology (the science of indenting, testing, and creating traceability in materials.) and General Metrology (the science of understanding and interpreting "blue prints", recognizing errors, understanding views, and utilizing GD&T concepts. (1 lecture, 3 lab)

### **MACH 111-Introduction to CNC Machining**

#### **Credit Hours: 4**

Prerequisite: None. Introduction to CNC Machining is a CNC lab class, which offers hands on and safety driven instruction of the operation of both CNC Turning and Machining Centers.

Throughout this course, the student will have the opportunity to gain, but not limited to the following skills: semi and precision measurement, material identification, importing and exporting programs, safe setup/operation of automated machine tools, setting work and tool offsets, identifying tools, and G and M codes. (1 lecture, 3 lab)

### **MACH 117-Introduction to CNC Programming**

#### **Credit Hours: 4**

Prerequisite: MACH 111 with a grade of C or higher.

Introduction to CNC Programming builds from the already learned CNC skills, and includes basic G and M code programming of the CNC Turning and Machining Centers. Throughout this course, each student will have the opportunity to gain, but not be limited to the following skills: creating and editing basic CNC programs, proper use of canned cycles, Cutter Compensation, as well as lineal and circular interpolation. (1 lecture, 3 lab)

### **MACH 118-Intermediate CNC Machining**

#### **Credit Hours: 4**

Prerequisite: MACH 117 with a grade of C or higher.

Intermediate CNC Machining continues to build on the introductory machine operation and programming principles already learned, and now adds; probing for tool wear, measurement, and set up, also utilizing robots for automated manufacturing, the implementing of Macros and other concepts for cycle time reduction. (1 lecture, 3 lab)

### **MACH 119-Advanced CNC Machining**

#### **Credit Hours: 4**

Prerequisite: MACH 118 with a grade of C or higher.

Advanced CNC Machining student will be exposed to safe operation and programming of both the CNC Lathe and Mill. Each student will gain the following skills; semi and precision measurement, material identification, importing and exporting programs, safe setup and operation of machine tools. Student should be able to program and design fixture/work holding devices and utilize advanced tooling for many applications. (1 lecture, 3 lab)

### **MACH 134-Computer Aided Manufacturing**

#### **Credit Hours: 4**

Prerequisite: None. Computer Aided Manufacturing consists of combining both engineering design and machining processes. During this course, it will be necessary for the student to be familiar with computers and machining. Throughout this course, the student will have the opportunity to gain, but not limited to the following skills: creating, modifying 3D models, creating and editing CNC G-code. Students will combine both Modeling skills and CNC skills to create from a 3D model file a usable and fully functioning CNC program using only "program outputted code". Students will also learn how to modify code and modify CNC machine "posts". Students will also build on

the already learned skills of: importing and exporting programs safe setup/operation of automated machine tools, setting work and tool offsets, identifying tools, and G and M codes. (1 lecture, 3 lab)

### **MACH 135-Advanced Computer Aided Manufacturing**

#### **Credit Hours: 4**

Prerequisite: MACH 134 with a grade of C or higher.

Advanced Computer Aided Manufacturing consists of combining both engineering design and machining processes.

During this course we move beyond the fundamentals and move into advanced operations like 4th and 5th axis Machining. All students will need to be proficient with computers and machining. Throughout this course, the student will have the opportunity to gain, but not limited to the following skills: creating, modifying 3D models, creating and editing CNC G-code. Students will combine both Modeling skills and CNC skills to create from a 3D model file a usable and fully functioning CNC program using only "program outputted code" Students will also learn how to modify code and modify CNC machine "posts". Students will also build on the already learned skills of: importing and exporting programs safe setup/operation of automated machine tools, setting work and tool offsets, identifying tools, and G and M codes. (1 lecture, 3 lab)

### **MACH 175-Machine Tool Internship**

#### **Credit Hours: 1 to 8**

Prerequisite: Consent of program coordinator. Provides opportunity to work with a skilled machinist to better understand skills and knowledge needed and to determine how the student likes actual machine tool work.

### **MACH 180-Problems in Machine Tool**

#### **Credit Hours: 1 to 3**

Prerequisite: Consent of program coordinator. Independent study of a special problem in machine tool technology under the supervision of a machine tool instructor.

## **MARINE TECHNOLOGY**

### **MRN 101-Marine Systems Rigging I**

#### **Credit Hours: 6**

Prerequisite: None. Course provides a foundation of information and skills for a marine career. Course is offered through an agreement with the Lake Career and Technical Center.

### **MRN 105-Marine Ignition Systems**

#### **Credit Hours: 3**

Prerequisite: None. Outboard, inboard, inboard/outboard, and personal watercraft ignition systems are explored in this course. Course is offered through an agreement with the Lake Career and Technical Center.

### **MRN 107-Marine Starter and Charging Systems**

#### **Credit Hours: 2**

Prerequisite: None. Course follows the progression of starter and charging systems in the outboard, inboard/outboard and the personal watercraft. Course is offered through an agreement with the Lake Career and Technical Center.

### **MRN 109-Marine Cooling Systems**

#### **Credit Hours: 2**

Prerequisite: None. Course covers the systems used in the cooling process. Course is offered through an agreement with the Lake Career and Technical Center.

### **MRN 111-Marine Lubrication Systems**

#### **Credit Hours: 2**

Prerequisite: None. Course begins with the manual mixing of oil and fuel to provide lubrication and progresses into the different automatic oiling systems. Course is offered through an agreement with the Lake Career and Technical Center.

### **MRN 113-Marine Engine Component and Precision Measuring**

#### **Credit Hours: 3**

Prerequisite: None. Course provides the student with the skills to determine if an engine component is reusable. Course is offered through an agreement with the Lake Career and Technical Center.

### **MRN 115-Marine Shop Procedures and Business Operations**

#### **Credit Hours: 2**

Prerequisite: None. Properly completing a repair order, providing proper communication with the customer, keeping track of the unit(s) brought in for service, recording the diagnosis and repair process, and the date promised for repair completion. Course is offered through an agreement with the Lake Career and Technical Center.

### **MRN 117-Marine Engine Systems Analysis**

#### **Credit Hours: 2**

Prerequisite: None. Course covers proper break-in procedure. Course is offered through an agreement with the Lake Career and Technical Center.

### **MRN 119-Marine Systems Preventive Maintenance**

#### **Credit Hours: 4**

Prerequisite: None. Course covers maintenance items the student must be responsible to complete. Course is offered through an agreement with the Lake Career and Technical Center.

**MRN 121-Marine Power Transfer Systems****Credit Hours: 4**

Prerequisite: None. Transom plate and adapter systems, couplers, upper gear case, driveshaft housing, jet pumps, gear housings, strut bearings, and surface-piercing drive systems are part of the course. Course is offered through an agreement with the Lake Career and Technical Center.

**MRN 123-Marine Systems Troubleshooting****Credit Hours: 3**

Prerequisite: None. Course covers correct troubleshooting techniques. Course is offered through an agreement with the Lake Career and Technical Center.

**MRN 125-Marine Fuel Systems****Credit Hours: 4**

Prerequisite: None. Course will cover the complexities of marine fuel systems and automatic oiling systems. Course is offered through an agreement with the Lake Career and Technical Center.

**MRN 127-Marine Instrumentation Systems****Credit Hours: 2**

Prerequisite: None. Course promotes understanding the different manufacturer systems and sending units. Course is offered through an agreement with the Lake Career and Technical Center.

**MRN 129-Marine Power Trim/Tilt Systems****Credit Hours: 2**

Prerequisite: None. Course will enable students to understand how hydraulic pumps can manage the pressure in a hydraulic system. Course is offered through an agreement with the Lake Career and Technical Center.

**MRN 175-Marine Technology Internship****Credit Hours: 4**

Prerequisite: None. The internship consists of approximately 160 clock hours at an approved marine facility. Course is offered through an agreement with the Lake Career and Technical Center.

---

**MATHEMATICS**


---

**MATH 061-Pre-Algebra****Credit Hours: 3**

Prerequisite: Equivalent placement score. Course is designed to review basic math skills in preparation for one of the following courses: MATH 101, MATH 107, MATH 110, or the Co-Requisite course combination of MATH 111/113, MATH 111/117, MATH 111/119. This course does not apply toward a degree or certificate. Students must earn a C or higher in the course (70%+) to advance to the next math class. This is a developmental course designed to help students prepare for

college level mathematics. The course covers arithmetic operations for rational numbers (integers & fractions), and applying: ratios/rates, proportions, percentages, and perimeter/area. In addition, students will simplify numeric and algebraic expressions, solve algebraic equations, graph linear equations, write numbers in scientific notation, and perform measurement conversions.

**MATH 101-Business Math****Credit Hours: 3**

Prerequisite: MATH 061 with a grade of C or higher or equivalent placement score. Practical approach to understanding the application of mathematics within the business environment. Emphasis is placed on developing mathematical solutions to problems in the areas of marketing, accounting, finance, and banking.

**MATH 107-Technical Math I****Credit Hours: 3**

Prerequisite: MATH 061 with a grade of C or higher or equivalent placement score. Course is designed to stress applications to practical problems as they apply to trade. Topics include whole numbers, number systems, dimensions, fractions, powers, roots, exponents, scientific notation, basic algebra (linear and nonlinear equations), rate, base and percentage, precision, accuracy, tolerance, simple equations, complex equations, and trigonometric functions especially as they relate to the right triangle and the six trigonometric functions of sine, cosine, tangent, cotangent, secant, and cosecant.

**MATH 108-Technical Math II****Credit Hours: 3**

Prerequisite: MATH 107 with a grade of C or higher or equivalent placement score. Designed to stress applications to practical problems as they apply to trade. Topics include plane geometry, solid geometry, angular measure, probability, statistics, Pythagorean Theorem, and fundamentals of trigonometry.

**MATH 110-Intermediate Algebra with Review****Credit Hours: 5**

Prerequisite: MATH 061 with a grade of C or higher or equivalent placement score. This course is designed to include review of some essential mathematical concepts while providing structured support through practice and review. Topics include linear equations, inequalities, and their graphs, systems of equations in two unknowns, absolute value equations, rules of exponents, polynomials, rational expressions and equations, rational exponents, radicals and their equations, complex numbers, and solving quadratic equations using various techniques.

**MATH 111-Review of Essential Mathematics****Credit Hours: 2**

Prerequisites: MATH 061 with a grade of C or higher or equivalent placement score. Corequisite: MATH 113, MATH 117 or MATH 119. This corequisite course is designed to review essential mathematical concepts and techniques while providing structured support through practice and review. This course is for students who place just below MATH 113, MATH 117 or MATH 119. Topics include using graphical representations of data, rational and irrational numbers, 1- and 2- variable equations, inequalities, rational and exponential expressions, functions, and mathematical formulas. In order to provide customized support for each student, additional topics may be added.

**MATH 112-Intermediate Algebra****Credit Hours: 3**

Prerequisite: Equivalent placement score. Topics include linear equations, inequalities, and their graphs, systems of equations in two unknowns, absolute value equations, rational expressions and equations, rational exponents, radicals and their equations, complex numbers, and solving quadratic equations using various techniques.

**MATH 113-Mathematical Reasoning and Modeling****Credit Hours: 3**

Prerequisite: MATH 110, MATH 111 or MATH 112 with a grade of C or higher or equivalent placement score. Corequisite: MATH 111. Provides humanities students with a comprehensive overview of the skills required to navigate the mathematical demands of modern life and a deeper understanding of mathematical information. Students will develop critical thinking and problem-solving skills in order to draw conclusions, make decisions, and communicate effectively in mathematical situations that depend upon multiple factors.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR MATH 120 - Mathematical Reasoning & Modeling

For additional information: <https://dhe.mo.gov/core42.php>

**MATH 114-Precalculus Algebra****Credit Hours: 3**

Prerequisite: MATH 110 or MATH 112 with a grade of C or higher or equivalent placement score. This course prepares students for fields of study that require a high level of algebraic reasoning or calculus. Topics include the foundational principles of functions, the analysis of functions, algebraic reasoning, and matrices. Students will study the following functions: linear, quadratic, exponential, logarithmic, rational, piecewise, and absolute value.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR MATH 130 - Pre-Calculus Algebra

For additional information: <https://dhe.mo.gov/core42.php>

**MATH 117-Contemporary Mathematics****Credit Hours: 3**

Prerequisite: MATH 110, MATH 111 or MATH 112 with a grade of C or higher or equivalent placement score. Corequisite: MATH 111. Designed for students in the field of elementary education, this course will cover mathematical concepts with historical perspectives from various branches of mathematics including an introduction to set theory, logic, number theory, statistics, probabilities, combinatorics, and geometry.

**MATH 119-Statistical Reasoning****Credit Hours: 3**

Prerequisite: MATH 110, MATH 111 or MATH 112 with a grade of C or higher or equivalent placement score. Corequisite: MATH 111. This is a first course in statistics for students, such as social science majors, whose college and career paths require knowledge of the fundamentals of the collection, analysis and interpretation of data. Topics include interpretation of univariate and bivariate data using graphical and numerical methods, probability, discrete and continuous probability distributions, linear regression, an understanding of good practice in study design, statistical inference, confidence intervals, and hypothesis testing. Data-collection methods, statistical thinking and techniques, simulation, and the use of technology will support decisions and conclusions.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR MATH 110 - Statistical Reasoning

For additional information: <https://dhe.mo.gov/core42.php>

**MATH 120-Precalculus Trigonometry****Credit Hours: 3**

Prerequisite: MATH 114 or equivalent placement score. Corequisite: MATH 114. This course prepares students for the fields of science, technology, engineering, or mathematics as well as other fields that require a high level of algebraic reasoning or would require calculus. Topics include radius vector, right triangle and unit circle definitions of trigonometric functions, trig identities, graphs, inverse trig functions, trig equations, De Moivre's Theorem, and conics.

**MATH 127-Business Statistics****Credit Hours: 3**

Prerequisites: CAPP 125 with a grade of C or higher and MATH 114 with a grade of C or higher or equivalent placement score. Emphasizes data analysis, data production and statistical inference. Topics include descriptive statistics, probability, normal distributions, sampling, the central limit

theorem, confidence intervals, and hypothesis testing. Correlation and regression will be discussed time permitting.

### **MATH 130-Calculus and Analytic Geometry I**

#### **Credit Hours: 5**

Prerequisites: MATH 114 and MATH 120 with grades of C or higher or equivalent placement score. Topics include limits, continuity, derivatives, integrals of algebraic and transcendental functions, and appropriate applications.

### **MATH 131-Calculus and Analytic Geometry II**

#### **Credit Hours: 5**

Prerequisite: MATH 130 with a grade of C or higher. Topics include parametric and polar coordinates, methods of integration, series, conic sections, and application of these topics.

### **MATH 132-Calculus and Analytic Geometry III**

#### **Credit Hours: 5**

Prerequisite: MATH 131 with a grade of C or higher. Topics include parametric equations of lines and curves in space; vectors and calculus of vector functions; multivariable, differential and integral calculus; introduction to vector analysis; and application of these topics.

### **MATH 134-Differential Equations**

#### **Credit Hours: 3**

Prerequisite: MATH 132 with a grade of C or higher. Course presents linear differential equations with application, series solutions and Laplace transforms.

### **MATH 180-Problems in Math**

#### **Credit Hours: 1 to 3**

Prerequisite: Consent of instructor. Independent study of a special problem in mathematics under the supervision of a mathematics instructor.

## **MEDICAL ASSISTING**

### **MEA 101-Introduction to Medical Assisting**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Medical Assisting program. Establishes foundational concepts for the medical assistant including roles, communication, professionalism, legal and ethical issues, end of life concepts, stages of grief, working in interdisciplinary teams and safety issues. To successfully complete the course, the student must achieve 100 % of course designated MAERB core competencies and a grade of B or higher.

### **MEA 108-Medical Assisting Administrative Procedures**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Medical Assisting program. This course is part of the MEA program. Students abide by the

admission requirements for the program. Course includes records management, financial practices, insurance and coding, scheduling, office environment, and communication. Furthermore, students will achieve 100 percent of designated MAERB core competencies in the course. Students must maintain a B or higher to successfully pass the class.

### **MEA 110-Medical Scribe**

#### **Credit Hours: 2**

Prerequisites: Must be a credentialed medical assistant, have completed the Medical Assistant Skills Certificate, or currently enrolled and in good standing in a medical assisting program from an accredited college with the consent of SFCC MEA program coordinator. The student is strongly encouraged to have prior keyboarding and effective typing skills. This course addresses the roles and responsibilities of a medical scribe. Students will be expected to type dictated information. Students discover how to ask pertinent questions, correct use of anatomy and medical terminology, enter diagnostic orders, basics of medical coding, and build relationships with healthcare providers. Students must maintain a C or higher to successfully pass the class.

### **MEA 112-Medical Assisting Clinical Procedures**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Medical Assisting program. This course is part of the MEA program. Students abide by the admission requirements for the program. Course includes infection control, patient screening, general/physical examination, specialty examination, procedure/minor surgery, medication administration, office emergencies, patient education, alternative health care/community resources, communication strategies, and adaptations. Furthermore, students will achieve 100 percent of designated MAERB core competencies in the course. Students must maintain a B or higher to successfully pass the class.

### **MEA 114-Medical Assisting Advanced Skills**

#### **Credit Hours: 4**

Prerequisite: Acceptance to the Medical Assisting program. This course is part of the MEA program. Students abide by the admission requirements for the program. Course includes infection control, patient screening, general/physical examination, medication administration, vision and auditory testing and procedures, electrocardiograms, office emergencies, patient education, alternative health care/community resources, communication strategies, and adaptations. Students complete the course taking the Certified Electrocardiogram Technician (CET) credentialing exam. Furthermore, students will achieve 100 percent of designated MAERB core competencies in the course. Students must maintain a B or higher to successfully pass the class.

**MEA 116-Medical Assisting Laboratory Procedures****Credit Hours: 3**

Prerequisite: Acceptance to the Medical Assisting program. Course uses advanced concepts for a more in-depth experience in clinical, laboratory and administrative procedures. This course examines pathophysiology, patient care coordination and education, transition of care, complex billing, allergy testing, specialty examination, sterile field procedures/minor surgery, CLIA waived laboratory tests. The students complete the course by taking NHA's Certified Phlebotomy Technician (CPT) credentialing exam. Students may need additional time to meet the required number of successful phlebotomy blood draws. Students must maintain a B or higher to successfully pass this class. In addition to the overall grade, students must achieve 100% of the MAERB Core Curriculum pertinent to this course.

**MEA 190-Medical Assisting Capstone****Credit Hours: 6**

Prerequisites: MEA 108, MEA 112, MEA 114 and MEA 116 with grades of B or higher and MEA 110 with a grade of C or higher. This course is part of the MEA program. Students must have met the course progression and grade requirements. This course applies the concepts learned throughout the Medical Assistant program in the clinical setting. The student will complete a minimum of 160 hours in an ambulatory care outpatient setting applying the knowledge learned throughout the program. Students must maintain a B or higher to successfully pass the class.

**MEDICAL LABORATORY TECHNICIAN****MLT 150-Introduction to Lab Science Methods****Credit Hours: 2**

Prerequisite: Acceptance to the Medical Laboratory Technician program. Course orients the student to the concepts in the laboratory environment including safe specimen handling, testing procedures, reporting results, basic quality control, laboratory organization, and professionalism.

**MLT 210-Immunology****Credit Hours: 3**

Prerequisite: Acceptance to the Medical Laboratory Technician program. Course consists of the principles and theories of antigen and antibody reactions and the immune system as related to diagnostic serologic procedures. (3 lab)

**MLT 220-Clinical Chemistry and Urinalysis****Credit Hours: 5**

Prerequisite: Acceptance to the Medical Laboratory Technician program. Course introduces the student to methods of analysis of chemical components found in the human body, the testing methodologies for those constituents

and the results as applied to normal and abnormal disease states. (5 lab)

**MLT 250-Hematology and Coagulation****Credit Hours: 5**

Prerequisite: Acceptance to the Medical Laboratory Technician program. Course studies the cellular structures in blood, normal and abnormal cell development, alterations present in disease and the mechanisms of coagulation. (5 lab)

**MLT 260-Phlebotomy****Credit Hours: 2**

Prerequisite: Acceptance to the Medical Laboratory Technician program. Course covers various procedures in performing venipuncture and other specialized collection techniques in addition to laws and regulations for safe phlebotomy practices. (2 lab)

**MLT 270-Immunohematology****Credit Hours: 5**

Prerequisite: Acceptance to the Medical Laboratory Technician program. Course consists of concepts, applications and discrepancies of blood group testing, screening and crossmatch procedures and identifying unexpected antibodies. (5 lab)

**MLT 280-Clinical Microbiology****Credit Hours: 4**

Prerequisite: Acceptance to the Medical Laboratory Technician program. Course consists of the role of pathogenic bacteria and other microorganisms that includes bacterial culturing, differentiation and identification of human normal flora and disease-causing microorganisms. (4 lab)

**MLT 290-Parasitology, Mycology and Virology****Credit Hours: 1**

Prerequisite: Acceptance to the Medical Laboratory Technician program. Course introduces the student to parasites, fungus and viruses and their role in human health and disease.

**MLT 291-Hematology and Coagulation Practicum****Credit Hours: 2**

Prerequisite: Acceptance to the Medical Laboratory Technician program. Supervised clinical practice coordinated by the consortium in the hematology lab of selected clinical affiliates.

**MLT 292-Clinical Chemistry Practicum****Credit Hours: 2**

Prerequisite: Acceptance to the Medical Laboratory Technician program. Supervised clinical practice coordinated by the consortium in the clinical chemistry lab of selected clinical affiliates.

**MLT 293-Clinical Microbiology Practicum****Credit Hours: 2**

Prerequisite: Acceptance to the Medical Laboratory Technician program. Supervised clinical practice coordinated by the consortium in the microbiology lab of selected clinical affiliates.

**MLT 294-Clinical Immunohematology Practicum****Credit Hours: 2**

Prerequisite: Acceptance to the Medical Laboratory Technician program. Supervised clinical practice coordinated by the consortium in the immunohematology lab of selected clinical affiliates.

---

**MUSIC**


---

**MUS 100-Music Theory I****Credit Hours: 3**

Prerequisite: MUS 100B or music theory placement test.  
Corequisites: MUS 100B and MUS 105. Introduction to musical elements of notation, scales, key signatures, rhythms, melodies and harmonies, and their application within the context of music theory. Students must possess at least a basic understanding of music notation (names of notes, note values, etc.) when enrolling in this course as demonstrated by a grade of C or higher on the music theory placement test given on the first day of class. Those students not earning a C or higher will be concurrently enrolled in MUS 100B for the semester in order to strengthen foundation skills and continue as a music major.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR MUSC 101 - Music Fundamentals

For additional information: <https://dhe.mo.gov/core42.php>

**MUS 100B-Exploring Music Theory****Credit Hours: 2**

Prerequisite: None. For students interested in enhancing their musicianship, exploring how music works, preparing for more serious collegiate study of music theory, or strengthening their fundamental music theory skills.

**MUS 101-Music Appreciation****Credit Hours: 3**

Prerequisite: None. Overview providing knowledge of the basic elements of music, the important musical masterpieces of various eras and the significant composers in musical history. A portion of the course time is devoted to listening to recordings and viewing supporting video footage of selected composers and performers. Students enrolled in this course must be able to independently attend two live concerts at some point in the course.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR MUSC 100 - Music Appreciation

For additional information: <https://dhe.mo.gov/core42.php>

**MUS 102-History of Rock Music****Credit Hours: 3**

Prerequisite: None. Analyses by decade of the many styles of modern music that have fallen under the descriptive term of rock and roll resulting in an understanding of rock music's importance as a cultural, generational and historical force in the 20th century. Focus will be given to key performing artists, groups and music trends in each decade from 1950 to the present. Lecture and discussion will also include the role that gender, race and socio-political events played in the music of the second half of the 20th century.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR MUSC 100RP - Music Appreciation-Rock/Pop

For additional information: <https://dhe.mo.gov/core42.php>

**MUS 103-Music History and Literature Before 1800****Credit Hours: 3**

Prerequisite: None. Survey of music history and literature from its beginnings through the Baroque era as well as the role of music in the historical fabric of each era. Instrumental and vocal/choral genres and major composers will be studied. A significant portion of course time will be devoted to listening to recordings of appropriate music, composers and performers.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR MUSC 103 - Music History I

For additional information: <https://dhe.mo.gov/core42.php>

**MUS 104-Music History and Literature Since 1800****Credit Hours: 3**

Prerequisite: None. Survey of music history and literature from the Classical era to the present as well as the role of music in the historical fabric of each era. Instrumental and vocal/choral genres and major composers will be covered. A significant portion of course time will be devoted to listening to recordings of appropriate music, composers and performers.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR MUSC 104 - Music History II

For additional information: <https://dhe.mo.gov/core42.php>

**MUS 105-Aural Training I****Credit Hours: 1**

Prerequisite: None. Corequisite: MUS 100. Introduction to musical elements of notation, scales, key signatures, rhythms, melodies, and harmonies, and their application within the context of music theory. Students must possess at least a

basic understanding of music notation (names of notes, note values, etc.) when enrolling in this course as demonstrated by a grade of C or higher on the music theory placement exam given on the first day of class. Those students not earning a C or higher will be concurrently enrolled in MUS 100B for the semester in order to strengthen foundation skills and continue as a music major.

### **MUS 106-Music Theory II**

#### **Credit Hours: 3**

Prerequisite: MUS 100. Corequisite: MUS 109. Continuation of MUS 100, developing theoretical competency in music notation, rhythm and meter, scales, intervals, triads, and melodic and harmonic analysis.

### **MUS 107-Music Theory III**

#### **Credit Hours: 3**

Prerequisite: MUS 106. Corequisite: MUS 110. Continuation of MUS 106 resulting in the application of more advanced theory concepts including the use of primary and secondary triads and seventh chords, the introduction of altered chords, modulations, and the use of cadential figures.

### **MUS 108-Music Theory IV**

#### **Credit Hours: 3**

Prerequisite: MUS 107. Corequisite: MUS 111. Continuation of MUS 107 that will introduce advanced theory topics such as the use of modality and counterpoint in music as well as late 19th century harmonic functions and early 20th century compositional techniques. This is the terminal theory course for all music majors.

### **MUS 109-Aural Training II**

#### **Credit Hours: 1**

Prerequisite: MUS 105. Corequisite: MUS 106. Provides practical application of the skills being learned in MUS 106 through sight singing, solfege and rhythmic, melodic and harmonic dictation. Enhances and supports confidence in music composition and performance through the aural process.

### **MUS 110-Aural Training III**

#### **Credit Hours: 1**

Prerequisite: MUS 109. Corequisite: MUS 107. Provides practical application of the skills learned in MUS 107 through more advanced sight singing, solfege and rhythmic, melodic and harmonic dictation experiences. Enhances and supports confidence in writing and performing music through the aural process.

### **MUS 111-Aural Training IV**

#### **Credit Hours: 1**

Prerequisite: MUS 110. Corequisite: MUS 108. Provides practical application of the skills learned in MUS 108 through

advanced sight singing, solfege and rhythmic, melodic and harmonic dictation experiences. Enhances and supports confidence in writing and performing music through the aural process. This is the terminal aural training course for all music majors.

### **MUS 119-Jazz Band I**

#### **Credit Hours: 1**

Prerequisite: Consent of instructor. A select ensemble that performs band literature representing the various styles and genres of traditional and nontraditional jazz. Instruction will focus on skills required for successful performance (tone, articulation, breathing, balance, rhythm, etc.).



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTRPERF102B- Music Performance-Band

For additional information: <https://dhe.mo.gov/core42.php>

### **MUS 120-Jazz Band II**

#### **Credit Hours: 1**

Prerequisites: MUS 119 and consent of instructor. A select ensemble that performs band literature representing the various styles and genres of traditional and nontraditional jazz. Second enrollment in Jazz Band will focus on advancing those skills required for successful performance (tone, articulation, breathing, balance, rhythm, etc.).

### **MUS 121-Jazz Band III**

#### **Credit Hours: 1**

Prerequisites: MUS 120 and consent of instructor. A select ensemble that performs band literature representing the various styles and genres of traditional and nontraditional jazz. Third enrollment in Jazz Band will focus on advancing those skills required for successful performance (tone, articulation, breathing, balance, rhythm, etc.).

### **MUS 122-Jazz Band IV**

#### **Credit Hours: 1**

Prerequisites: MUS 121 and consent of instructor. A select ensemble that performs band literature representing the various styles and genres of traditional and nontraditional jazz. Fourth enrollment in Jazz Band will focus on advancing those skills required for successful performance (tone, articulation, breathing, balance, rhythm, etc.).

### **MUS 123-Jazz Band V**

#### **Credit Hours: 1**

Prerequisites: MUS 122 and consent of instructor. A select ensemble that performs band literature representing the various styles and genres of traditional and nontraditional jazz. Fifth enrollment in Jazz Band will focus on advancing those skills required for successful performance (tone, articulation, breathing, balance, rhythm, etc.).

**MUS 124-Jazz Band VI****Credit Hours: 1**

Prerequisites: MUS 123 and consent of instructor. A select ensemble that performs band literature representing the various styles and genres of traditional and nontraditional jazz. Sixth enrollment in Jazz Band will focus on advancing those skills required for successful performance (tone, articulation, breathing, balance, rhythm, etc.).

**MUS 136-Applied Instrumental Lessons I****Credit Hours: 1 to 2**

Prerequisite: None. Performance-oriented study of the technique and literature associated with a specific musical instrument through weekly private lessons and student independent study. Performance on one recital and final jury required.

**MUS 137-Applied Instrumental Lessons II****Credit Hours: 1 to 2**

Prerequisite: MUS 136. Performance-oriented study of the technique and literature associated with a specific musical instrument through weekly private lessons and student independent study. Performance on one recital and final jury required.

**MUS 138-Applied Instrumental Lessons III****Credit Hours: 1 to 2**

Prerequisite: MUS 137. Performance-oriented study of the technique and literature associated with a specific musical instrument through weekly private lessons and student independent study. Performance on one recital and final jury required.

**MUS 139-Applied Instrumental Lessons IV****Credit Hours: 1 to 2**

Prerequisite: MUS 138. Performance-oriented study of the technique and literature associated with a specific musical instrument through weekly private lessons and student independent study. Performance on one recital and final jury required.

**MUS 139B-Applied Instrumental Lessons V****Credit Hours: 1 to 2**

Prerequisite: MUS 139. Performance-oriented study of the technique and literature associated with a specific musical instrument through weekly private lessons and student independent study. Performance on one recital and final jury required.

**MUS 139C-Applied Instrumental Lessons VI****Credit Hours: 1 to 2**

Prerequisite: MUS 139B. Performance-oriented study of the technique and literature associated with a specific musical instrument through weekly private lessons and student

independent study. Performance on one recital and final jury required.

**MUS 140-Guitar Class I****Credit Hours: 2**

Prerequisite: None. Practical study of the guitar designed for beginning students with less than one year of experience.

**MUS 141-Guitar Class II****Credit Hours: 2**

Prerequisite: MUS 140 or consent of instructor. Continuation of those skills learned in MUS 140 leading to more advanced guitar performance skills. Designed to allow the student to continue studying guitar beyond MUS 140.

**MUS 145-Piano Class I****Credit Hours: 2**

Prerequisite: None. Study of piano performance skills, especially for students with little or no previous training. Covers rudiments of music, hand positions, and performing hands separately and together; intervals, triads and scales are also covered. Required for music majors.

**MUS 146-Piano Class II****Credit Hours: 2**

Prerequisite: MUS 145. Continuation of the study of piano performance skills learned in MUS 145. Continued work performing hands separately and together, intervals, triads, simple harmony, and scales are covered. Required for music majors.

**MUS 147-Piano Class III****Credit Hours: 2**

Prerequisite: MUS 146. Continuation of the study of piano performance skills learned in MUS 146 with emphasis on specific skills necessary to pass the piano proficiency examination. Required for music majors.

**MUS 148-Piano Class IV****Credit Hours: 2**

Prerequisite: MUS 147. Continuation of the study of piano performance skills learned in MUS 147 with emphasis on specific skills necessary to pass the piano proficiency examination. Required for music majors.

**MUS 150-Applied Piano Lessons I****Credit Hours: 1 to 2**

Prerequisite: One year of a piano course. Private piano lessons. Intended only for serious piano students.

**MUS 151-Applied Piano Lessons II****Credit Hours: 1 to 2**

Prerequisite: MUS 150. Second enrollment in piano lessons. Private piano lessons. Intended only for serious piano students.

**MUS 152-Applied Piano Lessons III****Credit Hours: 1 to 2**

Prerequisite: MUS 151. Third enrollment in piano lessons. Private piano lessons. Intended only for serious piano students.

**MUS 153-Applied Piano Lessons IV****Credit Hours: 1 to 2**

Prerequisite: MUS 152. Fourth enrollment in Piano Lessons. Private piano lessons. Intended only for serious piano students.

**MUS 155-Voice Class****Credit Hours: 2**

Prerequisite: None. Study of vocal techniques and beginning vocal performance. Open to any interested students. Will include both group and individual singing.

**MUS 160-Applied Voice Lessons I****Credit Hours: 1**

Prerequisite: One year of a voice course. Performance-oriented study of voice through weekly private applied lesson and student independent study. Instruction will focus on individual vocal needs and strengths. Performance on one recital and final jury required.

**MUS 161-Applied Voice Lessons II****Credit Hours: 1**

Prerequisite: MUS 160. Performance-oriented study of voice through weekly private applied lessons and student independent study. Instruction will focus on individual vocal needs and strengths. Performance on one recital and final jury required.

**MUS 162-Applied Voice Lessons III****Credit Hours: 1**

Prerequisite: MUS 161. Performance-oriented study of voice through weekly private applied lessons and student independent study. Instruction will focus on individual vocal needs and strengths. Performance on one recital and final jury required.

**MUS 163-Applied Voice Lessons IV****Credit Hours: 1**

Prerequisite: MUS 162. Performance-oriented study of voice through weekly private applied lessons and student independent study. Instruction will focus on individual vocal

needs and strengths. Performance on one recital and final jury required.

**MUS 163B-Applied Voice Lessons V****Credit Hours: 1**

Prerequisite: MUS 163. Performance-oriented study of voice through weekly private applied lesson and student independent study. Instruction will focus on individual vocal needs and strengths. Performance on one recital and final jury required.

**MUS 163C-Applied Voice Lessons VI****Credit Hours: 1**

Prerequisite: MUS 163B. Performance-oriented study of voice through weekly private applied lessons and student independent study. Instruction will focus on individual vocal needs and strengths. Performance on one recital and final jury required.

**MUS 175-Chamber Singers I****Credit Hours: 1**

Prerequisite: Consent of instructor. Select choir of mixed voices that performs chamber music from all historical periods. Instruction will focus on ensemble skills necessary for successful performance (tone production, diction, blend, balance, phrasing, etc.).



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 102C - Music Performance-Choir

For additional information: <https://dhe.mo.gov/core42.php>

**MUS 176-Chamber Singers II****Credit Hours: 1**

Prerequisites: MUS 175 and consent of instructor. Second enrollment in chamber singers. Select choir of mixed voices that performs chamber music from all historical periods. Instruction will focus on ensemble skills necessary for successful performance (tone production, diction, blend, balance, phrasing, etc.).

**MUS 177-Chamber Singers III****Credit Hours: 1**

Prerequisites: MUS 176 and consent of instructor. Third enrollment in chamber singers. Select choir of mixed voices that performs chamber music from all historical periods. Instruction will focus on ensemble skills necessary for successful performance (tone production, diction, blend, balance, phrasing, etc.).

**MUS 178-Chamber Singers IV****Credit Hours: 1**

Prerequisites: MUS 177 and consent of instructor. Fourth enrollment in chamber singers. Select choir of mixed voices

that performs chamber music from all historical periods. Instruction will focus on ensemble skills necessary for successful performance (tone production, diction, blend, balance, phrasing, etc.).

### **MUS 178B-Chamber Singers V**

#### **Credit Hours: 1**

Prerequisites: MUS 178 and consent of instructor. Fifth enrollment in chamber singers. Select choir of mixed voices that performs chamber music from all historical periods. Instruction will focus on ensemble skills necessary for successful performance (tone production, diction, blend, balance, phrasing, etc.).

### **MUS 178C-Chamber Singers VI**

#### **Credit Hours: 1**

Prerequisites: MUS 178B and consent of instructor. Sixth enrollment in chamber singers. Select choir of mixed voices that performs chamber music from all historical periods. Instruction will focus on ensemble skills necessary for successful performance (tone production, diction, blend, balance, phrasing, etc.).

### **MUS 180-Problems in Music**

#### **Credit Hours: 1 to 3**

Prerequisite: Consent of instructor. Independent study of a special problem in music under the supervision of a music instructor.

### **MUS 195-Concert and Recital Attendance**

#### **Credit Hours: 0**

Prerequisite: None. Attendance of at least eight music concerts and/or recitals in a semester performed by college soloists and ensembles or community nonacademic performing groups such as professional or semi-professional ensembles, operas or university musicals. Community performances must be pre-approved by the Music Arts program coordinator prior to attending. This is a pass/fail course.

### **MUS 196-Concert Band I**

#### **Credit Hours: 1**

Prerequisite: Consent of instructor. Study and performance of music written specifically for instrumental music ensembles. Focuses on musical skills required for successful performance of literature from various musical genres.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 102B - Music Performance-Band

For additional information: <https://dhe.mo.gov/core42.php>

### **MUS 197-Concert Band II**

#### **Credit Hours: 1**

Prerequisites: MUS 196 and consent of instructor. Study and performance of music written specifically for instrumental music ensembles. Focuses on musical skills required for successful performance of literature from various musical genres.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 102B - Music Performance-Band

For additional information: <https://dhe.mo.gov/core42.php>

### **MUS 198-Concert Band III**

#### **Credit Hours: 1**

Prerequisites: MUS 197 and consent of instructor. Study and performance of music written specifically for instrumental music ensembles. Focuses on musical skills required for successful performance of literature from various musical genres.

### **MUS 199-Concert Band IV**

#### **Credit Hours: 1**

Prerequisites: MUS 198 and consent of instructor. Study and performance of music written specifically for instrumental music ensembles. Focuses on musical skills required for successful performance of literature from various musical genres.

### **MUS 200-Concert Band V**

#### **Credit Hours: 1**

Prerequisites: MUS 199 and consent of instructor. Study and performance of music written specifically for instrumental music ensembles. Focuses on musical skills required for successful performance of literature from various musical genres.

### **MUS 201-Concert Band VI**

#### **Credit Hours: 1**

Prerequisites: MUS 200 and consent of instructor. Study and performance of music written specifically for instrumental music ensembles. Focuses on musical skills required for successful performance of literature from various musical genres.

### **MUS 202-Concert Band VII**

#### **Credit Hours: 1**

Prerequisites: MUS 201 and consent of instructor. Study and performance of music written specifically for instrumental music ensembles. Focuses on musical skills required for successful performance of literature from various musical genres.

**MUS 203-Concert Band VIII****Credit Hours: 1**

Prerequisites: MUS 202 and consent of instructor. Study and performance of music written specifically for instrumental music ensembles. Focuses on musical skills required for successful performance of literature from various musical genres.

**MUS 210-Jazz Choir I****Credit Hours: 2**

Prerequisite: Consent of instructor. This small vocal ensemble performs a wide range of vocal jazz/contemporary periods and styles. Instruction focuses on those vocal skills unique to jazz including harmonies, rhythms, scat singing, and improvisation.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 102C - Music Performance-Choir

For additional information: <https://dhe.mo.gov/core42.php>

**MUS 211-Jazz Choir II****Credit Hours: 2**

Prerequisites: MUS 210 and consent of instructor. This small vocal ensemble performs a wide range of vocal jazz/contemporary periods and styles. Instruction focuses on those vocal skills unique to jazz including harmonies, rhythms, scat singing, and improvisation.

**MUS 212-Jazz Choir III****Credit Hours: 2**

Prerequisites: MUS 211 and consent of instructor. This small vocal ensemble performs a wide range of vocal jazz/contemporary periods and styles. Instruction focuses on those vocal skills unique to jazz including harmonies, rhythms, scat singing, and improvisation.

**MUS 213-Jazz Choir IV****Credit Hours: 2**

Prerequisites: MUS 212 and consent of instructor. This small vocal ensemble performs a wide range of vocal jazz/contemporary periods and styles. Instruction focuses on those vocal skills unique to jazz including harmonies, rhythms, scat singing, and improvisation.

**MUS 214-Jazz Choir V****Credit Hours: 2**

Prerequisites: MUS 213 and consent of instructor. This small vocal ensemble performs a wide range of vocal jazz/contemporary periods and styles. Instruction focuses on those vocal skills unique to jazz including harmonies, rhythms, scat singing, and improvisation.

**MUS 215-Jazz Choir VI****Credit Hours: 2**

Prerequisites: MUS 214 and consent of instructor. This small vocal ensemble performs a wide range of vocal jazz/contemporary periods and styles. Instruction focuses on those vocal skills unique to jazz including harmonies, rhythms, scat singing, and improvisation.

---

**NETWORKING**


---

**NET 101-Introduction to Networks****Credit Hours: 3**

Prerequisite: None. Introduces the architecture, structure, functions, components, and models of the internet and computer networks. The principles of Internet Protocol (IP) addressing, fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple local area networks (LANs), perform basic configurations for routers and switches and implement IP addressing schemes.

**NET 102-Networking Essentials****Credit Hours: 3**

Prerequisite: None. Introduces the student to the use and implementation of local area networks and basic network design concepts. Subject matter covered during this course all align with current Network+ certification topics and help prepare a student for this certification.

**NET 103-Routing and Switching Essentials****Credit Hours: 3**

Prerequisite: NET 101 with a grade of C or higher. Describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area open shortest path first (OSPF), virtual LANs, and inter-virtual LAN routing in both IPv4 and IPv6 networks.

**NET 106-Introduction to Network Security****Credit Hours: 3**

Prerequisite: NET 101 with a grade of C or higher. Course will introduce students to a basic understanding of computer, network and organizational security as it relates to the information technology field.

**NET 120-Network Server****Credit Hours: 3**

Prerequisite: NET 101 with a grade of C or higher. Course will cover the current popular server operating system. Topics include planning a network, installing hardware and software,

management, client accounts, and troubleshooting. Course will be structured to the requirements for certification.

### **NET 125-Linux Operating Systems**

#### **Credit Hours: 3**

Prerequisite: NET 101 with a grade of C or higher. Course will cover the basics of operating and managing a Linux-based operating system.

### **NET 126-Network Client**

#### **Credit Hours: 3**

Prerequisite: NET 101 with a grade of C or higher. Study of the operating system used on today's workstations. Installation, administration, configuring files, security, and local and network printing will be presented from a network administrator's viewpoint. Troubleshooting and networking the operating system will be included.

### **NET 135-SQL Server System Administration**

#### **Credit Hours: 3**

Prerequisite: NET 120 with a grade of C or higher. Course covers how to install, configure and administrate a structured query language (SQL) server. Topics include configuring database options (capacity, connectivity and performance); automating data transfer and manipulation with data transformation services (DTS) packages; using SQL server replication services; managing security (authentication, logins, permissions, and alerts); monitoring and fine-tuning system performance; performing backups and restorations; clustering databases; supporting SQL server in a clustered environment; implementing disaster recovery; and optimizing clustering performance.

### **NET 136-Exchange Server Administration**

#### **Credit Hours: 3**

Prerequisite: NET 120 with a grade of C or higher. Study of installing, configuring and administering Microsoft Exchange Server. Configure Microsoft Directory Services, administer groups and public folder solutions for Exchange Server. Deployment of mail clients such as Outlook and Outlook Web Access, as well as configuring recipient objects for email, instant messaging and chat. Learn to troubleshoot messaging connectivity and how to resolve problems with clients, routing, foreign mail systems, and links between servers. Additional topics include enhanced Exchange Server Security using v3 certificates, virtual servers, and Microsoft Key Management Server; optimizing messaging, collaboration and calendaring services; managing the Microsoft Web Storage System; and developing a backup and recovery plan for system and user data.

### **NET 138-Network Directory Services**

#### **Credit Hours: 3**

Prerequisite: NET 120 with a grade of C or higher. Study of the planning, configuring and administering of network directory services and infrastructure on a LAN. Topics include the installation and configuration of domain name system (DNS); the administration of the network users' environment and software using group policies; remote installation services (RIS); management of users, groups, shared folders, and network resources; implementing network security and security troubleshooting; and monitoring and optimizing the directory services.

### **NET 140-PC Hardware**

#### **Credit Hours: 3**

Prerequisite: None. Presents microcomputer architecture, input/output (I/O) and systems operation. Other topics include peripherals, diagnostics, drives, memory, and maintenance procedures. Laboratory consists of troubleshooting selected computer systems.

### **NET 142-PC Operating Systems**

#### **Credit Hours: 3**

Prerequisite: None. Study of computer operating systems including Windows, Linux and DOS, with requirements of necessary hardware and known problems and features. Laboratory consists of installation, maintenance and repair of operating systems.

### **NET 158-Network Firewalls**

#### **Credit Hours: 3**

Prerequisites: NET 106 and NET 203 with grades of C or higher. Course will cover the functions, features and configuration of a firewall as applied in a network. Covers setup, management, traffic filtering, and virtual private networks (VPNs). Students will configure and implement firewalls to protect the network from external threats. Hands-on coursework is included in the course.

### **NET 175-Network Administration Internship**

#### **Credit Hours: 4**

Prerequisite: Consent of program coordinator. Designed for practical application in the operations of a network. Provides on-the-job training work experience in the area of computer networks. Student will be supervised and evaluated by the instructor.

### **NET 180-Networking Project**

#### **Credit Hours: 1 to 3**

Prerequisite: Consent of program coordinator. Independent study of a special problem in networking under the supervision of a networking instructor.

**NET 202-Digital Forensics****Credit Hours: 3**

Prerequisites: NET 101 and NET 106 with grades of C or higher. Course will introduce students to the basics concepts and skills used when investigating possible computer crimes. Such skills could be beneficial in a variety of roles, i.e., working with law enforcement, private contractors, etc.

**NET 203-Enterprise Networks, Security and Automation****Credit Hours: 3**

Prerequisite: NET 103 with a grade of C or higher. Discusses the wide area network (WAN) technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students also develop the knowledge and skills needed to implement internet protocol security (IPsec) and virtual private network (VPN) operations in a complex network.

**NET 206-Ethical Hacking****Credit Hours: 3**

Prerequisites: NET 101 and NET 106 with grades of C or higher. Course will introduce students to the basics of scanning, testing, hacking, and securing resources. Expanding upon the basics of general security practices, students will gain a better understanding of how to better secure resources.

**NET 222-Enterprise Applications I****Credit Hours: 3**

Prerequisites: NET 120 and NET 138 with grades of C or higher. Course will introduce students to various server applications that are widely utilized throughout the information systems industry.

**NET 223-Enterprise Applications II****Credit Hours: 3**

Prerequisites: NET 120 and NET 138 with grades of C or higher. Course will introduce students to various server applications that are widely utilized throughout the information systems industry.

**NET 231-Mobile Networking****Credit Hours: 3**

Prerequisites: NET 101 and NET 126 with grades of C or higher. This course will teach students the basics of configuration, supporting and managing mobile devices in the corporate network.

**NET 238-Server Virtualization****Credit Hours: 3**

Prerequisite: NET 120 with a grade of C or higher. Course will teach students in the setup, configuration and management of virtualized servers.

**NET 240-Enterprise Storage****Credit Hours: 3**

Prerequisite: NET 120 with a grade of C or higher. Course is designed to introduce students to technologies utilized for data storage in the enterprise environment.

**NET 280-Cisco Capstone****Credit Hours: 1**

Prerequisite: NET 203 with a grade of C or higher. This course will be focused study for students preparing to take the Cisco CCNA Exam. Students will learn exam study techniques, focus study on topics of need, and utilize practice exams to help prepare for test.

**NET 281-A+ Capstone****Credit Hours: 1**

Prerequisite: NET 140 and NET 142 with grades of C or higher. This course will be focused study for students preparing to take the CompTIA A+ Exam. Students will learn exam study techniques, focus study on topics of need, and utilize practice exams to help prepare for test.

**NET 282-Security+ Capstone****Credit Hours: 1**

Prerequisite: NET 106 with a grade of C or higher. This course will be focused study for students preparing to take the CompTIA Security+ Exam. Students will learn exam study techniques, focus study on topics of need, and utilize practice exams to help prepare for test.

**NET 283-Windows Client Capstone****Credit Hours: 1**

Prerequisite: NET 126 with a grade of C or higher. This course will be focused study for students preparing to take the Windows Desktop Operating Systems. Students will learn exam study techniques, focus study on topics of need, and utilize practice exams to help prepare for test.

---

**NURSING**


---

**NURS 102-CPR for Health Care Providers****Credit Hours: .5**

Prerequisite: None. American Heart Association course teaches health care providers how to recognize and respond to life-threatening emergencies such as respiratory arrest, cardiac arrest and foreign-body obstruction in infants, children and adults. The skills necessary to respond to these emergencies are demonstrated and practiced during the

course. Course includes use of an automated external defibrillator (AED). Upon successful completion the student will be issued an American Heart Association Cardiopulmonary Resuscitation (CPR) card for Health Care Providers. This is a pass/fail course.

### **NURS 103-CPR Recertification**

#### **Credit Hours: .25**

Prerequisite: Consent of instructor. Course is required to maintain American Heart Association CPR certification in the health care field. A current American Heart Association CPR card for Health Care Provider is required to enroll in the course. This is a pass/fail course.

### **NURS 110-Personal Vocational Concepts**

#### **Credit Hours: 1**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Evidence-based practice concepts in nursing are introduced as they relate to standards of care, behavioral concepts important to the nurse, history of nursing, role identification and responsibility, interprofessional collaboration, the quality improvement process, and ethical and legal aspects of the licensed practical nurse and registered nurse.

### **NURS 112-Introduction to Psycho-Social Health**

#### **Credit Hours: 2**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Basic concepts of wellness and illness, caring, communication techniques, and growth and development across the life cycle are introduced with an emphasis on evidence-based care. Special circumstances and interpersonal relationships, such as the impact of violence and abuse, cultural awareness, the grieving process and spiritual needs of the individual and family will be explored. Special treatment modalities such as medications will be discussed with regard to concepts of mental health.

### **NURS 114-Fundamentals I**

#### **Credit Hours: 2**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Essential nursing skills utilizing current standards of practice required for entry-level nurses are introduced. The learner will demonstrate an understanding of how to assist clients with important daily activities and basic nursing assessment skills through both classroom and hands-on learning experiences. (1.5 lecture, .5 lab)

### **NURS 117-Fundamentals II**

#### **Credit Hours: 3**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Presents more advanced essential nursing skills based upon current standards of practice that are required for entry-level nurses. The learner is introduced to the nursing process that is utilized in the delivery of nursing care. Skills

are presented through both classroom and hands-on learning experiences and includes development of nursing assessment skills, medication administration, intravenous (IV) therapy, use of information technology, and other technical skills. (2 lecture, 1 lab)

### **NURS 118-Fundamentals II Clinical**

#### **Credit Hours: 1.5**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Essential nursing skills utilizing current standards of practice presented in NURS 114 and NURS 117 will be applied in both long-term and acute care clinical settings. Skills that will be mastered include physical assessment, therapeutic communication, basic nursing care, IV therapy, and nursing documentation. This is a pass/fail course.

### **NURS 119-Allied Health Pharmacology**

#### **Credit Hours: 3**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Basic pharmacologic, pharmacodynamics and pharmacokinetic principles for the most common drug classifications and specific select drugs will be explored using evidence-based practices. Emphasis on patient safety needs are incorporated through individualized teaching related to the most common drug classifications.

### **NURS 122-Adult Health I**

#### **Credit Hours: 4**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Entry-level, evidence-based nursing care will be discussed for adult and elderly clients experiencing alterations in the integumentary, respiratory and cardiac systems; clients undergoing surgery; and clients with cancer.

### **NURS 124-Adult Health II**

#### **Credit Hours: 4**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. The basic nursing course addresses evidence-based practice principles and nursing care of adult and elderly clients experiencing alterations in renal, neurological and gastrointestinal systems, as well as the client who has developed diabetes mellitus. Included are basic strategies for leadership and conflict resolution.

### **NURS 126-Adult Health Nursing Clinical**

#### **Credit Hours: 3**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Basic nursing concepts utilizing current standards and evidence-based best practices are applied to the acute clinical setting and clinical simulation. The student will provide culturally sensitive nursing care to the client and family with altered health status, while evaluating laboratory and diagnostic findings, dosage calculation, medication effectiveness and client responses. This is a pass/fail course.

**NURS 128-Adult Health III****Credit Hours: 2**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Principles of evidence-based nursing care are addressed for adult and elderly clients experiencing alterations in the endocrine, sensory, musculoskeletal, hematological, and immune systems.

**NURS 130-Adult Health Care Coordination Clinical****Credit Hours: 2**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Focuses on the utilization and application of basic skills gained from the practical nursing curriculum and incorporates current standards and evidence-based practices for the role of an entry-level nurse. Emphasis is placed on principles of leadership, conflict resolution, coordinating client care, and applying basic principles across the lifespan, particularly the elderly client. This is a pass/fail course.

**NURS 132-Nutrition****Credit Hours: 3**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Essential nutrient digestion, absorption, metabolism, and excretion are emphasized. Diet analysis and current issues in nutrition will aid the student in patient-centered care, applying evidence-based practice in a culturally competent manner to the basic concepts of everyday situations throughout the life cycle.

**NURS 134-Nursing Care Childbearing Family****Credit Hours: 2**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Foundational learning that focuses on health care and wellness promotion for uncomplicated clients (care conditions). Using evidence based practice the course addresses cultural diversity, health disparities, and standards of care during the reproductive years, including the laboring woman, postpartum patient/family, the newborn, and gynecological issues.

**NURS 136-Childbearing Family Clinical****Credit Hours: 1.5**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Foundational learning that focuses on women's health and wellness promotion across the lifespan. In addition, the course explores evidenced-based and culturally sensitive care for the laboring woman, postpartum patient/family and patients experiencing gynecological issues. This is a pass/fail course.

**NURS 140-Nursing Care Child Rearing Family****Credit Hours: 2**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Concepts of assessment, growth and development,

nutrition for the pediatric patient, medication administration for children, common recurring health conditions, and evidence-based nursing care of the hospitalized child are discussed.

**NURS 142-Child Rearing Family Clinical****Credit Hours: 1.5**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. Participation in activities to develop skills in family-centered nursing care of children is expected. Experiences will include health promotion activities in the community, providing evidence-based patient centered nursing care of ill children, and promoting interpersonal relationships within the family unit. This is a pass/fail course.

**NURS 210-Nursing Transition Course****Credit Hours: 2**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. Building upon the knowledge obtained from the practical nursing curriculum, the advanced placement student reviews the philosophy, outcome-based curriculum and use of evidence-based practice. The student transitioning into the ADN program will have opportunities to demonstrate competencies in pharmacology (including dosage calculations), IV starts and maintenance, physical assessment, and more. The student will explore safe and effective care, health promotion, care of the older adult, and cultural awareness. Completion of the course with a B or better is required to continue in the ADN program.

**NURS 211-Paramedic Transition Course****Credit Hours: 4**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. Course is designed to build upon existing knowledge and skill obtained from a formal paramedic education program. Utilizing outcome-based curriculum, the advanced placement student learns to apply nursing knowledge, skills, and attitudes to provide high-quality, safe, and effective care. The student transitioning into the ADN program will have opportunities to demonstrate competency in the application of the nursing process, display expected professional behaviors, examine the dynamics of the healthcare team, and utilize nursing skills. This course will emphasize and explore the importance of evidence-based practice, cultural awareness, health promotion, and care considerations for clients across the lifespan. Completion of the course with a grade of B or higher is required to continue into the ADN program.

**NURS 213-Introduction to Professional Nursing****Credit Hours: 2**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. Building upon the knowledge obtained from the practical nursing curriculum, the advanced placement student reviews the philosophy, outcome-based

curriculum and use of evidence-based practice. The student transitioning into the ADN program will have opportunities to demonstrate competencies in pharmacology (including dosage calculations), IV starts and maintenance, physical assessment, and more. The student will explore safe and effective care, health promotion, care of the older adult, and cultural awareness. Completion of the course with a B or better is required to continue in the ADN program.

#### **NURS 215-Complex Health: Mental Health**

##### **Credit Hours: 2.5**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. Building upon the knowledge obtained from the previous curriculum, the nurse's role in promoting evidence based psychosocial integrity for the client and family/significant others are explored. Topics include the use of coping mechanisms, crisis intervention, therapeutic communication, psychopathology, case management, and health disparities. Emphasis is placed on cultural awareness, social determinants of health, client education, available resources, and current trends in providing care in the community setting to promote wellness.

#### **NURS 216-Complex Health: Mental Health Clinical**

##### **Credit Hours: 2**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. Building upon the knowledge obtained from previous curriculum, this course focuses on managing clients in the mental health setting by incorporating current standards and evidence-based practice to the professional registered nurse role. Emphasis will be on planning and managing the care of a client in an inpatient mental health facility by participating and leading therapeutic groups. Application from NURS 215 will be demonstrated in the clinical settings. This is a pass/fail course.

#### **NURS 219-Complex Health: Elimination**

##### **Credit Hours: 3**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. Building upon the knowledge obtained from previous curriculum and incorporating current standards for the professional registered nurse, complex features of selected diseases and disorders of the liver, gastrointestinal and renal systems are discussed and explored. Topics will include pathophysiology and the medical and/or surgical management, and inter-professional collaboration needed for the patient with these diseases or disorders. The discussions will be centered on using evidence-based practice to guide the nursing process and the Gordon's Functional Health patterns framework. Cultural and psychosocial issues, including involvement of patients in decision making and best practices for promoting healthy lifestyles and providing patient centered care are also discussed.

#### **NURS 221-Complex Health: Nutrition/Metabolic**

##### **Credit Hours: 2.5**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. Building upon the knowledge obtained from previous curriculum and the first semester of professional nursing school, the student will be incorporating current standards, inter-professional collaboration, and evidence-based practice for the professional registered nurse. Complex features of selected acid-base, fluid and electrolyte disorders; selected exocrine disorders and injuries; and management of immune system problems are discussed and explored. The student will evaluate safe and effective care, health promotion, care of the older adult, and cultural awareness. The discussions will be centered on the nursing process and the Gordon's Functional Health patterns framework.

#### **NURS 227-Complex Health: Family**

##### **Credit Hours: 3**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. Advances the student's ability to provide client-centered, evidence-based complex care for the newborn, pediatric and obstetric clients. Care includes diverse populations with complicated issues, health disparities, cultural considerations, and those at high risk for developing complications.

#### **NURS 228-Complex Health: Family Clinical**

##### **Credit Hours: 1**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. Focuses on managing clients with complex health care needs and incorporates current standards of evidence-based practice to the professional registered nurse role. Emphasis is placed on problem-solving, advanced physical assessment techniques and time management activities. Application of the principles from NURS 227 will be demonstrated in the appropriate clinical settings. This is a pass/fail course.

#### **NURS 230-Complex Health: Adult Clinical I**

##### **Credit Hours: 1**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. In this clinical, the student will begin to utilize and apply appropriate advanced nursing concepts from Introduction to Professional Nursing and medical surgical knowledge to the professional registered nurse role, including principles of the nursing process, current standards of evidence-based practice, leadership, management, communication, interprofessional collaboration, and use of information technology where applicable to care for adults and older adults. This is a pass/fail course.

**NURS 231-Complex Health: Adult Clinical II****Credit Hours: 1**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. This clinical course is a continuation of Complex Health: Adult Clinical I and preparation for Complex Health: Adult Clinical III. Using current standards of care and evidenced based practice, the student will begin to coordinate and manage care for multiple clients at the acute care clinical site. The emphasis will be on further development of the professional nursing role in prioritization and coordination of patient care for adults and older adults. This is a pass/fail course.

**NURS 233-Complex Health: Adult Clinical III****Credit Hours: 3**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. Building upon the knowledge obtained from previous curriculum and the first semester of professional nursing school, students will work in an inpatient clinical area focusing on managing clients with complex health care needs. The student will manage care for clients in medical and surgical units, intensive care units (ICU), emergency rooms (ER) and step-down units. There will be an emphasis on prioritization, critical thinking, delegation, problem-solving, advanced physical assessment techniques, cultural awareness, care of the aged, and time management activities. Evidence-based practice is used in applying the assessment process to nursing care. Application of the principles from NURS 213, NURS 221, NURS 234, and NURS 237 will be demonstrated in the appropriate clinical settings while building upon NURS 230 and NURS 231 clinical. This is a pass/fail course.

**NURS 234-Complex Health: Activity and Rest****Credit Hours: 3**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. Building upon the knowledge obtained from previous curriculum and the first semester of professional nursing school, students will incorporate current standards and evidence-based practice for the professional registered nurse. This will include complex features of selected cardiovascular, respiratory, gastrointestinal, and traumatic disorders and injuries and discussion of the nursing care. Nursing that includes safe and effective care, health promotion and age and culture implications are explored as part of the learning process. The discussions will use evidence-based practice centered on the nursing process, application of the nursing assessment to case studies, and review of prioritization and implementation in conjunction with Gordon's Functional Health patterns framework.

**NURS 237-Complex Health: Cognitive/Perceptual****Credit Hours: 3**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. Building upon foundational knowledge obtained from previous curriculum and completed ADN courses, this course incorporates current standards and evidence-based practice for the professional registered nurse. The course explores the nursing care of clients with complex neurologic diseases, disorders, and injuries. Related concepts of nursing care such as pathophysiology, interdisciplinary client care planning, cultural considerations of care, pharmacological considerations and dosage calculation, as well as current research are integrated throughout activities and discussion in this course.

**NURS 243-Professional Nursing Capstone Clinical****Credit Hours: 2.5**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. Focuses on the utilization and application of complex skills and knowledge gained from the associate nursing curriculum and incorporates current standards and evidence-based practice to the professional registered nurse role. Emphasis is placed on mastery of assessment, documentation, teaching, medication knowledge and administration, prioritization, time management, and communication with clients, families, staff, and peers. Application and demonstration of leadership, management, legal and ethical principles of delegation for the registered nurse in various community and acute care settings is also expected. This is a pass/fail course.

---

## OCCUPATIONAL SAFETY HEALTH ADMINISTRATION

---

**OSHA 102-OSHA 10-hour Construction Industry****Credit Hours: 1**

Prerequisite: None. Course is provided for those seeking employment in a field that operates on construction sites governed by the safety regulations of 29 CFR 1926, Occupational Safety and Health Administration (OSHA) standards for the construction industry. Upon successful completion of this course, the student will earn an OSHA 10-hour completion card. This is a pass/fail course.

---

## OCCUPATIONAL THERAPY

---

**OTA 200-Foundations of Occupational Therapy****Credit Hours: 4**

Prerequisite: Acceptance to the Occupational Therapy Assistant program. Course presents an introduction to occupational therapy including history, philosophical base, values, ethics, practice framework, and clinical reasoning. Students will learn selected theories and frames of reference as they pertain to interventions in mental health, physical

disabilities, pediatrics, and community practice areas. An overview of the occupational therapy process, including assessment, treatment planning, treatment implementation, and discontinuation of intervention will be presented. Role delineation and collaboration of the occupational therapy assistant with other occupational therapy and health care personnel are discussed.

#### **OTA 205-Medical Conditions in Occupational Therapy**

##### **Credit Hours: 3**

Prerequisite: Acceptance to the Occupational Therapy Assistant program. Course will provide a framework for students to learn about common medical conditions seen by occupational therapy practitioners and to facilitate learning of these conditions from an occupational therapy perspective. It is not intended to emphasize treatment of a diagnosis; however, students will learn about specific factors unique to given conditions that may impact an individual's occupational roles and functions. These factors must be understood and analyzed regarding the relative impact on the individual's occupational performance. The knowledge gained from this course is a necessary prerequisite to Physical Disabilities Practice.

#### **OTA 210-Analysis of Occupations**

##### **Credit Hours: 2**

Prerequisite: Acceptance to the Occupational Therapy Assistant program. Course is designed to foster a beginning exposure to individuals experiencing a variety of physical or mental disabilities, including caregivers of individuals with disabilities, through community experiences. Through these experiences, students will develop skills in observation, analysis, interview, assessment and data collection, and relational skills. Students will complete writing assignments with an emphasis on their observations, analysis and performance of human occupation across the lifespan, with an emphasis on contextual factors impacting occupational performance. Through the written assignments, students will learn the style of professional writing required for OTAs. Professional and therapeutic relationships will be emphasized throughout the course.

#### **OTA 215-Mental Health and Psychosocial Practice**

##### **Credit Hours: 4**

Prerequisite: Acceptance to the Occupational Therapy Assistant program. Course presents the role of the occupational therapy assistant in the psychosocial area of occupational therapy practice. Students will learn selected frames of reference and explore the effects of psychosocial dysfunction on areas of occupation. Students will learn skills necessary to assess, implement and document intervention in a variety of mental health settings. Client factors, including culture and diversity, therapeutic interactions and methods are studied. Students will develop skills in administering individual

and group interventions, professional communication, conflict negotiation, and advocacy. Lab activities, in-class activities, and level I fieldwork opportunities will enable students to participate in and apply psychosocial principles to practice.

#### **OTA 220-Pediatric and Adolescent Practice**

##### **Credit Hours: 4**

Prerequisite: Acceptance to the Occupational Therapy Assistant program. Treatment of pediatric and adolescent conditions. Normal and delayed development of the infant, child and adolescent are explored. The lab component incorporates theoretical principles and provides opportunities for students to develop assessment, intervention planning and implementation, and documentation skills to address a range of childhood sensory-motor, cognitive and psychosocial performance deficits. Students will learn to adapt the environment, tools, materials, and occupations to meet the self-care, work/play and leisure needs of the pediatric and adolescent population. Lab activities, site visits and level I fieldwork opportunities will enable students to participate in and apply pediatric and adolescent treatment principles to practice.

#### **OTA 250-Functional Kinesiology**

##### **Credit Hours: 2**

Prerequisite: Acceptance to the Occupational Therapy Assistant program. In this course, students use and apply their knowledge of anatomy and physiology to study muscle groups and their function relative to performing various activities. Analysis of functional movement patterns required for work, self-care, play, and leisure activities is emphasized. Manual muscle testing, range of motion, goniometry and basic transfer skills are practiced. Principles of energy conservation, joint protection and work simplification are presented. Prevention, health maintenance and safety procedures relevant to functional mobility are reviewed.

#### **OTA 255-Physical Disabilities Practice**

##### **Credit Hours: 4**

Prerequisite: Acceptance to the Occupational Therapy Assistant program. Course provides in-depth opportunities for students to develop assessment, intervention planning, intervention, and documentation skills to address a wide range of adult and geriatric physical disabilities and conditions typically treated by occupational therapists and occupational therapy assistants. Topics include, but are not limited to, stroke, spinal cord injury, fractures and joint replacement, head injury, and cardiopulmonary disorders. The use of splinting, orthotics, modalities, and assistive technology in treatment will also be presented. Students will learn to adapt the environment, tools, materials, and occupations to meet the self-care, work, play, and leisure needs of the adult and geriatric population. Lab activities and level I fieldwork

opportunities will enable students to participate in and apply physical disabilities treatment principles to practice.

### **OTA 260-Community Practice**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Occupational Therapy Assistant program. Site visits and level I fieldwork opportunities will enable students to participate in and apply occupational therapy assessment and intervention principles to a wide range of community settings, including vocational, vocational rehabilitation, home health, and emerging community practice areas. Emphasis will be on community settings in the students' state and geographic region. The course also provides a broad exposure to the social, political, legislative, economic, and cultural factors that influence service delivery.

### **OTA 265-Ethics, Management and Leadership**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Occupational Therapy Assistant program. Course focuses on the OTA role in managing and directing occupational therapy services. It covers ethical provision of services, departmental operations, program development, supervisory requirements, personnel development and supervision, professional team building, quality assurance, compliance with regulations, reimbursement, and national and state credentialing requirements. Techniques for developing a resume and job interview skills are practiced. The importance and responsibility for ongoing OTA professional development, ethical practice, contributing to research and evidence-based practice, attention to emerging practice issues and areas, and international perspectives are explored.

### **OTA 270-Professional Skills**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Occupational Therapy Assistant program. Course is designed to foster practical professional skills in critical thinking using literature to make evidence-based practice decisions and recommendations and using theory to guide practice, all through the completion of a professional portfolio.

### **OTA 290-Level II Fieldwork A**

#### **Credit Hours: 8**

Prerequisite: Acceptance to the Occupational Therapy Assistant program. Full-time clinical fieldwork experience in mental health, physical disabilities, geriatric, pediatric, and/or community-based practice working under the supervision of an OTR and/or COTA. Focus is on achieving entry-level competence in planning and implementing interventions.

### **OTA 295 - Level II Fieldwork B**

#### **Credit Hours: 8**

Prerequisite: Acceptance to the Occupational Therapy Assistant program. Full-time clinical fieldwork experience in mental health, physical disabilities, geriatric, pediatric, and/or community-based practice working under the supervision of an OTR and/or COTA. Focus is on achieving entry-level competence in planning and implementing interventions.

---

## **OFFICE ADMINISTRATION**

---

### **OADM 134-Office Management**

#### **Credit Hours: 3**

Prerequisite: None. Course covers required skills and duties in an office management position. Topics include general business office procedures, ways to supervise, and opportunities for professional development.

---

## **PHARMACY TECHNOLOGY**

---

### **PHRM 102-Top 200 Medications**

#### **Credit Hours: 1**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. A thorough understanding of the Top 200 medications is essential for the Pharmacy Technician Certification Board (PTCB) exam. The course provides a study of the Top 200 medications prescribed in the United States, with an emphasis on FDA approved indications, and brand and generic names.

### **PHRM 104-Calculations for Pharmacy Technician**

#### **Credit Hours: 3**

Prerequisite: MATH 061 with a grade of C or higher or equivalent placement score. Course provides a study of all basic and advanced calculations expected of a pharmacy technician in all practice settings. Students will study and practice percentages, significant figures, alligation, powder volumes, compounding formulas, weight-based dosing and problem-solving using ratios.

### **PHRM 105-Pharmacy Technician I**

#### **Credit Hours: 3**

Prerequisite: Basic computer skills. Introduction to the fundamentals and knowledge necessary to take the Pharmacy Technician Certification Board (PTCB) exam. Contents of this course include a brief history of pharmacy and how it has evolved into today's pharmacy, drug regulation and control, pharmaceutical terminology, factors that make up a prescription, pharmaceutical calculations, and different routes and formulations of various medications.

### **PHRM 106-Role of the Pharmacy Technician**

#### **Credit Hours: 4**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Introduction to the fundamentals

and knowledge necessary to take the Pharmacy Technician Certification Board (PTCB) exam. Course will provide an in-depth study of the role of a pharmacy technician in the retail pharmacy setting, including a brief history of pharmacy and how it has evolved into today's pharmacy, drug regulation and control, retail pharmacy organization and operational standards of practice (SOP). Content will include new and refill prescriptions, transfer prescriptions, SIG codes, DAW codes, non-sterile compounding and labeling requirements.

#### **PHRM 107-Pharmacy Technician II**

##### **Credit Hours: 3**

Prerequisites: PHRM 105 with a grade of C or higher and basic computer skills. Course will provide additional necessary knowledge needed for the Pharmacy Technician Certification board (PTCB) exam. Contents of this course include compounding, biopharmaceutics and other factors affecting drug activity, utilizing appropriate resources, inventory management, and financial issues. Course will also go further in depth to the different areas of pharmacy where a pharmacy technician is needed.

#### **PHRM 109-Pharmacology**

##### **Credit Hours: 3**

Prerequisite: None. Course introduces basic pharmacological principles needed by pharmacy technicians, including basic understanding of the drug action, how antagonists and agonists work, the significance and meaning of blood concentration-time profiles, and other aspects of pharmacology suited for pharmacy technicians.

#### **PHRM 110-Federal Law and Ethics in Pharmacy Practice**

##### **Credit Hours: 2**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Pharmacy is one of the most regulated industries in our nation and as such, pharmacy technicians must possess an understanding of Federal pharmacy laws. The course will provide a study of the history of the FDA, Federal laws that govern pharmacy practice, and ethical dilemmas in pharmacy practice.

#### **PHRM 111-Practicum for Pharmacy Technicians**

##### **Credit Hours: 3**

Prerequisites: PHRM 105 and PHRM 107 with grades of C or higher and basic computer skills. Course provides a study of and an introduction to the pharmacy in providing patient care. There will be an opportunity for students to observe activities in a pharmacy setting of their choice. There will be practical, general workplace training supported by an individualized learning plan developed by the employer, program coordinator and student.

#### **PHRM 115-Pharmacology Certification**

##### **Credit Hours: 3**

Prerequisite: None. Course provides a comprehensive review of the content areas of the Pharmacy Technician Certification Exam (PTCE) to prepare students to take the PTCE at the end of the course. Students who pass the PTCE are designated as Certified Pharmacy Technicians (CPHT).

#### **PHRM 120-Immunization Training for Pharmacy Technician**

##### **Credit Hours: 2**

Prerequisite: Must hold an active PTCB CPHT Certification & program director approval. Course will provide a study of vaccine development, how vaccines work and recommended vaccination schedules for children and adults. Students will study vaccination technique, personal safety and protection from blood borne pathogens, and appropriate response to a vaccine-related emergency. Vaccination reporting and adverse event reporting will be covered. Students will be expected to attend a hands-on skills practice and assessment day on the Sedalia campus.

#### **PHRM 122-Advanced Top 200 and Over-The-Counter Medications**

##### **Credit Hours: 4**

Prerequisite: PHRM 102 with a grade of C or higher. This course is a continuation of the Top 200 Medications course. Knowledge of brand and generic drug names and FDA approved indications will be expanded to include common dosage forms, common dosing strategies and drug-drug interactions, as it relates to a pharmacy technician's practice.

#### **PHRM 124-Inventory Control and Financial issues in Pharmacy**

##### **Credit Hours: 3**

Prerequisite: MATH 061 with a grade of C or higher or equivalent placement score. Course will provide a study of the pharmacy technician's role in inventory systems, including order placement, returns and handling of expired medications. Course will provide a review of insurance reimbursement and contracting, the role of pharmacy benefit managers (PBM), prior authorization (PA), worker's compensation programs, coupons, discount cards and patient financial assistance programs.

#### **PHRM 175-Professional Practical Experience**

##### **Credit Hours: 3**

Prerequisite: Consent of program coordinator. Field-based professional practice experience in a hospital or commercial pharmacy setting. Students will be assigned specific professional practice objectives and skills to be completed at the site and will participate in daily pharmacy activities. This is an unpaid work experience requiring 80 to 120 hours of participation.

## PHILOSOPHY

### PHIL 101-Introduction to Philosophy

#### Credit Hours: 3

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. An introduction to historical and topical themes in philosophy, such as free will, God, personal identity, the limits of knowledge, the nature of inferential reasoning, morality, and social justice.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PHIL 100 - Introduction to Philosophy

For additional information: <https://dhe.mo.gov/core42.php>

### PHIL 102-Ethics

#### Credit Hours: 3

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. An introductory examination of the foundations of moral discourse and ethical practice. This course includes both an introduction to a number of moral theories and discussion of contemporary moral issues.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PHIL 102 - Introduction to Ethics

For additional information: <https://dhe.mo.gov/core42.php>

### PHIL 104-Living Religions

#### Credit Hours: 3

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. An introduction to a wide variety of the world's living religions as both beliefs and practices, and an analysis of the historical-cultural value systems underpinning their various divergent or overlapping value systems. Religions reviewed include Hinduism, Buddhism, Judaism, Christianity, Islam and to a lesser extent Jainism, Sikhism, Confucianism, Daoism, and Shinto.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR RELG 100 - World Religion

For additional information: <https://dhe.mo.gov/core42.php>

## PHYSICAL EDUCATION - ACTIVITY

### PEAC 124-Varsity Basketball - Men

#### Credit Hours: 1

Prerequisite: Consent of athletic director. Participation in the men's varsity basketball program.

### PEAC 125-Varsity Basketball - Women

#### Credit Hours: 1

Prerequisite: Consent of athletic director. Participation in the women's varsity basketball program.

## PHYSICAL EDUCATION – PROFESSIONAL

### PPRO 101-Sports Officiating I

#### Credit Hours: 2

Prerequisite: None. Includes lectures, readings, class discussions, and field experience in the officiating of fall sports, including football, soccer, basketball, etc.

### PPRO 102-Sports Officiating II

#### Credit Hours: 2

Prerequisite: None. Includes lectures, readings, class discussions, and field experience in the officiating of spring sports, including softball, baseball, volleyball, etc.

### PPRO 104-Care and Prevention of Athletic Injuries

#### Credit Hours: 3

Prerequisite: None. Introduction to athletic training and its administrative procedures and problems. Includes prevention and care of injuries and other special considerations.

### PPRO 180-Problems in Professional PE

#### Credit Hours: 1 to 3

Prerequisite: Consent of instructor. Independent study of a special problem in professional physical education under the supervision of a physical education instructor.

## PHYSICAL SCIENCE

### PHYS 105-College Physics I with Lab

#### Credit Hours: 5

Prerequisite: MATH 110 or MATH 112 with a grade of C or higher or equivalent placement score. An introduction to the fundamental ideas of physics. Topics include mechanics, wave motion and heat. (4 lecture, 1 lab)



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PHYS 150L - Physics I with Lab

For additional information: <https://dhe.mo.gov/core42.php>

### PHYS 106-College Physics II with Lab

#### Credit Hours: 3

Prerequisite: PHYS 105 with a grade of C or higher. Continuation of PHYS 105. Covers electricity, magnetism, optics, and modern physics. (2 lecture, 1 lab)

### PHYS 118-General Physics I with Lab

#### Credit Hours: 5

Prerequisite: MATH 130 with a grade of C or higher. Corequisite: MATH 131. An introduction to the fundamental ideas of physics. Topics include mechanics, oscillatory motion and thermodynamics. First course in calculus-based physics for the science and engineering student. (4 lecture, 1 lab)



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PHYS 200L - Advanced Physics I with Lab

For additional information: <https://dhe.mo.gov/core42.php>

### **PHYS 119-General Physics II with Lab**

**Credit Hours: 5**

Prerequisite: PHYS 118 with a grade of C or higher.  
Continuation of PHYS 118. Topics in the field of electromagnetism will be covered. (4 lecture, 1 lab)

### **PHYS 125-Technical Science**

**Credit Hours: 4**

Prerequisite: MATH 108, MATH 110 or MATH 112 with a grade of C or higher or equivalent placement score.  
Corequisite: MATH 108, MATH 110 or MATH 112. Designed to help students develop a better understanding of physics as it applies to the operation of machinery. Topics include measurement, applied geometry, mechanics, fluids, waves, simple machine, energy and power, heat and temperature, electricity, and magnetism.

### **PHYS 180-Problems in Physics**

**Credit Hours: 1 to 3**

Prerequisite: Consent of instructor. Independent study of a special problem in physics under the supervision of a science instructor.

### **PHYS 203-Statics**

**Credit Hours: 3**

Prerequisite: PHYS 118 with a grade of C or higher.  
Application of the principles of mechanics to engineering problems of equilibrium. Topics include resultants, equilibrium, friction, trusses, center of gravity and moment of inertia.

## **POLITICAL SCIENCE**

### **POLS 101-American/National Government**

**Credit Hours: 3**

Prerequisite: ENGL 070 or ENGL 110 with a grade of C or higher or equivalent placement scores. Survey course of the government of the United States and its political values, processes and structures. Attention is given to the government's origins, politics, branches of government, rights and responsibility of the residents of the U.S. and Missouri. A study of the Missouri Constitution is included to meet the state's requirements in Senate Bill No. 4. Students will also pass the Missouri Higher Education Civic Exam with a 70 percent or higher in compliance with Senate Bill No. 807.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR POSC 101 - American Government

For additional information: <https://dhe.mo.gov/core42.php>

### **POLS 103-Introduction to Political Science**

**Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Study of the nature of government, politics, the state, relations among nations, and the areas of political science. Students will make a preliminary examination of governmental institutions and selected political theories with an emphasis on basic principles, concepts and characteristics of governments around the world.

### **POLS 109-Civics and the Constitutions**

**Credit Hours: .5**

Prerequisite: None. Designed to meet the requirements of Senate Bill 807. Intended for students testing out of history or government courses or transferring these courses from another state. This is a pass/fail online course.

### **POLS 175-Political Science Internship**

**Credit Hours: 1 to 4**

Prerequisite: Consent of instructor. On-the-job work experience provides an opportunity for the student to work in a state or local government office or in a political action setting.

### **POLS 180-Problems in Political Science**

**Credit Hours: 1 to 3**

Prerequisite: Consent of instructor. Independent study of a special problem in political science under the supervision of a political science instructor.

## **PSYCHOLOGY**

### **PSY 101-General Psychology**

**Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Introduction to the scientific study of behavior and mental processes. Includes a survey of historical and current theories, theorists and perspectives in psychology. Goals include increasing critical thinking and intellectual curiosity about psychological phenomenon and provides a basis for further study in the field. Topics include neurology, sensation and perception, consciousness, learning, psychometrics, personality development, and mental illness and wellness. Writing papers in APA format is required.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PSYC 100 - General Psychology

For additional information: <https://dhe.mo.gov/core42.php>

### **PSY 102-Child Psychology**

**Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Investigation into the interaction of biological and environmental factors affecting the physiological, intellectual and emotional development of the

child from conception through adolescence. Writing papers in APA format is required.

### **PSY 104-Psychology of Personal Adjustment**

#### **Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Overview of the major theories, concepts and principles in psychology that can be applied to personal and social adjustment. Topics include self-esteem, motivation, stress management, and others.

### **PSY 180-Problems in Psychology**

#### **Credit Hours: 1 to 3**

Prerequisites: PSY 101 with a grade of C or higher and consent of instructor. Writing papers in APA format is required. Students are advised to have completed ENGL 101 prior to enrolling. Independent study of a special problem in psychology under the supervision of a psychology instructor.

### **PSY 210-Lifespan Development**

#### **Credit Hours: 3**

Prerequisite: PSY 101 with a grade of C or higher. Writing papers in APA format is required. Students are advised to have completed ENGL 101 prior to enrolling. Study of major theories of psychological development during infancy, childhood, adolescence, and adulthood. Topics include physical, psychosocial and cognitive development across the lifespan giving consideration to cultural and individual variations.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PSYC 200 - Life Span Human Development

For additional information: <https://dhe.mo.gov/core42.php>

### **PSY 220-Abnormal Psychology**

#### **Credit Hours: 3**

Prerequisite: PSY 101 with a grade of C or higher. Not offered every semester. Writing papers in APA format is required. Students are advised to have completed ENGL 101 prior to enrolling. Study of the historical and cultural context of abnormal behavior and diagnosis of mental disorders. Topics include a survey of the causes and treatment of major mental illness such as mood disorders, anxiety disorders, substance abuse, schizophrenia, and personality disorders. Writing papers in APA format is required.

## **RADIOLOGIC TECHNOLOGY**

### **RAD 106-Clinical Education I**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. Radiology student will complete an average of 240 contact hours, which equates to 3 credit hours. Supervised clinical rotations will be performed at assigned clinical sites.

Clinical education provides the students with the opportunity to practice the skills and theory taught in the classroom. The "Five Steps to Clinical Competency" allow the student to progress in competency exams while practicing patient care and professionalism. Students are expected to complete seven mandatory competencies.

### **RAD 109-Clinical Education II**

#### **Credit Hours: 2**

Prerequisite: Acceptance to the Radiologic Technology program. Radiology student will complete an average of 160 contact hours, which equates to 2 credit hours. Supervised clinical rotations will be performed at assigned clinical sites. Clinical education provides the students with the opportunity to practice the skills and theory taught in the classroom. The "Five Steps to Clinical Competency" allow the student to progress in competency exams while practicing patient care and professionalism. Students are expected to complete nine competencies.

### **RAD 111-Clinical Education III**

#### **Credit Hours: 2**

Prerequisite: Acceptance to the Radiologic Technology program. Radiology student will complete an average of 160 contact hours, which equates to 2 credit hours. Supervised clinical rotations will be performed at assigned clinical sites. Clinical education provides the students with the opportunity to practice the skills and theory taught in the classroom. The "Five Steps to Clinical Competency" allow the student to progress in competency exams while practicing patient care and professionalism. Students are expected to complete nine competencies.

### **RAD 113-Clinical Education IV**

#### **Credit Hours: 4**

Prerequisite: Acceptance to the Radiologic Technology program. Radiology student will complete an average of 160 contact hours, which equates to 2 credit hours. Supervised clinical rotations will be performed at assigned clinical sites. Clinical education provides the students with the opportunity to practice the skills and theory taught in the classroom. The Five steps to Competence allow the student to progress in competency exams while practicing patient care and professionalism.

### **RAD 115-Clinical Education V**

#### **Credit Hours: 4**

Prerequisite: Acceptance to the Radiologic Technology program. Radiology student will complete an average of 360 contact hours, which equates to 4 credit hours. Supervised clinical rotations will be performed at assigned clinical sites. Clinical education provides the students with the opportunity to practice the skills and theory taught in the classroom. The "Five Steps to Clinical Competency" allow the student to

progress in competency exams while practicing patient care and professionalism. Students are expected to complete the remainder of required competencies.

### **RAD 120-Radiographic Procedures I**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. Students will learn and practice the proper steps in the completion of radiographic exams including utilization of imaging equipment and proper patient positioning. Radiographic anatomy, radiation safety practices and patient care skills are reinforced. Students are introduced to basic film critique. Course will cover exams of the chest, abdomen and extremities. Course is a portion of the five steps to clinical competency and must be completed with a score of 85 percent or better. (1 lecture, 2 lab)

### **RAD 122-Radiographic Procedures II**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. Students will learn and practice the proper steps in the completion of radiographic exams including utilization of imaging equipment and proper patient positioning. Radiographic anatomy, radiation safety practices and patient care skills are reinforced. Students are introduced to basic film critique. Course will cover exams of the thorax and spines, as well as contrast exams. Course is a portion of the five steps to clinical competency and must be completed with a score of 85 percent or better. (1 lecture, 2 lab)

### **RAD 124-Radiographic Procedures III**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. Students will learn and practice the proper steps in the completion of radiographic exams including utilization of imaging equipment and proper patient positioning. Radiographic anatomy, radiation safety practices and patient care skills are reinforced. Students are introduced to basic film critique. Course will cover exams of the skull, facial bones, and geriatric and pediatric imaging. Course is a portion of the five steps to clinical competency and must be completed with a score of 85 percent or better. (2 lecture, 1 lab)

### **RAD 128-Introduction to Radiologic Sciences and Patient Care**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. Introduces students to an overview of the foundations in radiologic technology and the practitioner's role in the health care system. Students become cardiopulmonary resuscitation (CPR) certified. Students are introduced to Joint Review Committee on Education in Radiology Technology (JRCERT) standards and basic radiation safety. Instruction will also include basic concepts of routine and emergency

patient care procedures, infection control, standard precautions, and the legal and ethical aspects of professional radiologic technology.

### **RAD 130-Radiation Production and Characteristics**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. An overview of electricity, electromagnetic theory, circuitry, x-ray generation, production, interaction, and the basic characteristics of natural radiation.

### **RAD 134-Radiographic Exposures and Quality Control**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. Introduction to factors involved in quality image production and the correlation of these factors and their control. Overview of image receptors, scatter control and radiographic exposure techniques is provided. Students will identify and evaluate acceptable limits for equipment operation.

### **RAD 137-Radiation Protection**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. Student radiologic technologists must be able to protect patients and themselves from overexposure to radiation. Students will learn about dose limits and proper shielding, as well as radiation monitors and detectors. Radiation effects and potential biological damage of ionizing radiation will be discussed. The as low as reasonably achievable (ALARA) principle will be taught as well as the objectives of a radiation protection program. Students will have a basic understanding of the varieties of interactions between ionizing radiation and living cells.

### **RAD 140-Radiologic Pharmacology**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. Overview of the foundations of pharmacology, including pharmacokinetics, pharmacodynamics, pertinent laws, and safety issues. Students will gain an understanding of drug categories, their actions and commonly used drugs in each category. Additionally, this course will emphasize contrast media commonly used in medical imaging, routes of administration and venipuncture techniques.

### **RAD 142-Trauma and Advanced Imaging**

#### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. Builds on the positioning knowledge developed in the radiographic procedures courses. Advanced imaging techniques and approaches for imaging injured patients will be discussed. Radiographic anatomy, radiation protection and patient care skills will continue to be stressed. Course is a

portion of the five steps to clinical competency and must be completed with a score of 85 percent or better. (2 lecture, 1 lab)

#### **RAD 144-Radiation Biology**

##### **Credit Hours: 2**

Prerequisite: Acceptance to the Radiologic Technology program. Reinforcement of the varieties of interactions between ionizing radiation and living cells. Acute and chronic effects of radiation are described.

#### **RAD 146-Imaging Equipment**

##### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. Presents information about image intensified fluoroscopy, mobile equipment, and automatic exposure devices. Image acquisition utilizing film/screen, computed radiography (CR) and digital radiography (DR) systems and the appropriate processing units will be discussed.

#### **RAD 150-Radiographic Pathology**

##### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. Provides a basic understanding of disease processes as they relate to radiographic procedures. Course will include facts, etiology, symptoms, treatments, and radiographic appearance of many diseases and discussion of how one must adjust the radiographic technique for each of these disorders.

#### **RAD 152-Image Analysis**

##### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. Utilizes knowledge of anatomy, positioning and exposure factors to critique radiographs and determine if radiographs are of proper diagnostic quality. After a judgment is made, the student must determine which factors require change, how to accomplish the change, and why a change is necessary.

#### **RAD 154-Sectional Anatomy**

##### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. Apply knowledge of systemic human anatomy to determine the sectional relationships of human organs, vessels and tissues. Knowledge of cross-sectional anatomy reinforces prior anatomical knowledge and leads to a greater understanding of modalities such as computed tomography (CT), magnetic resonance (MR) and ultrasound.

#### **RAD 169-Comprehensive CT Course for Technologists**

##### **Credit Hours: 5**

Prerequisite: Acceptance to the Radiologic Technology program. This course will prepare registered radiologic

technologists or future registered radiologic technologists for post-primary certification and registration in Computed Tomography. This course will consist of the four major CT content categories (patient care, safety, image production, and procedures).

#### **RAD 170-Preparing for Professionalism**

##### **Credit Hours: 3**

Prerequisite: Acceptance to the Radiologic Technology program. A series of review assessments are administered, enabling students to identify their strengths and weaknesses. Students will prepare for employment through the development of a letter of intent, a resume and a thank you letter. Employment skills are researched and discussed.

#### **RAD 179-Advanced Modality Clinic**

##### **Credit Hours: 4**

Prerequisite: ARRT Registered Technologist or a second year student in an accredited Radiology Program. Clinical education provides the student with the opportunity to practice the skills and theory taught in the classroom. Students will demonstrate advanced imaging modality competency while practicing patient care and professionalism. Exam performance skills and critical thinking will be evaluated in this course.

---

## **SERVICE EDUCATION**

---

#### **SRVE 101-Emerging Leaders I**

##### **Credit Hours: 1**

Prerequisite: Consent of instructor. Provides students with opportunities to develop and enhance a personal philosophy of leadership that includes the understanding of self, others, and community, and acceptance of responsibilities inherent in community membership. Involvement in at least one leadership experience is required for the course. A full list of qualifying experiences is provided to all students who enroll.

#### **SRVE 201-Emerging Leaders II**

##### **Credit Hours: 1**

Prerequisite: Consent of instructor. Continuation of SRVE 101. Provides students with additional opportunities to develop and enhance a personal philosophy of leadership that includes the understanding of self, others, and community, and acceptance of responsibilities inherent in community membership. Involvement in at least one leadership experience is required for the course. A full list of qualifying experiences is provided to all students who enroll.

---

## **SOCIOLOGY**

---

#### **SOC 100-General Sociology**

##### **Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Introduction to the basic

principles, concepts, research strategies, and empirical findings representative of the field today. Explores the relationships of individuals and groups in the context of broader social patterns. Establishes a basis for further study in the field. Course topics may include gender and racial inequality, deviance, economic and political institutions, social mobility, and concepts related to current social and cultural change.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR SOCI 101 - General Sociology

For additional information: <https://dhe.mo.gov/core42.php>

### SOC 101-Social Problems

**Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Examines objective social conditions that have been defined as social problems. Focuses on gaining factual and theoretical knowledge to build better explanations for the existence and persistence of social problems in light of social controls and democratic values. Explores options for solutions to specific social problems. Topics include racial inequality, gender stratification, poverty, mass media, and education among others.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR SOCI 201 – Social Problems

For additional information: <https://dhe.mo.gov/core42.php>

### SOC 102-Marriage and Family

**Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Explores the social and historical roots of marriage as both a social institution and an intimate relationship. Examines the sources of and the challenges created by the diversity of family forms. Topics include intimacy, dating and courtship, conflict and communication, singlehood and cohabitation, divorce, and parenting.

### SOC 103-Introduction to Social Work

**Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Provides background knowledge of the field, an overview of social problems and social services, and methods of social work practice. Topics may include poverty, substance abuse, mental illness, crime, family, education, racism, and sexism among others. Each topic is discussed with an interest in identifying the opportunities for and challenges to effective social work.

### SOC 120-American Diversity

**Credit Hours: 3**

Prerequisite: ENGL 070 with a grade of C or higher or equivalent placement scores. Overview of global and American diversity resulting from cultural interactions, especially in the areas of art, government, economics, and religion, as well as a historical perspective. Students will gain a greater understanding of diversity from an individual and community perspective.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR SOCI 202 – Introduction to Studies of Race and Ethnicity

For additional information: <https://dhe.mo.gov/core42.php>

### SOC 180-Problems in Sociology

**Credit Hours: 1 to 3**

Prerequisite: Consent of instructor. Independent study of a special problem in sociology under the supervision of a sociology instructor.

## SPANISH

### SPAN 101-Elementary Spanish I

**Credit Hours: 3**

Prerequisite: None. Begins the four basic skills of language communication: listening, speaking, reading, and writing. Includes an introduction to the Spanish culture. Concentrates on the present indicative tense with the course conducted primarily in Spanish.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LANG 103 - Spanish I

For additional information: <https://dhe.mo.gov/core42.php>

### SPAN 102-Elementary Spanish II

**Credit Hours: 3**

Prerequisite: SPAN 101. Concentrates on the preterit and imperfect tenses and reflexive constructions for students to further enhance their ability to listen, speak, read, and write. Continues study of the Spanish culture. Course is conducted primarily in Spanish.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LANG 104 - Spanish II

For additional information: <https://dhe.mo.gov/core42.php>

## STEAM EXPLORATIONS

### STEM 110-STEAM Explorations

**Credit Hours: 3**

Prerequisites: ENGL 060 and MATH 061 with grades of C or higher or equivalent placement scores and consent of

instructor. In this course, science, technology, engineering, arts, and math will be taught in an interdisciplinary and applied approach. The course will bridge STEAM content and utilize humanities skills such as critical analysis and communication. This course will lead to an in-depth understanding of STEAM current events and careers in the STEAM industry. The course will culminate with a STEAM project and exploratory learning through place-based education.

## STUDENT SUCCESS

### SS 090-Student Orientation

#### Credit Hours: 0

Prerequisite: None. Designed to provide interactions with other students, staff and faculty that will help students get a sense of the campus culture and how to conduct business with the college. Emphasis is on assisting students with understanding how to use the different online elements. This is not a gradable course.

### SS 104-College Skills

#### Credit Hours: 3

Prerequisite: None. Designed to enhance the college learning experience and prepare students for personal and professional success. Concepts presented include time management, managing change, setting and achieving goals, and thinking in ways to create success. Note taking, library research, test taking, and study skills are also included.

### SS 108-Career Choice

#### Credit Hours: 1

Prerequisite: None. Designed to guide students who may be undecided about a college major or related career plans. Emphasis upon making connections between self and the world of work and between academic and career planning.

### SS 114-Computer Skills for College

#### Credit Hours: 2

Prerequisite: None. Designed to build a foundation of basic computer skills necessary to be successful within an educational setting. Topics include basic computer functions and functional navigation and practical application of Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Internet, email, mySFCC, and the SFCC learning management system.

### SS 120-Employment Strategies

#### Credit Hours: 1

Prerequisite: None. Designed to help students develop employment search skills and career growth potential.

### SS 125-Leadership through Cultural Experiences

#### Credit Hours: 3

Prerequisite: Consent of instructor. Spring semester only. Students practice various leadership themes and principles to foster interaction in a global society.

### SS 225-Problems in Leadership through Cultural Experiences

#### Credit Hours: 3

Prerequisite: Consent of instructor. Spring semester only. Independent study of a special problem relating to various leadership themes and principles to foster interaction in a global society under the supervision of an instructor in a related discipline.

## THEATRE

### THEA 107-Introduction to Theatre

#### Credit Hours: 3

Prerequisite: None. Introductory hands-on course where students examine the major contributors to the theatrical event: the director, actor, scene designer, and lighting designer. Students will be required to see at least two live theatre productions for which admission may be charged.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR THEA 100A - Theatre Appreciation

For additional information: <https://dhe.mo.gov/core42.php>

### THEA 110-Stagecraft and Lighting

#### Credit Hours: 3

Prerequisite: None. Basics of set construction, painting, scene design, lighting design, and wood shop safety. Students will be required to spend 30 clock hours outside classroom time with direct involvement in operation of specialized theatre equipment. Required course for speech and theatre majors and minors.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 104S - Stagecraft

For additional information: <https://dhe.mo.gov/core42.php>

### THEA 111-Acting I

#### Credit Hours: 3

Prerequisite: None. Intensive study of the techniques of acting with concentration on bodily movement, balance, diction, voice, and characterization.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 100 – Acting I

For additional information: <https://dhe.mo.gov/core42.php>

**THEA 113-Oral Interpretation****Credit Hours: 3**

Prerequisite: None. Includes development of the voice as an instrument of expression and analysis and performance of basic interpretive material and forms of literature.

**THEA 115-Theatre Practicum****Credit Hours: 1 to 2**

Prerequisite: None. Includes student participation in plays, either in performance or backstage work. No more than four credit hours of Theatre Practicum may be applied toward an Associate of Arts degree.

**THEA 119-Stage Makeup****Credit Hours: 3**

Prerequisite: None. Provides a hands-on look at stage makeup. Students will learn the basics of corrective, old age, effects makeup, and what is required in creating a character.

**THEA 122-Costume Construction****Credit Hours: 3**

Prerequisite: None. Course intends to introduce the student to the field of costume technology through the practical experience in the execution of theatrical costume techniques, basic sewing skills and costume crew.

**THEA 125-Theatre History****Credit Hours: 3**

Prerequisite: None. Introductory examination of theatre as a living and viable artistic medium. Course examines the historical development of the audience; dramatic literature and structure; and the role of the actors, directors, designers, and technicians.

**THEA 128-Introduction to Theatre Design****Credit Hours: 3**

Prerequisite: None. Students taking this course will be given the opportunity to identify, analyze and implement the elements of successful theatrical design. In addition, students will be given the opportunity to learn how to evaluate their own personal reactions to a given aesthetic. Students are expected to discuss designs from local shows they see.

**THEA 131-Script Analysis****Credit Hours: 3**

Prerequisite: None. The purpose of script analysis is to examine various methods of analyzing play scripts for performance. Specific emphasis will be placed on the working environment of the actor, director and designer in examining how a script is produced for a public performance. The course is designed to help students develop tools for use in their profession, not to survey the history of dramatic literature.



**Note:** Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 103SA – Script Analysis

For additional information: <https://dhe.mo.gov/core42.php>

**THEA 134-Stage Voice and Movement****Credit Hours: 3**

Prerequisite: None. A survey and practice of multiple theatre movement and voice theories designed to develop student awareness and skill related to the body's expressive potential.

**THEA 180-Problems in Theatre****Credit Hours: 1 to 3**

Prerequisite: Consent of instructor. Independent study of a special problem in speech or theatre under the supervision of a fine arts instructor.

**THEA 190-Theatre Capstone****Credit Hours: 1**

Prerequisite: Consent of program coordinator. This class is designed to put all the things that students have learned together, so they will be prepared for the college or university to which they transfer. Acting students will have to have two monologues ready to perform, and technical students will have to create a portfolio.

---

**TRIO SKILLS**


---

**TSKL 101-TRiO Skills I****Credit Hours: 1**

Prerequisite: Consent of TRiO STEPS advisor. Designed to assist incoming freshmen with basic skills needed to orient them to college and necessary for academic success. Emphasis upon basic computer skills, study skills, research skills, critical thinking skills, financial management skills, life skills, confidence building, and career exploration. Course is restricted to students who have been officially accepted into the TRiO STEPS program at SFCC.

**TSKL 102-TRiO Skills II****Credit Hours: 1**

Prerequisite: Consent of TRiO STEPS advisor. Continuation of TSKL 101. Aimed at assisting TRiO STEPS students who have completed basic skills courses and have moved on to college-level courses. Topics include study skills, research skills, critical thinking skills, financial management skills, time management, life skills, confidence building, and career exploration. Course is restricted to students who have been officially accepted into the TRiO STEPS program at SFCC.

**TSKL 103-TRiO Skills III****Credit Hours: 1**

Prerequisite: Consent of TRiO STEPS advisor. Continuation of TSKL 102. This TRiO STEPS course will focus on life skills and personal enrichment. Covers topics such as fiscal

management, job skills, resume writing, maintaining physical and emotional health, conflict resolution, and stress management. Course is restricted to students who have been officially accepted into the TRiO STEPS program at SFCC.

#### **TSKL 104-TRiO Skills IV**

##### **Credit Hours: 1**

Prerequisite: Consent of TRiO STEPS advisor. Designed to assist students who are participants in the TRiO STEPS program who are in their final year at SFCC complete the activities required for graduation and to assist them in transferring to the four-year college of their choice. Students in this course will be assisted in completing applications to four-year colleges and in applying for scholarships and financial aid at their transfer institutions. Students will also be assisted in planning financially for completing their baccalaureate degrees, including calculations of manageable student debt load. Campus visits to four-year colleges are provided free of charge to students in the STEPS program. Course is restricted to students who have been officially accepted into the TRiO STEPS program at SFCC.

## **WEB DEVELOPMENT**

#### **WEB 103-Introduction to Web Development**

##### **Credit Hours: 3**

Prerequisite: None. Students will learn the basic skills and technology for making animated web pages and the usage of hypertext markup language 5 (HTML5). Students will learn to create simple applications for smart devices.

#### **WEB 104-Android Applications**

##### **Credit Hours: 3**

Prerequisite: None. The Android Studio software is used for the application development of projects. The software is available at no charge with no expiration data. This software has proven to work on Windows and Mac devices. This course will teach the basis of Android development and to create GUI applications.

#### **WEB 114-Web Scripting**

##### **Credit Hours: 3**

Prerequisite: None. The use and implementation of client-side scripting languages to create interactive web-based applications. Content will include using JavaScript, VBScript and other scripting languages as appropriate for creating dynamic web applications.

#### **WEB 116-Web Development**

##### **Credit Hours: 3**

Prerequisite: None. Provides enhanced instruction in the concepts, issues and techniques related to designing, developing and deploying websites. Instruction includes, but is not limited to, learning about HTML5, basic JavaScript,

responsive Web pages, and the use of cascading style sheets (CSS). Students will learn the process for image mapping, hyperlinking, and embedding active content.

#### **WEB 117-Advanced Web Development**

##### **Credit Hours: 3**

Prerequisite: WEB 116 with a grade of C or higher. Course gives instruction in the creation of dynamic web pages through a variety of formats. These methods may include, but are not limited to, hypertext preprocessor (PHP), structured query language (MySQL), active server pages (ASP), extensible markup language (XML), ColdFusion, and file transfer protocol (FTP).

#### **WEB 118-Digital Imaging**

##### **Credit Hours: 3**

Prerequisite: None. Provides extensive instruction in the creation and manipulation of images through the software package Adobe Photoshop. Course is aimed at the Photoshop beginner who wants to create sophisticated graphics for both print and web. Special emphasis on tools, selections, masking, photo treatment and design will be discussed.

#### **WEB 119-Digital Illustration**

##### **Credit Hours: 3**

Prerequisite: None. Adobe Illustrator is one of the most popular and powerful digital tools used by artist and graphic designers who are working with vector-based art. Everything from logos all the way to full-blown illustrations can be created. The content in this course will provide the background and knowledge to work with key concepts including artboards, workspaces, layers, and shapes.

#### **WEB 120-XML**

##### **Credit Hours: 3**

Prerequisite: None. Instruction includes learning to use and implement XML standards in web page creation. XML is a language for storing and delivering information on the web. Basic concepts of XML along with delivery methods for developing dynamic HTML documents that maximize the use of browser capabilities will be taught.

#### **WEB 130-Media Productions**

##### **Credit Hours: 3**

Prerequisite: None. Students will learn to create multimedia presentation videos and to edit videos, as well as video editing, authoring, interfacing, and implementing the fundamentals of video production.

#### **WEB 160-Portfolio Design**

##### **Credit Hours: 3**

Prerequisite: None. Instruction in designing a professional, informative and effective DVD portfolio that highlights the experience and knowledge gained from courses taken at

SFCC. Design focuses on, but is not limited to, projects created in the CIS and WEB program courses. This DVD portfolio will be used so prospective employers can gain a better understanding of the student's technical skills and the subject matter learned.

#### **WEB 175-Web Development Internship**

##### **Credit Hours: 3**

Prerequisite: Consent of program coordinator. Provides on-the-job work experience in web development. Supervised and evaluated by the instructor.

## **WELDING**

#### **WELD 114-Structural Layout and Fabrication**

##### **Credit Hours: 3**

Prerequisites: WELD 116, WELD 120 and WELD 126 with grades of C or higher. Topics include whole numbers, number systems, dimensions, measurement, fractions, volume, weight, precision, accuracy, and percentages. In addition to teaching basic math concepts, the problems will give students a preview of the types of welding-related situations they will face in a work environment. Students will develop solid troubleshooting skills that will serve them throughout their careers as welders. (1 lecture, 2 lab)

#### **WELD 116-Print Reading for Welders**

##### **Credit Hours: 3**

Prerequisite: None. Study of symbols including AWS and ISO industry standards, measurement systems, terminology, and prints and diagrams associated with work performed by welders in the welding industry. Course includes reading basics prints, math and measurements, welding processes, types of welds and joints, welding symbols, shop drawings, assembly drawings, detail drawings, auxiliary views, detail views, projections, and sections.

#### **WELD 120-Shielded Metal Arc Welding I**

##### **Credit Hours: 3**

Prerequisite: None. Basic course includes instruction on entry-level skills and knowledge to: identify and set-up the types of Shielded Metal Arc Welding (SMAW) equipment; identify types and specifications of SMAW electrodes; set up and perform fillet and groove SMAW welds on carbon steel in flat, horizontal, vertical, and overhead positions. Covers the American Welding Society (AWS) D1.1 Structural Welding Code and related AWS SENSE Level 1 competencies. (1 lecture, 2 lab)

#### **WELD 122-Shielded Metal Arc Welding II - Structural**

##### **Credit Hours: 3**

Prerequisite: WELD 120 with a grade of C or higher. Intermediate course includes instruction on out of position groove welding on plate with shielded metal arc welding.

Covers the American Welding Society (AWS) D1.1 Structural Welding Code and prepares student for AWS SENSE Level 1 welder performance qualification test. (1 lecture, 2 lab)

#### **WELD 124-Shielded Metal Arc Welding III - Pipe**

##### **Credit Hours: 4**

Prerequisite: WELD 122 with a grade of C or higher. Advanced course includes instruction on out of position groove welding on welding of pipe using the shielded metal arc process in all positions. American Welding Society and the American Society of Mechanical Engineers (ASME) - Section 9 code for pipe welding with ASME welder qualification included. Prepares student for the AWS SENSE Level 2 welder performance qualification test. (1 lecture, 3 lab)

#### **WELD 126-Gas Metal/Flux Core Arc Welding I**

##### **Credit Hours: 3**

Prerequisite: None. Basic course includes instruction on entry-level skills and knowledge to: identify and set-up the types of Gas Metal Arc Welding (GMAW) and Flux Core Arc Welding (FCAW) equipment; identify types and specifications of GMAW/FCAW electrodes; set up and perform fillet and groove GMAW/FCAW welds in flat, horizontal, vertical, and overhead positions. Covers the American Welding Society (AWS) D1.1 Structural Welding Code and related AWS SENSE Level 1 competencies. (1 lecture, 2 lab)

#### **WELD 128-Gas Metal/Flux Core Arc Welding II - Structural**

##### **Credit Hours: 3**

Prerequisite: WELD 126 with a grade of C or higher. Intermediate course includes instruction on out of position groove welding on plate with gas metal arc welding and flux core arc welding. Covers the American Welding Society (AWS) D1.1 Structural Welding Code and prepares student for AWS SENSE Level 1 welder performance qualification test. (1 lecture, 2 lab)

#### **WELD 130-Gas Metal/Flux Core Arc Welding III**

##### **Credit Hours: 3**

Prerequisite: WELD 128 with a grade of C or higher. Advanced course includes instruction on Gas Metal Arc Welding (GMAW), Pulse Gas Metal Arc Welding (GMAW-P), and Flux Core Arc Welding (FCAW) equipment to perform welds and weldments on Aluminum and Stainless Steel. Prepares student for the AWS SENSE Level 2 welder performance qualification test. (1 lecture, 2 lab)

#### **WELD 132-Gas Tungsten Arc Welding I**

##### **Credit Hours: 2**

Prerequisite: None. Basic course includes instruction on entry-level skills and knowledge to: set up Gas Tungsten Arc Welding (GTAW) equipment; select correct electrodes and perform welds on carbon steel in flat, horizontal, vertical, and

overhead positions. Prepares student for the AWS SENSE Level 1 welder qualification test. (1 lecture, 1 lab)

### **WELD 134-Gas Tungsten Arc Welding II**

#### **Credit Hours: 3**

Prerequisite: None. Intermediate course includes instruction on welding aluminum and stainless steel with Gas Tungsten Arc Welding (GTAW) equipment. Prepares student for AWS SENSE Level 1 welder performance qualification test. (1 lecture, 2 lab)

### **WELD 136-Gas Tungsten Arc Welding III**

#### **Credit Hours: 4**

Prerequisite: WELD 132 or WELD 134 with a grade of C or higher. Advanced course includes instruction on Gas Tungsten Arc Welding (GTAW) on pipe. Prepares student for the AWS SENSE Level 2 welder performance qualification test. (1 lecture, 3 lab)

### **WELD 160-Welding Fabrication**

#### **Credit Hours: 4**

Prerequisites: WELD 114, WELD 122, WELD 128 with grades of C or higher and MATH 107 or equivalent placement score. An advanced, comprehensive class designed to put the skills obtained in the areas of welding, print reading, layout, and shapes to practical use and provide additional instruction on welding fabrication, weldments and fixtures. Upon completion students will be able to fabricate a metal weldment using layout methods, prints and a weldment fixture. (1 lecture, 3 lab)

### **WELD 163-CNC Plasma Cutting**

#### **Credit Hours: 2**

Prerequisite: EDT 111 or EDT 130 with a grade of C or higher. Basic course includes instruction on numerical control software and programming. Students will: write several programs; use computer aided drafting (CAD) to communicate with the plasma cutting system; program and cut two-dimensional parts; and learn how to troubleshoot the equipment for problems. (1 lecture, 1 lab)

### **WELD 170-Welding Inspection and Testing**

#### **Credit Hours: 3**

Prerequisite: None. Basic course includes instruction on the most common types of weld inspection and testing methods. Destructive testing methods include bend test, tensile pulls, and macro etch test. Non-destructive methods focusing on visual, dye penetrant, ultrasonic, magnetic particle and radiographic testing. Welding code acceptance criteria will be interpreted and applied to testing methods where applicable. (2 lecture, 1 lab)

### **WELD 180-Current Topics in Welding**

#### **Credit Hours: 1 to 8**

Prerequisite: Consent of program coordinator. Independent study of a special topic in welding under the supervision of a welding instructor.

## **WELLNESS**

### **WELL 116-Building Fitness for Life I**

#### **Credit Hours: 1**

Prerequisite: None. Course offers a comprehensive plan for utilizing fitness training as a means to lifetime wellness. Students explore nutritional needs, stress management and prevention of disease.

### **WELL 117-Building Fitness for Life II**

#### **Credit Hours: 1**

Prerequisite: WELL 116. Course expands the student's knowledge and ability to develop a comprehensive plan of lifetime wellness utilizing fitness training.

### **WELL 121-Women and Health**

#### **Credit Hours: 1**

Prerequisite: None. Designed to provide students with the tools to improve a woman's health status. Historical trends in health care regarding women are discussed as well as methods for facilitating change. Personal choices and their effects on health and wellbeing are identified. Topics include, but are not limited to, reproductive and gynecological concerns, nutrition, exercise, weight loss, bone health, women's concerns, heart disease, sexuality, and abuse.

### **WELL 122-Applied Wellness**

#### **Credit Hours: 1**

Prerequisite: None. A different type of physical education activity course that can be enjoyed by any or all students regardless of age or physical condition. Designed to provide students with theoretical and practical experiences focusing on the relationship of lifestyle to productivity and quality of life.