

It's about community!

State Fair

Community College



2024-2025
COURSE CATALOG



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Letter from the President

Dear Students,

Welcome to State Fair Community College! We are thrilled that you are considering joining our vibrant community of learners. As you embark on this exciting journey, we want to assure you that SFCC is committed to providing you with a high-quality education that will prepare you for success in your chosen field.

At SFCC, you will find a supportive and inclusive environment where you can pursue your academic and personal goals. Whether you are interested in earning a degree or certificate, preparing for transfer to a four-year institution, or enhancing your skills for the workforce, we have a wide range of programs and resources to help you succeed.

Our dedicated faculty and staff are here to support you every step of the way. From academic advising and tutoring services to career counseling and student organizations, we are here to help you achieve your goals and make the most of your college experience.

We also offer a variety of extracurricular activities and events to help you engage with your peers and make lifelong memories. Whether you are interested in sports, arts and culture, or community service, there is something for everyone at SFCC.

We invite you to explore all that SFCC has to offer and discover why we are the right choice for your education. We look forward to welcoming you to our campus and helping you achieve your dreams.

Sincerely,
Dr. Brent Bates, PhD
President



Fall 2024

August 8, 2024	Campus Closes at Noon
August 14, 2024	All Staff Meeting – Offices Closed 8:00AM – 11:00AM
August 19, 2024	Fall Term Starts
September 2, 2024	Labor Day – CLOSED
October 14 – 17, 2024	Fall Break for Students
October 18, 2024	Fall Holiday – CLOSED
November 11, 2024	Veterans Day – CLOSED
November 27 – 29, 2024	Thanksgiving Break – CLOSED
December 9 – 13, 2024	Last Week of Term
December 13, 2024	Fall Term Ends
December 18, 2024	Campus Closes at Noon until January 2, 2025

Spring 2025

January 2, 2025	Campus Reopens after Winter Break
January 16, 2025	All Staff Meeting – Offices Closed 8:00AM – 11:00AM
January 20, 2025	Martin Luther King Jr. Day – CLOSED
January 21, 2025	Spring Term Starts
February 17, 2025	President's Day – CLOSED
March 17 – 21, 2025	Spring Break – CLOSED
April 18, 2025	Spring Holiday – CLOSED
May 12 – 16, 2025	Last Week of Term
May 16, 2025	Spring Term Ends
May 16, 2025	Commencement

Summer 2025

May 26, 2025	Memorial Day – CLOSED
June 2, 2025	Summer Term I Starts
June 19, 2025	Juneteenth – CLOSED
June 27, 2025	Summer Term I Ends
July 4, 2025	Independence Day – CLOSED
July 7, 2025	Summer Term II Starts
August 1, 2025	Summer Term II Ends

Mission of the College

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.

Vision Statement

State Fair Community College will be the communities' preferred choice, where students, faculty, and staff realize their confidence, passion, skills, and potential.



Opportunities

Campuses

Attend SFCC in Boonville, Clinton, Eldon, Jefferson City, Lake of the Ozarks, Sedalia, Whiteman Air Force Base in Knob Noster, and online. You don't have to travel far to reach your career and academic goals at SFCC!

Academics and Programs

SFCC offers Skills and Professional Certificates, Associate of Applied Science degrees and Associate of Arts, Associate of Fine Arts, Associate of Arts in Teaching, Associate of General Studies, and Associate of Science in Chemistry or Engineering degrees for transferring to four-year colleges or universities. Explore all our areas of study.

Continuing and community education programs and classes are offered by The LearningForce, and Adult Education and Literacy provides high school equivalency preparation coursework, English Language Learner classes and brush-up skills in reading, writing and math.

Online Learning

Students can take advantage of SFCC's 260+ online classes. We even offer two degree programs completely online: an Associate of Arts degree and an Associate of Applied Science degree in Business Management. Find out more about online learning at SFCC.

Arts

Quality performing and visual arts programming is presented at SFCC throughout the year. Not only are these events tremendous learning tools for students but they also provide great cultural and entertainment value for the community! Get involved and find out more about the Arts at SFCC.

Athletics

SFCC is home to fourteen teams. The Roadrunners compete in basketball, soccer, baseball, softball, track and field, cross country, esports, spirit squad (cheer), clay target shooting and golf. Visit the SFCC Roadrunners website for rosters, team schedules and all athletic news.

Student and Residential Life

The best college experiences happen when you join any of the 22 student clubs and organizations or live in the Residence Hall. You can discover new interests, make lasting friendships, and have fun!



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 framework for Missouri's Core 42 is designed for students to obtain the basic competencies of Valuing, Managing Information, Communicating, and Higher-Order Thinking through the completion of at least 42-semester hours distributed across the broad Knowledge Areas of Communications, Humanities & Fine Arts, Natural & Mathematical Sciences, and Social & Behavioral Sciences. (See <https://dhewd.mo.gov/core42.php> for additional information.)

CORE 42 Framework Competencies

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

- develop an understand the moral and ethical values of a diverse society;
- develop the ability to analyze the ethical implications of actions and decisions;
- compare and contrast historical and cultural ethical perspectives and belief systems.
- utilize cultural, behavioral, and historical knowledge to clarify and articulate a personal value system.
- recognize the ramifications of one's value decisions on self and others.
- recognize conflicts within and between value systems and recognize and analyze ethical issues as they arise in a variety of contexts.
- consider multiple perspectives, recognize biases, deal with ambiguity, and take a reasonable position.

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

- locate, organize, store, retrieve, evaluate, synthesize, and annotate information from print, electronic, and other sources in preparation for solving problems and making informed decisions.
- access and generate information from a variety of sources, including the most contemporary technological information services.
- evaluate information for its currency, usefulness, truthfulness, and accuracy.
- organize, store, and retrieve information efficiently.
- reorganize information for an intended purpose, such as research projects.
- present information clearly and concisely, using traditional and contemporary technologies.

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 symbol 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 communication takes many forms and may focus on developing meaning and understanding; increasing knowledge; enacting change; solving problems; and developing, maintaining, and transforming relationships; among other goals and outcomes.

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

- analyze and evaluate their own and others' speaking and writing.
- conceive of writing as a recursive process that involves many strategies, including generating material, evaluating sources when used, drafting, revising, and editing.
- develop written work employing correct syntax, usage, grammar, and mechanics appropriate to one's audience and purpose.
- 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

- recognize the problematic elements of presentations of information and argument and to formulate diagnostic questions for resolving issues and solving problems.
- use linguistic, mathematical or other symbolic approaches to describe problems, identify alternative solutions, and make reasoned choices among those solutions.
- analyze and synthesize information from a variety of sources and apply the results to resolving complex situations and problems.
- defend conclusions using relevant evidence and reasoned argument.
- reflect on and evaluate their critical-thinking processes.

CORE 42 KNOWLEDGE AREA GOALS AND COMPETENCIES**Social & Behavioral Sciences Knowledge Area***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 (Missouri Revised Statute 170.011.1).

Students will demonstrate the ability to

- explain social institutions, structures, and processes across a range of historical periods and cultures.
- develop and communicate hypothetical explanations for individual human behavior within the large-scale historical and social context.
- draw on history and the social sciences to evaluate contemporary problems.
- describe and analytically compare social, cultural, and historical settings and processes other than one's own.
- articulate the interconnectedness of people and places around the globe.
- describe and explain the constitutions of the United States and Missouri.

Communication Knowledge Area

Written Communication 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 workforce.

Students will demonstrate the ability to

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

Oral Communication State-level Goal:

To prepare students to communicate effectively in a variety of contexts. Students will understand communication is symbolic, relational, collaborative, 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

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

Natural Sciences Knowledge Area*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

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

Mathematical Sciences Knowledge Area*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

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

Humanities and Fine Arts*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

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



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. Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

General Education Core	42 Hours	History	
Written Communications	6 hours	HIST 108	World History Before 1500 3
ENGL 101 English Composition I	3	HIST 109	World History After 1500 3
ENGL 102 English Composition II	3	Psychology	
Oral Communications	3 hours	PSY 101	General Psychology 3
COMM 101 Public Speaking	3	PSY 210	Lifespan Development 3
COMM 103 Small Group Communication	3	Social and Behavioral Science Communications	
COMM 105 Interpersonal Communication	3	COMM 110	Introduction to Mass Communication 3
COMM 190 Argumentation and Debate	3	Sociology	
Social and Behavioral Sciences	9 hours	SOC 100	General Sociology 3
<i>Must include courses from at least two disciplines, including at least one Civics course</i>		SOC 101	Social Problems 3
Civics		SOC 102	Marriage and Family 3
HIST 101 U.S. History Before 1877	3	SOC 120	American Diversity 3
HIST 102 U.S. History Since 1877	3	Mathematical Sciences	3 Hours
POLS 101 American/National Government	3	MATH 113	Mathematical Reasoning and Modeling 3
Criminal Justice		MATH 114	Precalculus Algebra 3
CJ 102 Introduction to Criminal Justice	3	MATH 119	Statistical Reasoning 3
Criminology		Natural Sciences	7 Hours
CJ 107 Criminology	3	<i>Must include courses from at least two disciplines, including one course with a lab component</i>	
Economics		Astronomy	
AGRI 132 Agriculture Economics	3	EASC 120	Introduction to Astronomy 3
ECON 101 Principles of Macroeconomics	3	Biology	
ECON 102 Principles of Microeconomics	3	BIO 100	Essentials of Biology 3
Geography		BIO 105	Introduction to Ecology 3
GEOG 101 World Geography	3	BIO 112	Principles of Biology with Lab 4
		BIO 125	General Biology with Lab 4

Associate of Arts (Continued)

Chemistry

CHEM 101	Introduction to Chemistry with Lab	4
CHEM 123	General Chemistry I with Lab	5

Geology

EASC 106	Introduction to Geology with Lab	4
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 110	Survey of Physics with Lab	5
PHYS 211	Engineering 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 140	Art History Survey I	3
ART 142	Art History Survey II	3

Film

COMM 120	History of Film	3
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Foreign Language

FREN 101	Elementary French I	3
FREN 102	Elementary French II	3
GERM 101	Elementary German I	3
GERM 102	Elementary German II	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
COMM 161	Media Productions I	3
ENGL 106	Creative Writing	3
MUS 119	Jazz Band I	1
MUS 196	Concert Band I	1
MUS 197	Concert Band II	1
MUS 204	Chamber Singers I	1.5
MUS 210A	Contemporary Choir I	1
THEA 110	Stagecraft and Lighting	3
THEA 111	Acting I	3
THEA 119	Stage Makeup	3
THEA 131	Script Analysis	3

Philosophy

PHIL 101	Introduction to Philosophy	3
PHIL 102	Ethics	3

Religion

PHIL 104	Living Religions	3
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Theatre

THEA 107	Introduction to Theatre	3
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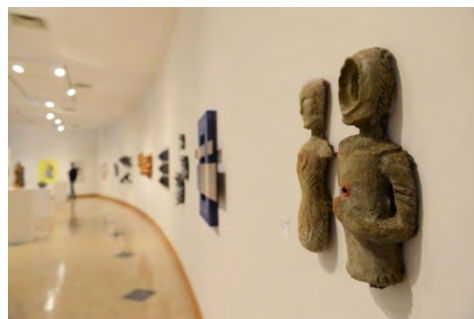
General Education Elective **5 Hours**

Select additional hours from the General Education categories listed above for a minimum total of 42 hours to meet the General Education Core. Any course with an approved MOTR number or additional hours from a MOTR-approved course can be utilized to fulfill the General Education Core electives requirement.

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.

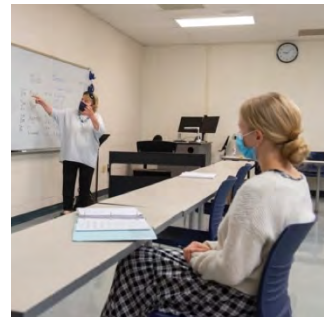
Civics Exam: HIST 101, HIST 102, POLS 101, or POLS 109 taken at SFCC beginning fall 2019 meet the requirement for Missouri Senate Bill 807 (section 170.013.1).

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

General Education Core	42 Hours	PSY 210	Lifespan Development	3	
Written Communications	6 hours	Social and Behavioral Science Communications			
ENGL 101	English Composition I	3	COMM 110	Introduction to Mass Communication	3
ENGL 102	English Composition II	3	Sociology		
Oral Communications	3 hours	SOC 100	General Sociology	3	
COMM 101	Public Speaking	3	SOC 101	Social Problems	3
COMM 190	Argumentation and Debate	3	SOC 120	American Diversity	3
Social and Behavioral Sciences	9 hours	Mathematical Sciences			
<i>Must include courses from at least two disciplines, including at least one civics course</i>		MATH 113	Mathematical Reasoning and Modeling	3	
Civics		MATH 114	Precalculus Algebra	3	
HIST 101	U.S. History Before 1877	3	MATH 119	Statistical Reasoning	3
HIST 102	U.S. History Since 1877	3	Natural Sciences		
POLS 101	American/National Government	3	<i>Must include courses from at least two disciplines, including one course with a lab component</i>		
Criminal Justice		Astronomy			
CJ 102	Introduction to Criminal Justice	3	EASC 120	Introduction to Astronomy	3
Economics		Biology			
AGRI 132	Agriculture Economics	3	BIO 100	Essentials of Biology	3
ECON 101	Principles of Macroeconomics	3	BIO 105	Introduction to Ecology	3
ECON 102	Principles of Microeconomics	3	BIO 112	Principles of Biology with Lab	4
Geography		Chemistry			
GEOG 101	World Geography	3	CHEM 101	Introduction to Chemistry with Lab	4
History		Geology			
HIST 108	World History Before 1500	3	EASC 106	Introduction to Geology with Lab	4
HIST 109	World History After 1500	3	EASC 118	Environmental Geology	3
Psychology					
PSY 101	General Psychology	3			

Associate of Fine Arts in Art (continued)

Life Sciences			MUS 210A	Cotemporary Choir I	1
BIO 103	Human Biology	3	THEA 110	Stagecraft and Lighting	3
BIO 207	Human Anatomy with Lab	4	THEA 111	Acting I	3
BIO 208	Human Physiology with Lab	4	THEA 131	Script Analysis	3
Physics			Philosophy		
PHYS 110	Survey of Physics with Lab	5	PHIL 101	Introduction to Philosophy	3
PHYS 211	Engineering Physics I with Lab	5	PHIL 102	Ethics	3
Humanities and Fine Arts 9 Hours			Religion		
<i>Must include courses from at least two disciplines</i>			PHIL 104	Living Religions	3
Foreign Language			Theatre		
FREN 101	Elementary French I	3	THEA 107	Introduction to Theatre	3
FREN 102	Elementary French II	3	General Education Elective 5 Hours		
GERM 101	Elementary German I	3	Select additional hours from the general education categories listed above for a minimum total of 42 hours to meet the general education core		
SPAN 101	Elementary Spanish I	3	Art Core 15 Hours		
SPAN 102	Elementary Spanish II	3	ART 103	Design I	3
Literature			ART 112	Drawing I	3
LIT 101	Introduction to Literature	3	ART 122	Sculpture I or	
LIT 107	American Literature	3	ART 126	Ceramics I	3
LIT 109	British Literature	3	ART 140	Art History Survey I	3
LIT 112	World Literature	3	ART 142	Art History Survey II	3
Music			Art Electives 9 Hours		
MUS 100	Music Theory I	3	ART 104	Design II	3
MUS 101	Music Appreciation	3	ART 106	Watercolor I	3
MUS 102	History of Rock Music	3	ART 107	Watercolor II	3
MUS 103	Music History and Literature Before 1800	3	ART 108	Watercolor III	3
MUS 104	Music History and Literature Since 1800	3	ART 110	Printmaking	3
Performance			ART 113	Drawing II	3
<i>A maximum of 3 credit hours can be applied to the humanities and fine arts category and the total general education core</i>			ART 114	Figure Drawing I	3
ART 116	Painting I	3	ART 115	Figure Drawing II	3
ART 122	Sculpture I	3	ART 116	Painting I	3
ART 126	Ceramics I	3	ART 117	Painting II	3
ART 160	Introduction to Graphic Design	3	ART 118	Painting III	3
MUS 119	Jazz Band I	1	ART 122	Sculpture I	3
MUS 196	Concert Band I	1	ART 123	Sculpture II	3
MUS 197	Concert Band II	1	ART 126	Ceramics I	3
MUS 204	Chamber Singers I	1.5	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. Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

General Education Core	42 Hours		
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		
COMM 190 Argumentation and Debate	3		
Social and Behavioral Sciences	9 hours		
<i>Must include courses from at least two disciplines, including at least one civics course</i>			
Civics			
HIST 101 U.S. History Before 1877	3		
HIST 102 U.S. History Since 1877	3		
POLS 101 American/National Government	3		
Criminal Justice			
CJ 102 Introduction to Criminal Justice	3		
Economics			
AGRI 132 Agriculture Economics	3		
ECON 101 Principles of Macroeconomics	3		
ECON 102 Principles of Microeconomics	3		
Geography			
GEOG 101 World Geography	3		
History			
HIST 108 World History Before 1500	3		
HIST 109 World History After 1500	3		
Psychology			
PSY 101 General Psychology	3		
PSY 210 Lifespan Development	3		
		Social and Behavioral Science Communications	
		COMM 110 Introduction to Mass Communication	3
		Sociology	
		SOC 100 General Sociology	3
		SOC 101 Social Problems	3
		SOC 120 American Diversity	3
		Mathematical Sciences	3 Hours
		MATH 113 Mathematical Reasoning and Modeling	3
		MATH 114 Precalculus Algebra	3
		MATH 119 Statistical Reasoning	3
		Natural Sciences	7 Hours
		<i>Must include courses from at least two disciplines, including one course with a lab component</i>	
		Astronomy	
		EASC 120 Introduction to Astronomy	3
		Biology	
		BIO 100 Essentials of Biology	3
		BIO 105 Introduction to Ecology	3
		BIO 112 Principles of Biology with Lab	4
		BIO 125 General Biology with Lab	4
		Chemistry	
		CHEM 101 Introduction to Chemistry with Lab	4
		CHEM 123 General Chemistry I with Lab	5
		Geology	
		EASC 106 Introduction to Geology with Lab	4
		EASC 118 Environmental Geology	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 110	Survey of Physics with Lab	5
PHYS 211	Engineering 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 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 196	Concert Band I	1
MUS 197	Concert Band II	1
MUS 204	Chamber Singers I	1.5
MUS 210A	Contemporary Choir I	1
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
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Theatre

THEA 107	Introduction to Theatre	3
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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 I	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 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 204	Chamber Singers I	1.5
MUS 205	Chamber Singers II	1.5
MUS 206	Chamber Singers III	1.5
MUS 207	Chamber Singers IV	1.5
MUS 210A	Contemporary Choir I	1
MUS 211A	Contemporary Choir II	1
MUS 212A	Contemporary Choir III	1
MUS 213A	Contemporary Choir IV	1

Concert and Recital Attendance 4 Semesters

MUS 195	Concert and Recital Attendance	0
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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. Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

General Education Core	42 Hours		
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		
COMM 190 Argumentation and Debate	3		
Social and Behavioral Sciences	9 hours		
<i>Must include courses from at least two disciplines, including at least one civics course</i>			
Civics			
HIST 101 U.S. History Before 1877	3		
HIST 102 U.S. History Since 1877	3		
POLS 101 American/National Government	3		
Criminal Justice			
CJ 102 Introduction to Criminal Justice	3		
Economics			
AGRI 132 Agriculture Economics	3		
ECON 101 Principles of Macroeconomics	3		
ECON 102 Principles of Microeconomics	3		
Geography			
GEOG 101 World Geography	3		
History			
HIST 108 World History Before 1500	3		
HIST 109 World History After 1500	3		
Psychology			
PSY 101 General Psychology	3		
PSY 210 Lifespan Development	3		
		Social and Behavioral Science Communications	
		COMM 110 Introduction to Mass Communication	3
		Sociology	
		SOC 100 General Sociology	3
		SOC 101 Social Problems	3
		SOC 120 American Diversity	3
		Mathematical Sciences	3 Hours
		MATH 113 Mathematical Reasoning and Modeling	3
		MATH 114 Precalculus Algebra	3
		MATH 119 Statistical Reasoning	3
		Natural Sciences	7 Hours
		<i>Must include courses from at least two disciplines, including one course with a lab component</i>	
		Astronomy	
		EASC 120 Introduction to Astronomy	3
		Biology	
		BIO 100 Essentials of Biology	3
		BIO 105 Introduction to Ecology	3
		BIO 112 Principles of Biology with Lab	4
		BIO 125 General Biology with Lab	4
		Chemistry	
		CHEM 101 Introduction to Chemistry with Lab	4
		CHEM 123 General Chemistry I with Lab	5
		Geology	
		EASC 106 Introduction to Geology with Lab	4
		EASC 118 Environmental Geology	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 110	Survey of Physics with Lab	5
PHYS 211	Engineering 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 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 196	Concert Band I	1
MUS 197	Concert Band II	1
MUS 204	Chamber Singers I	1.5
MUS 210A	Contemporary Choir I	1

Philosophy

PHIL 101	Introduction to Philosophy	3
PHIL 102	Ethics	3

Religion

PHIL 104	Living Religions	3
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Theatre

THEA 107	Introduction to Theatre	3
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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	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. Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

General Education Core	42 Hours	Social and Behavioral Science Communications	
Written Communications	6 hours	COMM 110	Introduction to Mass Communication 3
ENGL 101	English Composition I 3	Sociology	
ENGL 102	English Composition II 3	SOC 100	General Sociology 3
Oral Communications	3 hours	SOC 101	Social Problems 3
COMM 101	Public Speaking 3	SOC 120	American Diversity 3
COMM 190	Argumentation and Debate 3	Mathematical Sciences	3 Hours
Social and Behavioral Sciences	9 hours	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
Civics		MATH 119	Statistical Reasoning 3
HIST 101	U.S. History Before 1877 3	Natural Sciences	7 Hours
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	Astronomy	
Criminal Justice		EASC 120	Introduction to Astronomy 3
CJ 102	Introduction to Criminal Justice 3	Biology	
Economics		BIO 100	Essentials of Biology 3
AGRI 132	Agriculture Economics 3	BIO 105	Introduction to Ecology 3
ECON 101	Principles of Macroeconomics 3	BIO 112	Principles of Biology with Lab 4
ECON 102	Principles of Microeconomics 3	BIO 125	General Biology with Lab 4
Geography		Chemistry	
GEOG 101	World Geography 3	CHEM 101	Introduction to Chemistry with Lab 4
History		CHEM 123	General Chemistry I with Lab 5
HIST 108	World History Before 1500 3	Geology	
HIST 109	World History After 1500 3	EASC 106	Introduction to Geology with Lab 4
Psychology		EASC 118	Environmental Geology 3
PSY 101	General Psychology 3		
PSY 210	Lifespan Development 3		

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

Life Sciences			Philosophy		
BIO 103	Human Biology	3	PHIL 101	Introduction to Philosophy	3
BIO 207	Human Anatomy with Lab	4	PHIL 102	Ethics	3
BIO 208	Human Physiology with Lab	4	Religion		
Physics			PHIL 104	Living Religions	3
PHYS 110	Survey of Physics with Lab	5	Theatre		
PHYS 211	Engineering Physics I with Lab	5	THEA 107	Introduction to Theatre	3
Humanities and Fine Arts			General Education Elective		
6 Hours			5 Hours		
MUS 100	Music Theory I	3	Select additional hours from the general education categories listed above for a minimum total of 42 hours to meet the general education core		
THEA 111	Acting I	3	Theatre Core		
Humanities and Fine Arts Elective			10 Hours		
3 Hours			THEA 119	Stage Makeup	3
Art			THEA 131	Script Analysis	3
ART 101	Art Appreciation	3	THEA 134	Stage Voice and Movement	3
ART 140	Art History Survey I	3	THEA 190	Theatre Capstone	1
ART 142	Art History Survey II	3	Musical Theatre Core		
Foreign Language			14 Hours		
FREN 101	Elementary French I	3	DANC 110	Tap I	2
FREN 102	Elementary French II	3	DANC 120	Jazz I	2
GERM 101	Elementary German I	3	MUS 105	Aural Training I	1
SPAN 101	Elementary Spanish I	3	MUS 107	Music Theory III	3
SPAN 102	Elementary Spanish II	3	MUS 109	Aural Training II	1
Literature			MUS 160	Applied Voice Lessons I	1
LIT 101	Introduction to Literature	3	MUS 161	Applied Voice Lessons II	1
LIT 107	American Literature	3	MUS 204	Chamber Singers I	1.5
LIT 109	British Literature	3	MUS 205	Chamber Singers II	1.5
LIT 112	World Literature	3	Degree Total		
Music			66 Hours		
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			



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 institutional GPA of 2.0 to apply for graduation.
- Successful completion of the ACT with a composite score of 20 or better, or successful completion of the SAT with a composite score in the 1030, or the successful completion of the MoGEA (180 or higher for Mathematics; 183 or higher for Reading Comprehension and Interpretation; 167 or higher for Writing). Alternatively, achievement of the Praxis ParaPro examination, post July 1, 2024, is contingent upon meeting a score criterion established by the Department of Elementary and Secondary Education (DESE). For more detailed information regarding scores, please contact Dr. Cara Barth-Fagan, Teacher Education Program Coordinator: cbarthfagan1@sfccmo.edu or visit the DESE website: www.dese.mo.gov.
- The state could require different scores for all areas on the Praxis ParaPro.
- Transfer institutions could require different scores for the ACT or Praxis ParaPro.
- 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, Praxis ParaPro, or have a composite ACT score of 20 or better 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. 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^{^^}.

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
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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	Principles of Biology with Lab or	
BIO 125	General Biology with Lab	4
EASC 101	Introduction to Earth Sciences with Lab or	
EASC 106	Introduction to Geology with Lab or	
PHYS 110	Survey of Physics with Lab	5

Humanities and Fine Arts 9 Hours

Must include courses from two disciplines

Art

ART 101	Art Appreciation	3
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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 Since 1800	3

Philosophy

PHIL 101	Introduction to Philosophy	3
PHIL 102	Ethics	3

Religion

PHIL 104	Living Religions	3
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Theatre

THEA 107	Introduction to Theatre	3
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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	0.5
EDUC 205 ^{^^}	Teaching Profession with Field Experience	3
EDUC 209 ^{^^}	Foundations of Education in a Diverse Society	3
EDUC 212 ^{^^}	Educational Technology	3
EDUC 220 ^{^^}	Educational Psychology	3
PSY 102 ^{^^}	Child Psychology	3

Program Electives 9 Hours

Suggested Courses

ECD 107 ^{^^}	Child Nutrition, Health, and Safety	3
ECON 101	Principles of Macroeconomics	3
EDUC 110 ^{^^}	Introduction to Physical Education in the Elementary School	2
EDUC 218 ^{^^}	Children's Literature	3
EDUC 228 ^{^^}	Education of Exceptional Learners Pre-K 12	3
EDUC 240 ^{^^}	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 General Studies

The Associate of General Studies provides students flexibility to study areas of personal interest, complement existing talents and skills, and adapt the learning outcomes to meet future career, employment, and/or educational goals. For students planning to transfer to another college or university, this degree may not be as appropriate as an Associate of Arts, an Associate of Science, or an Associate of Applied Science degree.

Written and Oral Communications	6 Hours	Program Requirements	45 hours
COMM 101 Public Speaking	3	Working with their Navigator, students should select additional courses from across a variety of areas to meet their personal goals.	
ENGL 101 Composition I	3		
ENGL 110 Communication for Business and Industry	3		
Civics	3 Hours	Degree Total	60 Hours
HIST 101 U.S. History Before 1877 <i>or</i>	3		
HIST 102 U.S. History Since 1877 <i>or</i>	3		
POLS 101 American/National Government	3		
Mathematical Sciences	3 Hours		
TECH 101 Technical Math <i>or</i>	3		
Any higher-level MATH course	3		
Humanities, Sciences, and Fine Arts	3 Hours		
General Education Core	15 Hours		



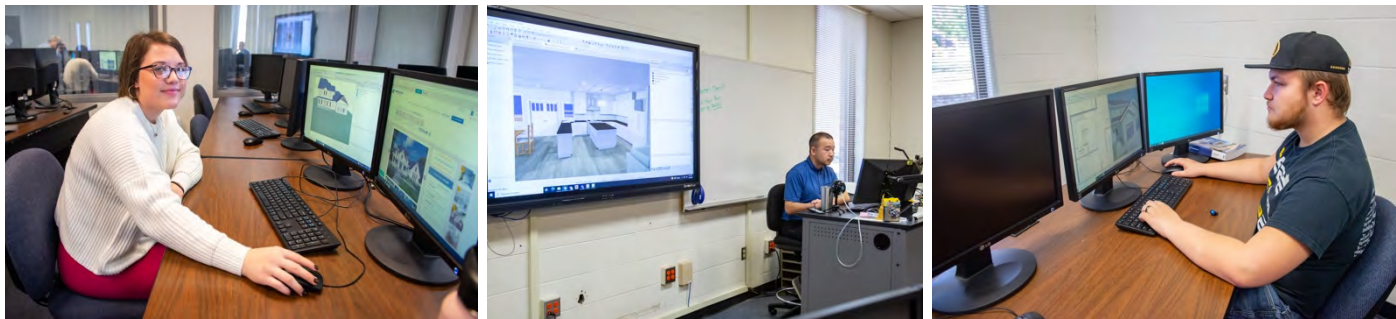
Associate of Science in Chemistry

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. Students take basic courses common to most science and pre-health disciplines and continue their studies of chemistry at their transfer school. 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. 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	39 Hours
ENGL 101 English Composition I	3	BIO 112 Principles of Biology with Lab	4
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 211 Engineering Physics I with Lab	5
HIST 102 U.S. History Since 1877	3	PHYS 212 Engineering Physics II with Lab	5
POLS 101 American/National Government	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 General Biology with Lab	4
ECON 101 Principles of Macroeconomics	3	MATH 120 Precalculus Trigonometry	3
ECON 102 Principles of Microeconomics	3	MATH 131 Calculus and Analytic Geometry II	5
FREN 101 Elementary French I	3		
LIT 107 American Literature	3	Degree Total	63 Hours
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. Students take basic courses common to most engineering disciplines and continue their studies in specialized areas (electrical, mechanical, civil, chemical, etc.) at their transfer school. 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).

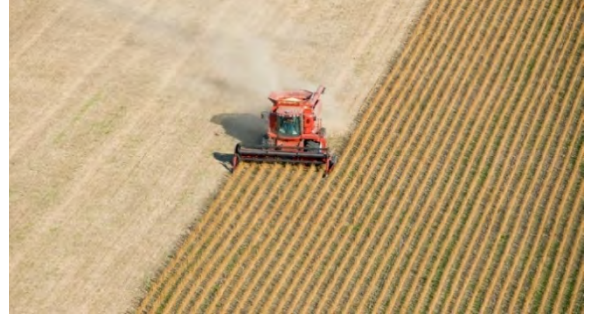
Some programs require essential qualifications to be admitted and retained. Visit www.sfccmo.edu/essential-qualifications. Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Written and Oral Communications	6 Hours	Program Requirements	36 Hours
ENGL 101 English Composition I	3	CHEM 123 General Chemistry I with Lab	5
Select an additional course		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
Civics	3 Hours	MATH 132 Calculus and Analytic Geometry III	5
HIST 101 U.S. History Before 1877	3	PHYS 211 Engineering Physics I with Lab	5
HIST 102 U.S. History Since 1877	3	PHYS 212 Engineering Physics II with Lab	5
POLS 101 American/National Government	3	PHYS 235 Engineering Statics	3
Humanities, Sciences, and Fine Arts	6 Hours	Program Electives	16 Hours
ART 101 Art Appreciation	3	BIO 112 Principles of Biology with Lab	4
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	Degree Total	67 Hours



Associate of Applied Science General Education Requirements

General Education Core	15 Hours	COMM 110	Introduction to Mass Communication	3	
Written and Oral Communications	6 Hours	EASC 106	Introduction to Geology with Lab	4	
COMM 101	Public Speaking	3	EASC 118	Environmental Geology	3
COMM 190	Argumentation and Debate	3	EASC 120	Introduction to Astronomy	3
ENGL 101	English Composition I	3	ECON 101	Principles of Macroeconomics	3
ENGL 102	English Composition II	3	ECON 102	Principles of Microeconomics	3
ENGL 110	Communication for Business and Industry	3	FREN 101	Elementary French I	3
Civics	3 Hours	FREN 102	Elementary French II	3	
HIST 101	U.S. History Before 1877	3	GEOG 101	World Geography	3
HIST 102	U.S. History Since 1877	3	GERM 101	Elementary German I	3
POLS 101	American/National Government	3	HIST 108	World History Before 1500	3
Mathematical Sciences	3 Hours	HIST 109	World History After 1500	3	
MATH 101	Business Math	3	LIT 101	Introduction to Literature	3
MATH 110	Intermediate Algebra with Review	5	LIT 107	American Literature	3
MATH 112	Intermediate Algebra	3	LIT 109	British Literature	3
MATH 113	Mathematical Reasoning and Modeling	3	LIT 112	World Literature	3
MATH 114	Precalculus Algebra	3	MUS 100	Music Theory I	3
MATH 119	Statistical Reasoning	3	MUS 101	Music Appreciation	3
MATH 120	Precalculus Trigonometry	3	MUS 102	History of Rock Music	3
MATH 130	Calculus and Analytic Geometry I	5	MUS 103	Music History and Literature Before 1800	3
TECH 101	Technical Math	3	MUS 104	Music History and Literature Since 1800	3
Humanities, Sciences, and Fine Arts	3 Hours	MUS 119	Jazz Band I	1	
AGRI 119	Soils I with Lab	4	MUS 196	Concert Band I	1
AGRI 132	Agriculture Economics	3	MUS 197	Concert Band II	1
ART 101	Art Appreciation	3	MUS 204	Chamber Singers I	1.5
ART 112	Drawing I	3	MUS 210A	Contemporary Choir I	1
ART 116	Painting I	3	PHIL 101	Introduction to Philosophy	3
ART 122	Sculpture I	3	PHIL 102	Ethics	3
ART 126	Ceramics I	3	PHIL 104	Living Religions	3
ART 140	Art History Survey I	3	PHYS 110	Survey of Physics with Lab	5
ART 142	Art History Survey II	3	PHYS 211	Engineering Physics I with Lab	5
ART 160	Introduction to Graphic Design	3	PHYS 212	Engineering Physics II with Lab	5
BIO 100	Essentials of Biology	3	PSY 101	General Psychology	3
BIO 103	Human Biology	3	PSY 210	Lifespan Development	3
BIO 105	Introduction to Ecology	3	SOC 100	General Sociology	3
BIO 112	Principles of Biology with Lab	4	SOC 101	Social Problems	3
BIO 125	General Biology with Lab	4	SOC 120	American Diversity	3
BIO 207	Human Anatomy with Lab	4	SPAN 101	Elementary Spanish I	3
BIO 208	Human Physiology with Lab	4	SPAN 102	Elementary Spanish II	3
CHEM 101	Introduction to Chemistry with Lab	4	TECH 102	Applied Science	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. 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
Certificate Total		30 Hours



Associate of Applied Science 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. 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
Select an additional course		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
Civics	3 Hours	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
Mathematical Sciences	3 Hours	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
Humanities, Sciences, and Fine Arts	4 Hours	AGRI 138 Ag Business Management	3
AGRI 119 Soils I with Lab	4	AGRI 175 Occupational Internship	4
		CAPP 125 Microcomputer Applications	3
		Degree Total	62 Hours



Associate of Applied Science 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. 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
Select an additional course		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
Civics	3 Hours	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
Mathematical Sciences	3 Hours	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
Humanities, Sciences, and Fine Arts	4 Hours	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
		Degree Total	63 Hours



Associate of Applied Science 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. 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
Select an additional course		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
Civics	3 Hours	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
Mathematical Sciences	3 Hours	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
Humanities, Sciences, and Fine Arts	4 Hours	AGRI 141 Livestock Breeding	3
BIO 112 Principles of Biology with Lab	4	AGRI 143 Livestock Reproduction	3
		AGRI 175 Occupational Internship	4
		BIO 210 Principles of Genetics with Lab	4
		CAPP 125 Microcomputer Applications	3
		Degree Total	63 Hours



Associate of Applied Science 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. 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
Select an additional course			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
Civics			AGRI 121	Soils II	3
		3 Hours	AGRI 126	Ornamental Woody Plants	3
HIST 101	U.S. History Before 1877	3	AGRI 127	Farm Chemicals	3
HIST 102	U.S. History Since 1877	3	AGRI 128	Ornamental Herbaceous Plants	3
POLS 101	American/National Government	3	AGRI 129	General Horticulture	3
Mathematical Sciences			AGRI 131	Introduction to Agribusiness Systems	3
		3 Hours	AGRI 138	Ag Business Management	3
MATH 101	Business Math	3	AGRI 151	Landscape Design and Maintenance	3
MATH 110	Intermediate Algebra with Review	5	AGRI 154	Greenhouse Management with Lab	4
MATH 112	Intermediate Algebra	3	AGRI 168	Commercial Applicator Licensing	2
MATH 114	Precalculus Algebra	3	AGRI 175	Occupational Internship	4
Humanities, Sciences, and Fine Arts			CAPP 125	Microcomputer Applications	3
		4 Hours			
AGRI 119	Soils I with Lab	4			
			Degree Total		62 Hours



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. 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
Certificate Total	59 Hours



Associate of Applied Science 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. 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^{^^}

		6 Hours	Program Requirements	59 Hours
Written and Oral Communications		6 Hours	AUTO 102 ^{^^} Introduction to Automotive Industry	3
COMM 101	Public Speaking	3	AUTO 103 ^{^^} Manual Transmissions, Drivelines and Axles	5
ENGL 110	Communication for Business and Industry	3	AUTO 104 ^{^^} Introduction to Automotive Technology	4
Civics		3 Hours	AUTO 105 ^{^^} Automatic Transmissions	5
HIST 101	U.S. History Before 1877	3	AUTO 106 ^{^^} Power Train Management	5
HIST 102	U.S. History Since 1877	3	AUTO 108 ^{^^} Advanced Engine Performance	6
POLS 101	American/National Government	3	AUTO 113 ^{^^} Steering, Suspension and Wheels	5
Mathematical Sciences		3 Hours	AUTO 115 ^{^^} Automotive Brakes	5
TECH 101	Technical Math	3	AUTO 116 ^{^^} Automotive Electrical System Fundamentals	3
Humanities, Sciences, and Fine Arts		3 Hours	AUTO 118 ^{^^} Automotive Electrical Systems	3
TECH 102	Applied Science	3	AUTO 119 ^{^^} Automotive Heating and Air Conditioning	5
			AUTO 120 ^{^^} Advanced Electrical Systems Diagnosis	4
			AUTO 121 ^{^^} Automotive Engines	6
			Degree Total	74 Hours



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. 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 125 Human Relations	3
CAPP 125 Microcomputer Applications	3
ENGL 110 Communication for Business and Industry	3
SS 120 Employment Strategies	1
Certificate Total	16 Hours



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. 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
Certificate Total		16 Hours



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. 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 Marketing Essentials	3
BSMT 125	Human Relations	3
CAPP 125	Microcomputer Applications	3
SS 120	Employment Strategies	1
Certificate Total		16 Hours



Associate of Applied Science 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. 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	BSMT 119	Customer Service Management	3	
ENGL 110	Communication for Business and Industry	3	BSMT 125	Human Relations	3
Select an additional course		BSMT 130	Business Strategies	3	
COMM 101	Public Speaking	3	BSMT 211	Data Analytics	3
ENGL 101	English Composition I	3	CAPP 125	Microcomputer Applications	3
Civics	3 Hours	CAPP 166	Excel	3	
HIST 101	U.S. History Before 1877	3	SS 120	Employment Strategies	1
HIST 102	U.S. History Since 1877	3	Program Electives	12 Hours	
POLS 101	American/National Government	3	ACCT 102	Managerial Accounting	3
Mathematical Sciences	3 Hours	ACCT 125	Computerized Accounting Applications	3	
MATH 101	Business Math	3	ACCT 135	Business and Federal Taxation	3
MATH 110	Intermediate Algebra with Review	5	BADM 107	Personal Finance	3
MATH 112	Intermediate Algebra	3	BSMT 106	Principles of Marketing	3
Humanities, Sciences, and Fine Arts	3 Hours	BSMT 110	Salesmanship	3	
ECON 102	Principles of Microeconomics	3	BSMT 122	Digital Marketing Essentials	3
PHIL 102	Ethics	3	BSMT 175	Business Management Internship	3-6
PSY 101	General Psychology	3	CIS 103	Introduction to CIS	3
SOC 100	General Sociology	3	CIS 124	Database Management	3
SPAN 101	Elementary Spanish I	3	CIS 185	Project Management	3
Program Requirements	34 Hours	COMM 112	Introduction to Public Relations	3	
ACCT 101	Principles of Financial Accounting	3	ECON 101	Principles of Macroeconomics	3
ACCT 109	Applied Accounting Procedures	3	IEM 146	Quality Management and Control	3
BADM 101	Introduction to Business	3	WEB 103	Introduction to Web Development	3
BADM 103	Legal Environment of Business	3	Degree Total	61 Hours	
BSMT 108	Principles of Management	3			



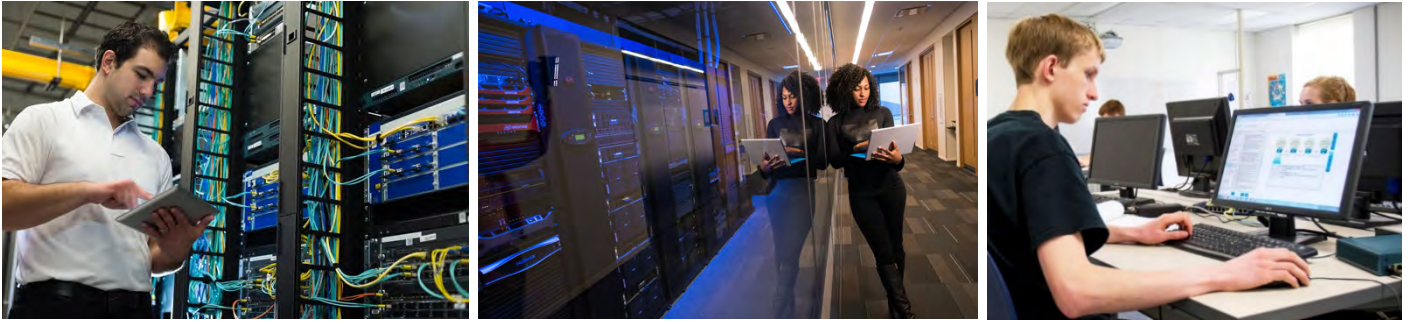
Skills Certificate in Cyber Security

With the number of unfilled cyber security jobs estimated at well over one million, the Skills Certificate in Cyber Security is designed to prepare students for this career field. While cyber security analyst, network defender, and penetration tester are just a few of the roles available, this Skills Certificate will give students a fundamental understanding of concepts and skills needed to get this career started on the right track.

Some programs require essential qualifications to be admitted and retained. Visit 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		15 Hours
CYB 110^^	Offensive Security	3
CYB 120^^	Defensive Security	3
CYB 130^^	Industrial Cyber Security	3
CYB 140^^	Cloud Security Technologies	3
Elective course with CYB prefix, NET 202, or NET 206^^		3
Certificate Total		15 Hours



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. 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 222^^ Enterprise Applications I	3
NET 223^^ Enterprise Applications II	3
Certificate Total	18 Hours



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. 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 and 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
Certificate Total	18 Hours



Skills Certificate in Systems Administration & Network Automation

With ever-changing business environments and the demand for Computer Information Systems professionals, the Skills Certificate in Systems Administration & Network Automation will give students a fundamental understanding of concepts and skills needed to begin this career. This certificate is designed to provide students with the knowledge and hands-on experience needed to manage the systems and networks on which today's businesses rely.

Some programs require essential qualifications to be admitted and retained. Visit 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		15 Hours
NET 103^^	Routing and Switching Essentials	3
NET 138^^	Network Directory Services	3
NET 203^^	Enterprise Networks, Security, and Automation	3
NET 210^^	Infrastructure Automation	3
NET 220^^	Enterprise Linux	3
Certificate Total		15 Hours



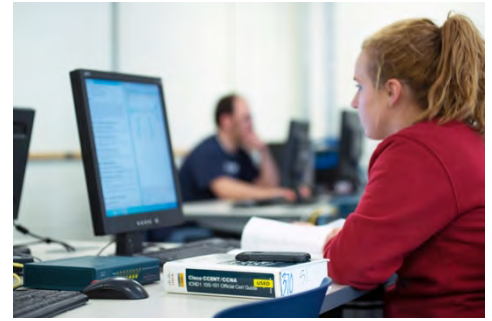
Professional Certificate in IT Essential Skills

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. 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
Certificate Total		31 Hours



Associate of Applied Science 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. 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 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 101 Business Math	3
TECH 101 Technical Math	3
Choose any MATH course numbered 110 or higher	3

Humanities, Sciences, and Fine Arts	3 Hours
ECON 101 Principles of Macroeconomics	3
ECON 102 Principles of Microeconomics	3

Program Requirements	28 Hours
CIS 103 Introduction to CIS	3
CIS 120 Programming in Python	3
NET 101 ^{^^} Introduction to Networks	3
NET 106 ^{^^} Introduction to Network Security	3
NET 120 ^{^^} Network Server	3
NET 125 ^{^^} Linux Operating Systems	3
NET 126 ^{^^} Network Client	3
NET 158 ^{^^} Network Firewalls	3
NET 175 ^{^^} Network Administration Internship	4

Program Electives	18 Hours
Choose any NET/CYB courses	15
Choose any NET/CYB/CIS/WEB course not taken	3

Degree Total	61 Hours
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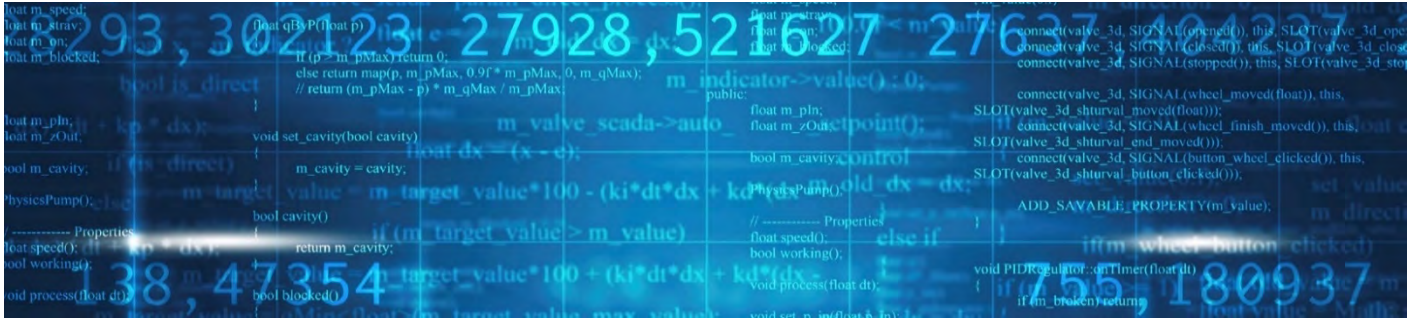
Skills Certificate in Computer User Support

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. 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
Certificate Total	19 Hours



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. 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
Certificate Total		18 Hours



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. 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
Certificate Total	30 Hours



Associate of Applied Science 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. 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 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

TECH 101 Technical Math 3

Humanities, Sciences, and Fine Arts 3 Hours

ECON 101 Principles of Macroeconomics 3

PHIL 102 Ethics 3

Program Requirements 44 Hours

ACCT 101^^ Principles of Financial Accounting 3

ACCT 102^^ Managerial Accounting 3

ACCT 109^^ Applied Accounting Procedures 3

ACCT 125^^ Computerized Accounting Applications 3

CAPP 125 Microcomputer Applications 3

CAPP 166^^ Excel 3

CIS 103^^ Introduction to CIS 3

CIS 124^^ Database Management 3

CIS 155^^ Programming in C# 3

CIS 161^^ Systems Analysis 3

CIS 175^^ CIS Internship 4

CIS 185^^ Project Management 3

NET 101^^ Introduction to Networks 3

SS 120 Employment Strategies 1

WEB 160^^ Portfolio Design 3

Program Electives 6 Hours

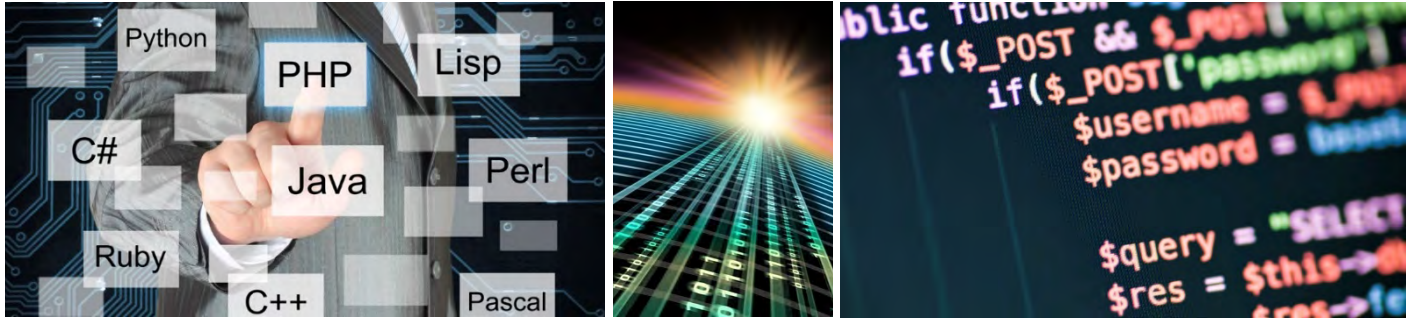
ACCT 135^^ Business and Federal Taxation 3

CIS 145^^ Visual Basic 3

CIS 157^^ Advanced C# 3

CIS 174^^ Programming in C# with SQL 3

Degree Total 65 Hours



Associate of Applied Science in Computer Information Systems with Emphasis in Programming

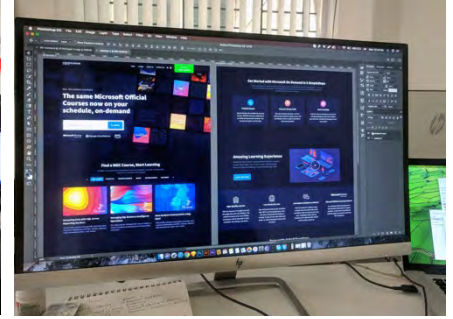
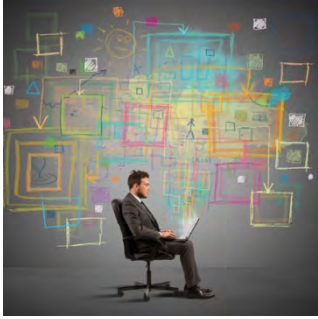
The Computer Information Systems with Emphasis in Programming program prepares students to enter an exciting field of computer programming. Local, national and international companies including banks, insurance companies, state agencies, and major programming firms have hired State Fair Community College 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. 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	CIS 124^^	Database Management	3	
ENGL 110	Communication for Business and Industry	3	CIS 145^^	Visual Basic	3
Select an additional course		CIS 155^^	Programming in C#	3	
COMM 101	Public Speaking	3	CIS 157^^	Advanced C#	3
ENGL 101	English Composition I	3	CIS 158^^	JAVA	3
Civics	3 Hours	CIS 161^^	Systems Analysis	3	
HIST 101	U.S. History Before 1877	3	CIS 174^^	Programming in C# with SQL	3
HIST 102	U.S. History Since 1877	3	CIS 175^^	CIS Internship	4
POLS 101	American/National Government	3	CIS 185^^	Project Management	3
Mathematical Sciences	3 Hours	SS 120	Employment Strategies	1	
MATH 101	Business Math	3	WEB 103^^	Introduction to Web Development	3
MATH 110	Intermediate Algebra with Review	5	WEB 104^^	Android Applications	3
MATH 112	Intermediate Algebra	3	WEB 160^^	Portfolio Design	3
MATH 113	Mathematical Reasoning and Modeling	3	Program Electives	9 Hours	
MATH 114	Precalculus Algebra	3	CIS 120^^	Programming in Python	3
MATH 119	Statistical Reasoning	3	CIS 148^^	COBOL	3
TECH 101	Technical Math	3	CIS 149^^	Advanced COBOL	3
Humanities, Sciences, and Fine Arts	3 Hours	CIS 151^^	DB2 Relational Database	3	
ECON 101	Principles of Macroeconomics	3	CIS 168^^	Game Programming	3
PHIL 102	Ethics	3	NET 101^^	Introduction to Networks	3
Program Requirements	44 Hours	NET 102^^	Networking Essentials	3	
CAPP 125	Microcomputer Applications	3	NET 106^^	Introduction to Network Security	3
CIS 103^^	Introduction to CIS	3	NET 120^^	Network Server	3
			WEB 114^^	Web Scripting	3
			WEB 116^^	Web Development	3
			Degree Total	68 Hours	



Associate of Applied Science 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. 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	CIS 124 ^{^^}	Database Management	3	
ENGL 110	Communication for Business and Industry	3	CIS 161 ^{^^}	Systems Analysis	3
Select an additional course		NET 101 ^{^^}	Introduction to Networks	3	
COMM 101	Public Speaking	3	SS 120	Employment Strategies	1
ENGL 101	English Composition I	3	WEB 103 ^{^^}	Introduction to Web Development	3
Civics	3 Hours	WEB 104 ^{^^}	Android Applications	3	
HIST 101	U.S. History Before 1877	3	WEB 114 ^{^^}	Web Scripting	3
HIST 102	U.S. History Since 1877	3	WEB 116 ^{^^}	Web Development	3
POLS 101	American/National Government	3	WEB 118 ^{^^}	Digital Imaging	3
Mathematical Sciences	3 Hours	WEB 119 ^{^^}	Digital Illustration	3	
MATH 101	Business Math	3	WEB 120 ^{^^}	XML	3
MATH 110	Intermediate Algebra with Review	5	WEB 160 ^{^^}	Portfolio Design	3
MATH 112	Intermediate Algebra	3	WEB 175 ^{^^}	Web Development Internship	3
MATH 113	Mathematical Reasoning and Modeling	3	Program Electives	6 Hours	
MATH 114	Precalculus Algebra	3	CIS 120 ^{^^}	Programming in Python	3
MATH 119	Statistical Reasoning	3	CIS 145 ^{^^}	Visual Basic	3
TECH 101	Technical Math	3	CIS 155 ^{^^}	Programming in C#	3
Humanities, Sciences, and Fine Arts	3 Hours	CIS 157 ^{^^}	Advanced C#	3	
ECON 101	Principles of Macroeconomics	3	CIS 158 ^{^^}	JAVA	3
PHIL 102	Ethics	3	CIS 174 ^{^^}	Programming in C# with SQL	3
Program Requirements	46 Hours	COMM 161 ^{^^}	Media Productions I	3	
CAPP 125	Microcomputer Applications	3	NET 102 ^{^^}	Networking Essentials	3
CAPP 162 ^{^^}	Desktop Publishing	3	NET 106 ^{^^}	Introduction to Network Security	3
CIS 103 ^{^^}	Introduction to CIS	3	NET 120 ^{^^}	Network Server	3
			WEB 117 ^{^^}	Advanced Web Development	3
			Degree Total	67 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. 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
TECH 101	Technical Math	3
SS 120	Employment Strategies	1
Certificate Total		25 Hours



Associate of Applied Science 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. 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 <i>or</i>		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
Civics	3 Hours	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
Mathematical Sciences	3 Hours	CNST 148 Construction Codes and Law	3
MATH 114 Precalculus Algebra	3	CNST 150 Building Layout and Surveying	3
TECH 101 Technical Math	3	CNST 160 Statics and Strength of Materials	3
Humanities, Sciences, and Fine Arts	3 Hours	CNST 162 Construction Safety	3
EASC 118 Environmental Geology	3	EDT 105 Print Reading for Construction	3
TECH 102 Applied Science	3	EDT 111 Introduction to Engineering Design	3
		EDT 120 Architectural Design	3
		SS 120 Employment Strategies	1
		Business Elective	3 Hours
		BADM 101 Introduction to Business	3
		BSMT 106 Principles of Marketing	3
		Degree Total	61 Hours



Associate of Applied Science 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. 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	CJ 103	Traffic Safety and Investigation <i>or</i>	
COMM 101 Public Speaking	3	CJ 122	Current Events in Criminal Justice	3
ENGL 101 English Composition I	3	CJ 104	Criminal Investigation	3
Civics	3 Hours	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
Mathematical Sciences	3 Hours	CJ 115	Procedural Law	3
MATH 101 Business Math	3	CJ 118	Criminal Justice Communications <i>or</i>	
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	Program Elective		3 Hours
Humanities, Sciences, and Fine Arts	6 Hours	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
Program Requirements	44 Hours	CJ 122	Current Events in Criminal Justice	3
BSMT 125 Human Relations <i>or</i>		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 <i>or</i>		SOC 102	Marriage and Family	3
SOC 103 Introduction to Social Work	3	Degree Total		65 Hours
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. 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 Marketing Essentials	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 161^^	Media Productions I	3
WEB 116^^	Web Development	3
WEB 118^^	Digital Imaging	3
Certificate Total		18 Hours



Skills Certificate in Digital Video

Students who complete the Skills Certificate in Digital Video will be able to film, edit, and produce video content for personal or commercial applications, including small business, corporate, and non-profit needs.

Some programs require essential qualifications to be admitted and retained. Visit 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
ART 162^^ Digital Photography	3
COMM 161^^ Media Productions I	3
COMM 162^^ Media Productions II	3
COMM 163^^ Digital Video Editing	3
COMM 164^^ Digital Storytelling	3
COMM 165^^ Graphics for Video	3
Certificate Total	18 Hours



Associate of Applied Science 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. 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
POLS 101 ^{^^} American/National Government	3
Mathematical Sciences	3 Hours
MATH 119 ^{^^} Statistical Reasoning	3
Humanities, Sciences, and Fine Arts	3 Hours
COMM 110 ^{^^} Introduction to Mass Communication	3

Program Requirements	45 Hours
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 Marketing Essentials	3
COMM 105 ^{^^} Interpersonal Communication	3
COMM 112 ^{^^} Introduction to Public Relations	3
COMM 114 ^{^^} News Reporting I	3
COMM 161 ^{^^} Media Productions I	3
COMM 201 ^{^^} Writing Across the Media	3
COMM 215 ^{^^} New Media Communications Applications	3
COMM 220 ^{^^} Digital Media Communications Internship	6
WEB 116 ^{^^} Web Development	3
WEB 118 ^{^^} Digital Imaging	3
Degree Total	60 Hours



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. 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	0.5
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
Certificate Total	24.5 Hours



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. 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	0.5
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
Certificate Total	39.5 Hours



Associate of Applied Science 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

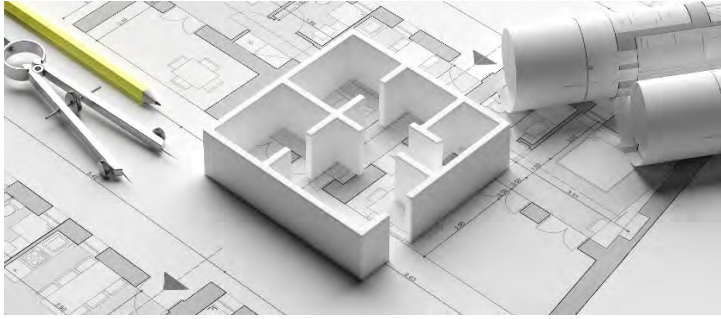
A successful background check included in EDUC 108 is required in this program. This requirement is included in and will be met once students successfully complete EDUC 108. This course must be successfully completed prior to taking most ECD or EDUC courses.

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. 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	ECD 107 ^{^^}	Child Nutrition, Health, and Safety	3
COMM 101 Public Speaking	3	ECD 109 ^{^^}	Observation, Planning, and Assessment	3
ENGL 101 English Composition I	3	ECD 111 ^{^^}	Language Development/Early Literacy	3
Civics	3 Hours	ECD 115 ^{^^}	Child Social/Emotional Development	3
HIST 101 U.S. History Before 1877	3	ECD 117 ^{^^}	Creative Expression and Play	3
HIST 102 U.S. History Since 1877	3	ECD 121 ^{^^}	Curriculum Strategies for Early Childhood	3
POLS 101 American/National Government	3	ECD 125 ^{^^}	Introduction to Special Individuals and Sensory Integration	3
Mathematical Sciences	3 Hours	ECD 127 ^{^^}	Parent/Teacher Interaction	3
MATH 101 Business Math	3	ECD 129 ^{^^}	Administration in Early Childhood Care	3
MATH 110 Intermediate Algebra with Review	5	ECD 175 ^{^^}	Child Care Practicum	3
MATH 112 Intermediate Algebra	3	EDUC 108	Introduction to the Field of Education	0.5
MATH 113 Mathematical Reasoning and Modeling	3	EDUC 212 ^{^^}	Educational Technology	3
MATH 114 Precalculus Algebra	3	PSY 102	Child Psychology	3
Humanities, Sciences, and Fine Arts	3 Hours	Program Elective	3 Hours	
SOC 120 American Diversity	3	BSMT 125	Human Relations	3
Program Requirements	42.5 Hours	ECD 131 ^{^^}	Child Development Portfolio/Assessment Preparation	3
ECD 101 ^{^^} Introduction to Early Childhood	3	EDUC 205 ^{^^}	Teaching Profession with Field Experience	3
ECD 103 ^{^^} Child Growth and Development	3			
		Degree Total		60.5 Hours

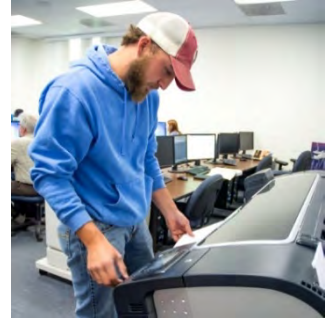


Skills Certificate in Architectural Design

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. Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Program Requirements	13 Hours
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
Program Elective	3 Hours
Choose any CNST course	
EDT 115 Advanced Engineering Design	3
EDT 125 Architectural Applications	3
EDT 130 Manufacturing Design I	3
Certificate Total	16 Hours

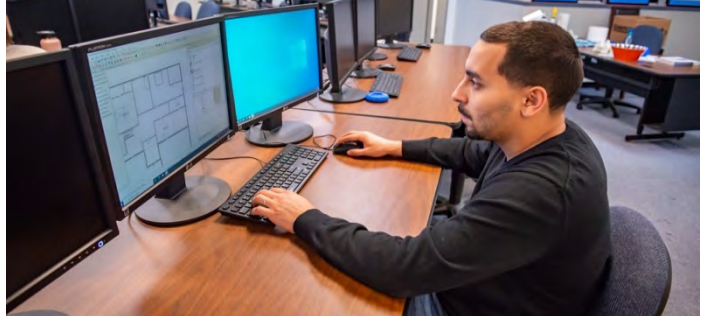
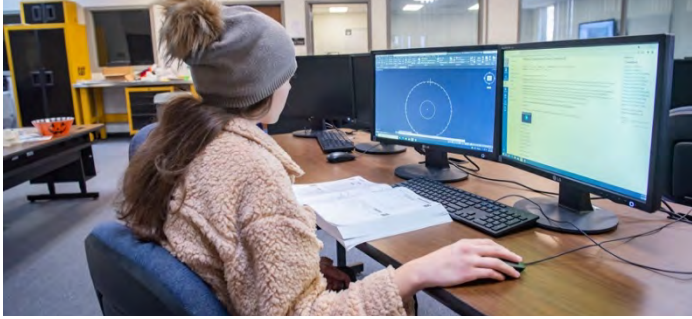


Skills Certificate in Mechanical Design

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. Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Program Requirements	13 Hours
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
Program Elective	3 Hours
EDT 115 Advanced Engineering Design	3
EDT 120 Architectural Design	3
EDT 132 Manufacturing Design II	3
Choose any MACH course	3
Choose any WELD course	3
Certificate Total	16 Hours



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. 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	3
Choose any EDT course	3
Choose any IEM course	3
Choose any MACH course	3
Choose any WELD course	3
Certificate Total	31 Hours



Associate of Applied Science 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. 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 <i>or</i>		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 114 Precalculus Algebra	3	EDT 175 EDT Internship	4
TECH 101 Technical Math	3	EDT 190 EDT Capstone	3
Humanities, Sciences, and Fine Arts	3 Hours	SS 120 Employment Strategies	1
PHYS 110 Survey of Physics with Lab	5	Program Electives	9 Hours
TECH 102 Applied Science	3	Choose any CNST course	3
		EDT 180 Problems in EDT	1-3
		Choose any IEM course	3
		Choose any MACH course	3
		Choose any WELD course	3
		Degree Total	62 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. 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
Certificate Total		30 Hours



Associate of Applied Science 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. 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
Civics		3 Hours	FIRE 132	Introduction to Emergency Services	3
POLS 101	American/National Government	3	FIRE 133	Fire Behavior and Combustion	3
Mathematical Sciences		3 Hours	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
Humanities, Sciences, and Fine Arts		3 Hours	FIRE 138	Fire Investigations	3
CHEM 101	Introduction to Chemistry with Lab	4	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
			Degree Total		60 Hours



Professional Certificate in Heating, Ventilation, Air Conditioning, Refrigeration, and Controls Technology

The Professional Certificate in Heating, Ventilation, Air Conditioning, Refrigeration, and Controls Technology for a Technical Level 1 will provide necessary skills and knowledge to obtain employment as an entry level service technician.

Not all courses are offered every semester. Check with your navigator or the program coordinator. Refer to the course descriptions for prerequisites.

Program Requirements		28 Hours
HVAC 102	HVAC Fundamentals I	3
HVAC 104	HVAC Fundamentals II	3
HVAC 108	Electrical Fundamentals	3
HVAC 110	Refrigeration & Diagnostics	3
HVAC 120	Heating Systems	3
HVAC 130	Air Flow Fundamentals	3
HVAC 136	EPA 608	1
IEM 102	Electrical Fundamentals	3
IEM 104	Electrical Power	3
IEM 112	Control Circuit Troubleshooting	3
Certificate Total		28 Hours



Associate of Applied Science in Heating, Ventilation, Air Conditioning, Refrigeration, and Controls Technology

The Heating, Ventilation, Air Conditioning, Refrigeration, and Controls Technology program was designed to equip students with the valuable knowledge and hands-on skills needed to obtain a remarkable start to a fulfilling career. This program is comprised of the basic elements of refrigeration and the latest of energy controls technologies, in order to develop a technician who can demonstrate the competencies that are vastly needed in an expanding industry.

Graduates will be able to choose between numerous careers in the residential and commercial HVAC/R industries.

Students should be able to lift 45 pounds, bend, stoop, crawl, kneel, climb ladders, work in awkward and tight spaces, and know the awareness and discipline of good safety habits.

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).

Written and Oral Communications	6 Hours	Program Requirements	48 Hours
COMM 101 Public Speaking	3	CNST 162 Construction Safety	3
ENGL 101 English Composition I	3	HVAC 102 HVAC Fundamentals I	3
Civics	3 Hours	HVAC 104 HVAC Fundamentals II	3
HIST 101 U.S. History Before 1877	3	HVAC 106 HVAC Schematics	2
HIST 102 U.S. History Since 1877	3	HVAC 108 Electrical Fundamentals	3
POLS 101 American/National Government	3	HVAC 110 Refrigeration and Diagnostics	3
Mathematical Sciences	3 Hours	HVAC 120 Heating Systems	3
TECH 101 Technical Math	3	HVAC 130 Air Flow Fundamentals	3
Humanities, Sciences, and Fine Arts	3 Hours	HVAC 132 HVAC Installation and Evaluation	3
TECH 102 Applied Science	3	HVAC 134 Heat Pumps	2
		HVAC 136 EPA 608	1
		HVAC 140 Commercial Air Conditioning	2
		HVAC 160 HVAC Automation Systems	3
		HVAC 180 HVAC Internship	4
		IEM 102 Electrical Fundamentals	3
		IEM 104 Electrical Power	3
		IEM 112 Control Circuit Troubleshooting	3
		SS 120 Employment Strategies	1
		Degree Total	63 Hours



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. 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
Certificate Total		18 Hours



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. 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
Certificate Total	31 Hours



Professional Certificate in Millwright Technician

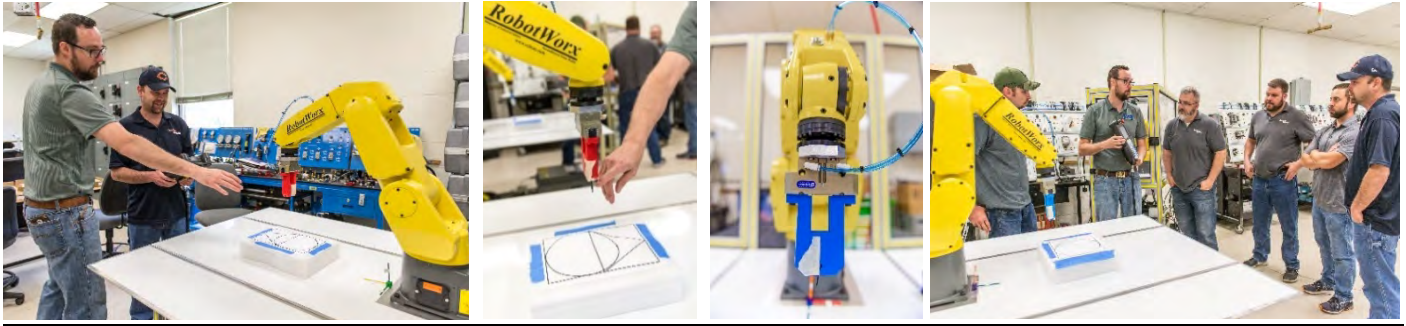
The Professional Certificate in Millwright Technician is designed to provide students instruction in all major maintenance disciplines resulting in a comprehensive knowledge and skill base including the basics of welding, structural welding, lathe and milling machine operations.

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. 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
Certificate Total		31 Hours



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. 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
Certificate Total		33 Hours



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. 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
Certificate Total		30 Hours



Associate of Applied Science 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. 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 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

TECH 101 Technical Math 3

Humanities, Sciences, and Fine Arts 3 Hours

TECH 102 Applied Science 3

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 and Switchgear 3

IEM 140 Transformers and Motors 3

Electronics Group

IEM 110 Digital Principles and Applications 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

Associate of Applied Science in Industrial Technology with Emphasis in Electrical Maintenance
(Continued)

Safety and Management Group

IEM 126	Industrial Safety	3
IEM 128	Maintenance Management	3
IEM 146	Quality Management and Control	3

Program Electives **12 Hours**

AUTO 104	Introduction to Automotive Technology	4
AUTO 116	Automotive Electrical Systems Fundamentals	3
AUTO 118	Automotive Electrical Systems	3
CNST 105	Construction Materials and Methods	3
CNST 138	Construction Planning and Scheduling	3
CNST 142	Building Mechanical Systems	3
CPT 102	Safety	3
CPT 104	Quality Practices and Measurement	3
CPT 106	Manufacturing Processes and Production	3

CPT 108	Maintenance Awareness	3
EDT 105	Print Reading for Construction	3
EDT 111	Introduction to Engineering Design	3
IEM	Any course(s) not taken	
MACH 101	Introduction to Machining	4
MACH 102	Lathe and Milling Machine Operations	4
MACH 103	Milling and Grinding Machine Applications	4
NET 101	Introductions to Networks	3
NET 102	Networking Essentials	3
NET 103	Routing and Switching Essentials	3
TECH 101	Technical Math	3
WELD 120	Shielded Metal Arc Welding I	3
WELD 122	Shielded Metal Arc Welding II—Structural	3

Degree Total **64 Hours**



Skills Certificate in Machinist Level I

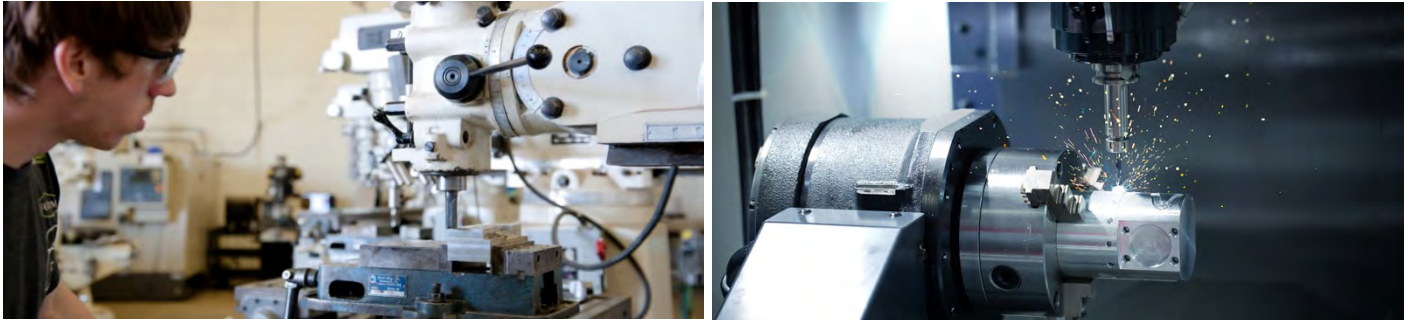
The Skills Certificate in Machinist Level I is designed for the student who wants to get into the manufacturing workforce as soon as possible. Upon completion of the certificate, students will gain knowledge and exposure to various styles of machining, including manual and computer numerical controlled (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. 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	15 Hours
MACH 101^^ Introduction to Machining	4
MACH 105^^ Metrology	4
MACH 111^^ Introduction to CNC Machining	4
TECH 101 Technical Math	3
Certificate Total	15 Hours



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. 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	38 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 117 ^{^^} Introduction to CNC Programming	4
MACH 118 ^{^^} Intermediate CNC Machining	4
MACH 134 ^{^^} Computer Aided Manufacturing	4
TECH 101 Technical Math	3
Certificate Total	38 Hours



Associate of Applied Science 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. 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
TECH 101 Technical Math	3
Humanities, Sciences, and Fine Arts	3 Hours
TECH 102 Applied Science	3

Program Requirements	46 Hours
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
Degree Total	61 Hours



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. 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
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
Certificate Total	18 Hours



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.

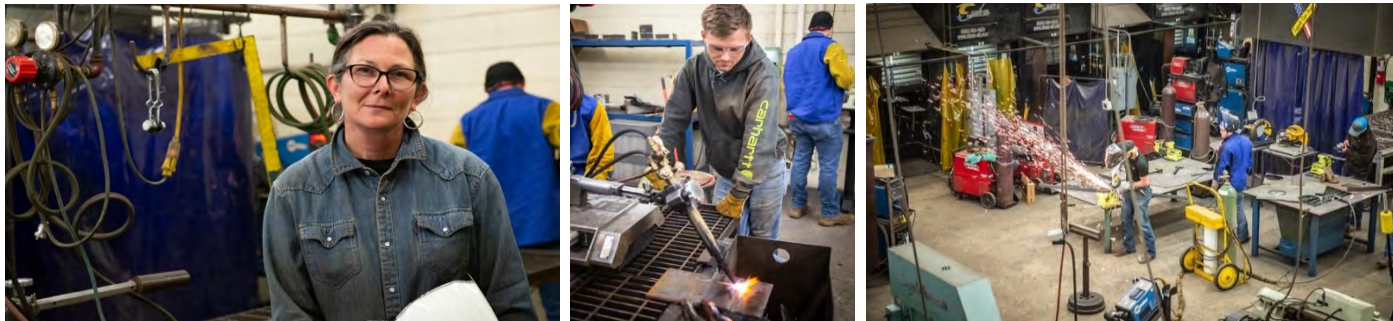
Welders need good eyesight, hand-eye coordination and manual dexterity. Students should be able to concentrate on detailed work for long periods and must be able to lift up to 45 pounds, bend, stoop, crawl, kneel, climb ladders, and work in awkward and cramped positions.

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. 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 110	Intermediate Algebra with Review	5	CNST 162	Construction Safety	3
MATH 112	Intermediate Algebra	3	WELD 114 ^{^^}	Structural Layout and Fabrication	3
MATH 114	Precalculus Algebra	3	WELD 116 ^{^^}	Print Reading for Welders	3
TECH 101	Technical Math	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 132 ^{^^}	Gas Tungsten Arc Welding I	2
			WELD 134 ^{^^}	Gas Tungsten Arc Welding II	3
			WELD 136 ^{^^}	Gas Tungsten Arc Welding III	4
			Certificate Total		37 Hours



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. 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	44 Hours
MATH 110	Intermediate Algebra with Review	5	CNST 162 Construction Safety	3
MATH 112	Intermediate Algebra	3	WELD 114 ^{^^} Structural Layout and Fabrication	3
MATH 114	Precalculus Algebra	3	WELD 116 ^{^^} Print Reading for Welders	3
TECH 101	Technical Math	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
			Certificate Total	47 Hours



Associate of Applied Science 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. 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	52 Hours
Written and Oral Communications			
	6 Hours	CNST 162 Construction Safety	3
COMM 101 Public Speaking	3	EDT 111 Introduction to Engineering Design or	
		EDT 130 Manufacturing Design I	3
Select an additional course		MACH 101 Introduction to Machining	4
ENGL 101 English Composition I	3	SS 120 Employment Strategies	1
ENGL 110 Communication for Business and Industry	3	WELD 114 ^{^^} Structural Layout and Fabrication	3
Civics		WELD 116 ^{^^} Print Reading for Welders	3
	3 Hours	WELD 120 ^{^^} Shielded Metal Arc Welding I	3
HIST 101 U.S. History Before 1877	3	WELD 122 ^{^^} Shielded Metal Arc Welding II—Structural	3
HIST 102 U.S. History Since 1877	3	WELD 124 ^{^^} Shielded Metal Arc Welding III—Pipe	4
POLS 101 American/National Government	3	WELD 126 ^{^^} Gas Metal/Flux Core Arc Welding I	3
Mathematical Sciences		WELD 128 ^{^^} Gas Metal/Flux Core Arc Welding II	
	3 Hours	—Structural	3
MATH 110 Intermediate Algebra with Review	5	WELD 130 ^{^^} Gas Metal/Flux Core Arc Welding III	3
MATH 112 Intermediate Algebra	3	WELD 132 ^{^^} Gas Tungsten Arc Welding I	2
MATH 114 Precalculus Algebra	3	WELD 134 ^{^^} Gas Tungsten Arc Welding II	3
TECH 101 Technical Math	3	WELD 136 ^{^^} Gas Tungsten Arc Welding III	4
Humanities, Sciences, and Fine Arts		WELD 160 ^{^^} Welding Fabrication	4
	3 Hours	WELD 170 ^{^^} Welding Inspection and Testing	3
TECH 102 Applied Science	3		
		Degree Total	67 Hours



Associate of Applied Science 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. 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

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 110 Intermediate Algebra with Review	5
MATH 112 Intermediate Algebra	3
TECH 101 Technical Math	3
Humanities, Sciences, and Fine Arts	3 Hours
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

Program Requirements	46 Hours
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



Associate of Applied Science 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, chronic health issues, and family and youth issues. Students will be qualified to work with behavioral health and medical professionals as part of a treatment team. Finally, students 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.

Admission process

Admission to the Behavioral Health Support program requires an additional admission application following admission to the college. An information/application packet is available online at <https://www.sfccmo.edu/academics-programs/areas-of-study/behavioral-health/>. This packet contains the essential qualifications and admission requirements, fee schedule, program mission and goals, sequencing of courses in program, 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.

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. Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

Associate of Applied Science 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	15 Hours
BHS 200 [^] Introduction to Behavioral Health Support	3
CJ 102 ^{^^} Introduction to Criminal Justice	3
SOC 103 ^{^^} Introduction to Social Work	3
PSY 210 ^{^^} Lifespan Development	3
PSY 220 ^{^^} Abnormal Psychology	3
Prerequisite Total	33 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 **65 Hours**



Associate of Applied Science 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 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. Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

Associate of Applied Science 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 16 Hours**

BIO 221 [^]	Microbiology	4
BIO 207 [^]	Human Anatomy with Lab	4
BIO 208 [^]	Human Physiology with Lab	4
CHEM 101 [^]	Introduction to Chemistry with Lab	4

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 19 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

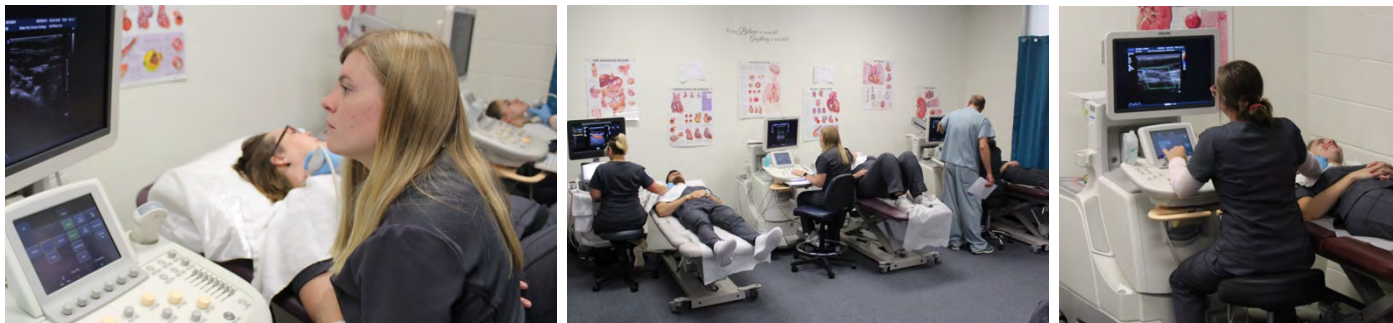
Humanities, Sciences, and Fine Arts 6 Hours

*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	0.5
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	0.5

Degree Total**91 Hours**



Associate of Applied Science in Diagnostic Medical Sonography

Diagnostic Medical Sonographers, or ultrasound technologists, operate equipment that utilizes high frequency sound waves to produce images of internal organs. The images obtained by sonographers are used in the diagnosis and monitoring of various medical conditions and disease processes. Sonographers may specialize in multiple modalities including, but not limited to, cardiac, vascular, abdomen, and obstetrics and gynecology. 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. Admission to the Diagnostic Medical Sonography program requires an additional admission application following admission to the college. An information/application packet is available online at www.sfccmo.edu/diagnostic-medical-sonography.

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, in addition to meeting other application criteria. Successful program applicants are subject to background checks and drug tests that could prevent an applicant's progression in the 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. Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

Associate of Applied Science 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 110^{^^} Survey of Physics with Lab *or*
 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 0.5

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) and 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. 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	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	0.5
Certificate Total	16.5 Hours



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. 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		31.5 Hours
BHS 200	Introduction to Behavioral Health Support	3
BIO 103	Human Biology	3
ENGL 110^^	Communication for Business and Industry	3
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
HIT 105	Health Care Technologies	3
NURS 102	CPR for Health Care Providers	0.5
SS 104	College Skills	3
Certificate Total		31.5 Hours



Associate of Applied Science 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. 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^^

Written and Oral Communications		6 Hours	Program Requirements		35.5 Hours
COMM 101	Public Speaking	3	BHS 200	Introduction to Behavioral Health Support	3
ENGL 110	Communication for Business and Industry	3	BIO 221	Microbiology	4
Civics		3 Hours	CAPP 125^^	Microcomputer Applications	3
HIST 101	U.S. History Before 1877	3	HEOC 119^^	Medical Terminology	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
Mathematical Sciences		3 Hours	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	HIT 100	Introduction to Health Information Technology	3
Humanities, Sciences, and Fine Arts		14 Hours	HIT 105	Health Care Technologies	3
BIO 103	Human Biology	3	NURS 102	CPR for Health Care Professionals	0.5
BIO 207^^	Human Anatomy with Lab	4	SS 104	College Skills	3
BIO 208	Human Physiology with Lab	4			
PSY 101	General Psychology	3	Degree Total		61.5 Hours



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. 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	15 Hours
PHRM 102 ^{^^} Top 200 Medications	1
PHRM 104 ^{^^} Calculations for Pharmacy Technician	3
PHRM 106 ^{^^} Role of the Pharmacy Technician	3
PHRM 109 ^{^^} Pharmacology	3
PHRM 110 ^{^^} Federal Law and Ethics in Pharmacy Practice	2
PHRM 115 ^{^^} Pharmacology Certification	3
Certificate Total	15 Hours



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. 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 Hours
BHS 200^^ Introduction to Behavioral Health Support	3
HEOC 119^^ Medical Terminology	3
PHRM 102^^ Top 200 Medications	1
PHRM 104^^ Calculations for Pharmacy Technician	3
PHRM 106^^ Role of the Pharmacy Technician	3
PHRM 109^^ Pharmacology	3
PHRM 110^^ Federal Law and Ethics in Pharmacy Practice	2
PHRM 115^^ Pharmacology Certification	3
PHRM 122^^ Advanced Top 200 and Over-the-Counter Medications	3
PHRM 124^^ Inventory Control and Financial Issues in Pharmacy	3
PHRM 175^^ Professional Practice Experience	3
Certificate Total	30 Hours



Associate of Applied Science 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. 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^{^^}

Written and Oral Communications	6 Hours	Program Requirements	39 Hours
COMM 101 Public Speaking	3	BHS 200 ^{^^} Introduction to Behavioral Health Support	3
ENGL 110 Communication for Business and Industry	3	CAPP 125 ^{^^} Microcomputer Applications	3
Civics	3 Hours	HEOC 119 ^{^^} Medical Terminology	3
HIST 101 U.S. History Before 1877	3	HIT 105 Health Care Technologies	3
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	3
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	10 Hours	PHRM 115 ^{^^} Pharmacology Certification	3
BIO 103 Human Biology	3	PHRM 122 ^{^^} Advanced Top 200 and Over-the-Counter Medications	3
CHEM 101 Introduction to Chemistry with Lab	4	PHRM 124 ^{^^} Inventory Control and Financial Issues in Pharmacy	3
SOC 100 General Sociology	3	PHRM 175 ^{^^} Professional Practice Experience	3
		SS 104 College Skills	3
		Degree Total	61 Hours



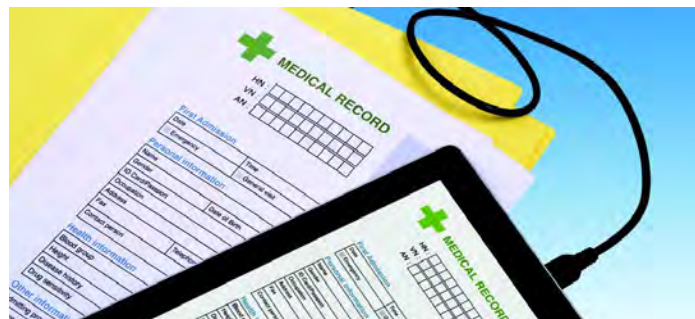
Professional Certificate in Medical Coding

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. 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	0.5
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
Certificate Total		30.5 Hours



Associate of Applied Science 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. Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

Associate of Applied Science in Health Information Technology (Continued)

Courses to complete with a grade of C or higher^{^^}

Written and Oral Communications	6 Hours	Program Requirements	45.5 Hours
COMM 101 Public Speaking	3	BSMT 108 ^{^^} Principles of Management	3
ENGL 101 English Composition I	3	CAPP 125 ^{^^} Microcomputer Applications	3
Civics	3 Hours	CIS 124 ^{^^} Database Management	3
HIST 101 U.S. History Before 1877	3	HEOC 119 ^{^^} Medical Terminology	3
HIST 102 U.S. History Since 1877	3	HEOC 135 ^{^^} Allied Health Career Development	0.5
POLS 101 American/National Government	3	HIT 100 ^{^^} Introduction to Health Information Technology	3
Mathematical Sciences	3 Hours	HIT 105 ^{^^} Health Care Technologies	3
MATH 119 ^{^^} Statistical Reasoning	3	HIT 115 ^{^^} Health Care and the Law	3
Humanities, Sciences, and Fine Arts	3 Hours	HIT 200 ^{^^} Health Care Statistics and Data Analysis	3
BIO 103 ^{^^} Human Biology	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
		Degree Total	60.5 Hours



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.

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 or at the nearest SFCC campus. 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. 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 four hours 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
HEOC 119^^ Medical Terminology	3
MEA 101^ Introduction to Medical Assisting	3
MEA 103^^ Exploration of the Human Body	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	0.5
Certificate Total	18.5 Hours



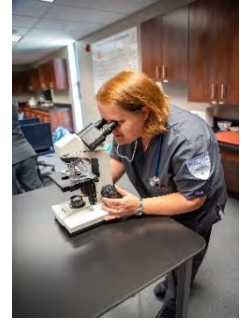
Professional Certificate in Medical Assisting

The Professional Certificate in Medical Assisting provides seamless transition after completion of the Skills Certificate. Courses are online with one four-hour skills lab 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. Students have the opportunity to test for their 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
HEOC 119^^ Medical Terminology	3
HEOC 135^^ Allied Health Career Development	0.5
MEA 101^ Introduction to Medical Assisting	3
MEA 103^^ Exploration of the Human Body	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	0.5
PHRM 109^^ Pharmacology	3
Certificate Total	34 Hours



Associate of Applied Science 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^
Courses to complete with a grade of C or higher^^

Written and Oral Communications	6 Hours	Program Requirements	34 Hours
COMM 101^^ Public Speaking	3	HEOC 119^^ Medical Terminology	3
ENGL 101^^ English Composition I	3	HEOC 135^^ Allied Health Career Development	0.5
Civics	3 Hours	MEA 101^ Introduction to Medical Assisting	3
HIST 101^^ U.S. History Before 1877	3	MEA 103^^ Exploration of the Human Body	3
HIST 102^^ U.S. History Since 1877	3	MEA 108^ Medical Assisting Administrative Procedures	3
POLS 101^^ American/National Government	3	MEA 110^^ Medical Scribe	2
Mathematical Sciences	3 Hours	MEA 112^ Medical Assisting Clinical Procedures	3
MATH 110^^ Intermediate Algebra with Review	5	MEA 114^ Medical Assisting Advanced Skills	4
MATH 112^^ Intermediate Algebra	3	MEA 116^ Medical Assisting Laboratory Procedures	3
Humanities, Sciences, and Fine Arts	6 Hours	MEA 190^ Medical Assisting Capstone	6
PSY 101^^ General Psychology	3	NURS 102 CPR for Health Care Providers	0.5
SOC 100^^ General Sociology	3	PHRM 109^^ Pharmacology	3
		Health Care Applications	9 Hours
		CAPP 125^^ Microcomputer Applications	3
		HIT 105^^ Health Care Technologies	3
		HIT 224^^ Human Disease and Conditions	3
		Degree Total	61 Hours



Associate of Applied Science 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.

An information/application packet can be found online at www.sfccmo.edu/academics-programs/areas-of-study/medical-laboratory-technician/. MLT courses must be completed with at least a C or 78% while also maintaining an overall minimum 2.5 GPA or higher in order to progress to the MLT coursework of 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. 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		Prerequisite Total	27 Hours
Written and Oral Communications	6 Hours	Program Requirements	35 Hours
COMM 101 ^{^^} Public Speaking	3	MLT 150 ^{^^} Introduction to Lab Science Methods	2
ENGL 101 ^{^^} English Composition I	3	MLT 210 ^{^^} Immunology	3
Civics	3 Hours	MLT 220 ^{^^} Clinical Chemistry and Urinalysis	5
HIST 101 ^{^^} U.S. History Before 1877	3	MLT 250 ^{^^} Hematology and Coagulation	5
HIST 102 ^{^^} U.S. History Since 1877	3	MLT 260 ^{^^} Phlebotomy	2
POLS 101 ^{^^} American/National Government	3	MLT 270 ^{^^} Immunohematology	5
Mathematical Sciences	3 Hours	MLT 280 ^{^^} Clinical Microbiology	4
MATH 114 ^{^^} Precalculus Algebra	3	MLT 290 ^{^^} Parasitology, Mycology, and Virology	1
Humanities, Sciences, and Fine Arts	15 Hours	MLT 291 ^{^^} Hematology and Coagulation Practicum	2
BIO 207 ^{^^} Human Anatomy with Lab	4	MLT 292 ^{^^} Clinical Chemistry Practicum	2
BIO 208 ^{^^} Human Physiology with Lab	4	MLT 293 ^{^^} Clinical Microbiology Practicum	2
CHEM 101 ^{^^} Introduction to Chemistry with Lab or	4	MLT 294 ^{^^} Clinical Immunohematology Practicum	2
CHEM 123 ^{^^} General Chemistry I with Lab	5	Degree Total	62 Hours
PHIL 102 ^{^^} Ethics or			
SOC 100 ^{^^} General Sociology	3		



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. Information packets can be found online at www.sfccmo.edu/nursing. 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 engage students and facilitate the achievement of program outcomes aimed at enhancing the care of diverse patient populations.

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. 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)

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	0.5
NURS 102 CPR for Health Care Providers	0.5
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



Associate of Applied Science 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[^]

Courses to complete with a grade of C or higher^{^^}

Courses can be completed prior to the start of the program^{}*

*Advanced Placement credits for LPNs and Licensed Paramedics^{**}.*

Year Two (Level 2) Advanced Placement

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

ENGL 101 ^{^^} English Composition I	3
ENGL 102 ^{^^} English Composition II	3

Mathematical Sciences

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

BIO 208 [^] Human Physiology with Lab	4
PSY 101 ^{^^} General Psychology	3

Prerequisite Total

13 Hours

Year Two (Level 2) Courses required after acceptance for students not bridging directly from Year One (Level 1)

HEOC 135 [^] Allied Health Career Development (required for advanced placement students with PN transcripts from outside Missouri and Paramedics)	0.5
NURS 210 [^] Nursing Transition Course (required for advanced placement LPN's only)	2
NURS 211 [^] Paramedic Transition Course (required for advanced placement Paramedics only)	4

Program Requirements

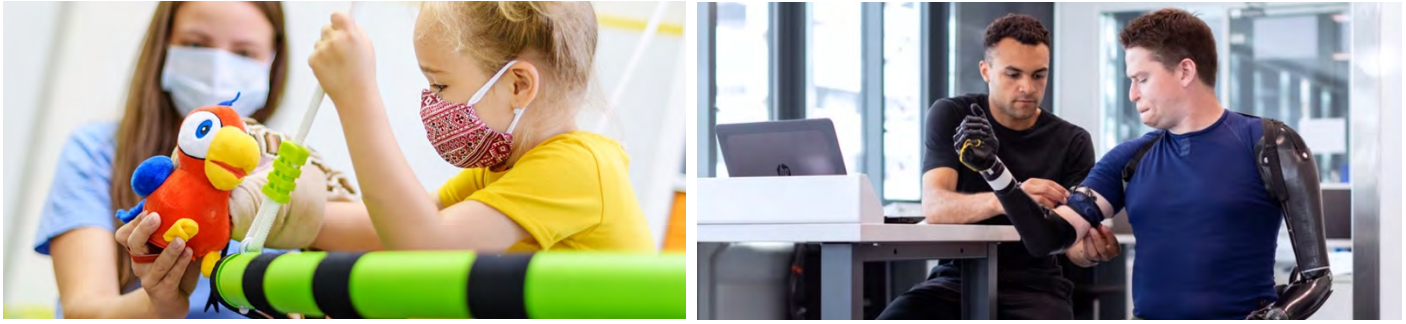
47.5 Hours

Each eight-week session of nursing must be successfully completed to take the next eight-week courses.

**Nursing Competencies	7
*BIO 221 [^] Microbiology	4
*COMM 101 ^{^^} Public Speaking	3
HEOC 135 [^] Allied Health Career Development	0.5
*HIST 101 ^{^^} U.S. History Before 1877 (or)	
*HIST 102 ^{^^} U.S. History Since 1877 (or)	
*POLS 101 ^{^^} American/National Government	3
NURS 102 CPR for Health Care Providers	0.5
NURS 213 [^] Introduction to Professional Nursing	2
NURS 215 [^] Complex Health: Mental Health	2.5
NURS 216 Complex Health: Mental Health Clinical	2
NURS 219 [^] Complex Health: Elimination	3
NURS 221 [^] Complex Health: Nutrition/Metabolic	2.5
NURS 227 [^] Complex Health: Family	3
NURS 228 Complex Health: Family Clinical	1
NURS 230 [^] Complex Health: Adult Clinical I	1
NURS 231 Complex Health: Adult Clinical II	1
NURS 233 Complex Health: Adult Clinical III	3
NURS 234 [^] Complex Health: Activity and Rest	3
NURS 237 [^] Complex Health: Cognitive/Perceptual	3
NURS 243 Professional Nursing Capstone Clinical	2.5

Degree Total

60.5 Hours



Associate of Applied Science 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. The OTA program is a hybrid program. 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 assistants. 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 (www.sfccmo.edu/occupational-therapy-assistant) 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.

Associate of Applied Science 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. 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^^.

Program Prerequisites

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 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	14 Hours
BIO 207^^ Human Anatomy with Lab	4
BIO 208^^ Human Physiology with Lab	4
PSY 101^^ General Psychology	3
PSY 210^^ Lifespan Development	3
General Education Elective	3 Hours
SOC 100^^ General Sociology (recommended)	3
Other Requirements	3 Hours
HEOC 119^^ Medical Terminology	3
Prerequisite Total	32 Hours

All program requirements require a grade of C or higher and an overall 2.5 GPA maintained^^.

Program Requirements	48 Hours
OTA 200^^ Foundations of Occupational Therapy	3
OTA 205^^ Medical Conditions in Occupational Therapy	3
OTA 210^^ Activity Analysis and Therapeutic Media	3
OTA 215^^ Mental Health and Geriatric Practice	4
OTA 220^^ Pediatric and Adolescent Practice	4
OTA 250^^ Functional Kinesiology	2
OTA 255^^ Physical Disabilities Practice	4
OTA 260^^ Community Practice and Emerging Practice in Occupational Therapy	3
OTA 265^^ Ethics, Management, and Leadership	3
OTA 270^^ Professional Skills	3
OTA 290^^ Level II Fieldwork A	8
OTA 295^^ Level II Fieldwork B	8
Degree Total	80 Hours



Associate of Applied Science 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 Process

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. 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, in addition to meeting other application criteria. Successful program applicants are subject to background checks and drug tests that could prevent an applicant's progression in the program.

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.

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. Not all courses are offered every semester. Check with your navigator or the program director. Refer to the course descriptions for prerequisites.

Associate of Applied Science in Radiologic Technology (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	65 Hours
Written and Oral Communications	3 Hours	*Written and Oral Communications	3 Hours
ENGL 101 ^{^^} English Composition I	3	COMM 101 ^{^^} Public Speaking	3
ENGL 102 ^{^^} English Composition II	3		
Mathematical Sciences	3 Hours	*Civics	3 Hours
MATH 110 [^] Intermediate Algebra with Review	5	HIST 101 ^{^^} U.S. History Before 1877	3
MATH 112 [^] Intermediate Algebra	3	HIST 102 ^{^^} U.S. History Since 1877	3
MATH 113 [^] Mathematical Reasoning and Modeling	3	POLS 101 ^{^^} American/National Government	3
MATH 114 [^] Precalculus Algebra	3		
MATH 119 [^] Statistical Reasoning	3		
Humanities, Sciences, and Fine Arts	8 Hours	RAD 106 ^{^^} Clinical Education I	3
BIO 207 [^] Human Anatomy with Lab	4	RAD 109 ^{^^} Clinical Education II	2
BIO 208 [^] Human Physiology with Lab	4	RAD 111 ^{^^} Clinical Education III	2
Other	3 Hours	RAD 113 ^{^^} Clinical Education IV	4
HEOC 119 ^{^^} Medical Terminology	3	RAD 115 ^{^^} Clinical Education V	4
Prerequisite Total	17 Hours	RAD 120 ^{^^} Radiographic Procedures I	3
		RAD 122 ^{^^} Radiographic Procedures II	3
		RAD 124 ^{^^} Radiographic Procedures III	3
		RAD 128 ^{^^} Introduction to Radiologic Sciences and Patient Care	3
		RAD 130 ^{^^} Radiation Production and Characteristics	3
		RAD 134 ^{^^} Radiographic Exposures and Quality Control	3
		RAD 137 ^{^^} Radiation Protection	3
		RAD 140 ^{^^} Radiologic Pharmacology	3
		RAD 142 ^{^^} Trauma and Advanced Imaging	3
		RAD 144 ^{^^} Radiation Biology	2
		RAD 146 ^{^^} Imaging Equipment	3
		RAD 150 ^{^^} Radiographic Pathology	3
		RAD 152 ^{^^} Image Analysis	3
		RAD 154 ^{^^} Sectional Anatomy	3
		RAD 170 ^{^^} Preparing for Professionalism	3
		Degree Total	82 Hours



Associate of Applied Science in Surgical Technology

The Surgical Technology program is designed to deliver the educational foundation for students to earn an Associate of Applied Science in Surgical Technology degree. The minimum expectation is to prepare entry-level Surgical Technologists who are competent in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains to enter the profession.

This 12-month hybrid program requires an additional program application and acceptance. The program includes didactic, lab, and clinical instruction methods. Upon successful completion of the required courses and clinical case requirements, and after the program obtains accreditation, the students will sit for the certification exam offered through the National Board of Surgical Technology and Surgical Assisting (NBSTSA). Upon passing the certification exam, graduates will be recognized as a Certified Surgical Technologist.

The Program Information and Application is available online at www.sfccmo.edu/surgical-tech or by request from Student Services. The information contains the admission requirements, fee schedule, program mission, sequencing of courses, a link to the online application form, and other pertinent information. Program applicants are subject to background checks and drug tests that could prevent an applicant's progression in the program.

An applicant must meet all admission requirements outlined in the program information prior to entering the program. 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.

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).

This program requires essential qualifications to be admitted and retained. Visit 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.

Associate of Applied Science in Surgical Technology (Continued)*Courses to complete with a grade of C or higher^^*

Written Communications	6 Hours	Program Requirements	35.5 Hours
COMM 101^^ Public Speaking	3	NURS 102 CPR for Health Care Providers	0.5
ENGL 101^^ English Composition I or	3	SRGT 101^^ Intro to Surgical Technology	2
ENGL 102^^ English Composition II	3	SRGT 103^^ Fundamentals of Surgical Technology	7
Mathematical Sciences	3 Hours	SRGT 105^^ Surgical Instrumentation	4
MATH 110^^ Intermediate Algebra with Review	5	SRGT 107^^ Surg Tech Clinical I	1
MATH 112^^ Intermediate Algebra	3	SRGT 109^^ Surgical Procedures I	4
MATH 113^^ Mathematical Reasoning and Modeling	3	SRGT 111^^ Surg Tech Clinical II	10
MATH 114^^ Precalculus Algebra	3	SRGT 113^^ Surgical Procedures II	2
Humanities, Sciences, and Fine Arts	15 Hours	SRGT 115^^ Surg Tech Clinical III	4
BIO 207^^ Human Anatomy with Lab	4	SRGT 117^^ Certification Prep and Review	1
BIO 208^^ Human Physiology with Lab	4	Degree Total	62.5 Hours
BIO 221^^ Microbiology	4		
HEOC 119^^ Medical Terminology	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		
Prerequisite Total	27 Hours		

ACCOUNTING

ACCT 101 Principles of Financial Accounting

Credit Hours: 3

Prerequisites: ENGL 070 or ENGL 110 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. Offered Fall, Spring, and Summer.

ACCT 102 Managerial 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. Offered Fall, Spring, and Summer.

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. Offered Fall and Spring.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Fall only.

AGRI 102 Ag Leadership and Issues II

Credit Hours: 1

Prerequisite: AGRI 101. A continuation of AGRI 101 and development of a career plan through a literacy research and presentation project where students will gain a deeper understanding of their chosen field and how to communicate about their field with others. Instruction will also include creating a professional online presence. Offered Spring only.

AGRI 103 Ag Leadership and Issues III

Credit Hours: 2

Prerequisite: AGRI 102. Continuation of AGRI 102 promoting further development of the student's career plan. Course will help students identify what attributes are sought by the agriculture industry and how to prepare for the workforce. Course focuses on résumé building, creating cover letters, completing employment applications, and job interview skills. Offered Fall only.

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. Offered Spring only.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Spring odd-numbered years.

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. Offered Spring even-numbered years.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Fall only. (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. Offered Spring only.

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. Offered Spring only.

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. Offered Spring only.

AGRI 126 Ornamental Woody Plants**Credit Hours: 3**

Prerequisite: None. Identification and evaluation of trees and shrubs for landscape use. Offered Fall even-numbered years.

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. Offered Spring only.

AGRI 128 Ornamental Herbaceous Plants**Credit Hours: 3**

Prerequisite: None. Identification and evaluation of annuals, biennials, perennials, ground covers, and bulbs. Offered Fall odd-numbered years.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Spring only.



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. Offered Spring only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Spring odd-numbered years.

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. Offered Spring even-numbered years.

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. Offered Spring only.

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. Offered Spring odd-numbered years.

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. Offered Spring only. (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. Offered Spring only.

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. Offered Fall only.

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. Offered Fall, Spring, and Summer.

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. Offered Fall and Spring.

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. Offered Fall, Spring, and Summer.



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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall and Spring.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 105D Studio Art – 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. Offered Spring only.

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. Offered Fall and Spring.



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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.



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. Offered Fall and Spring.

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. Offered Fall and Spring.



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. Offered Fall and Spring.

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. Offered Fall only.



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. Offered Spring only.



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. Offered Fall and Spring.



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. Offered Fall and Spring.

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. Offered Spring only.

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. Offered Fall and Spring.

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. Offered Fall and Spring. (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. Offered Fall only. (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. Offered Fall and Spring. (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. Offered Fall only. (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. Offered Fall and Spring. (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. Offered Spring only. (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. Offered Spring only. (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. Offered Spring only. (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. Offered Fall and Spring. (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. Offered Fall and Spring. (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. Offered Summer only. (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. Offered Spring only. (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. Offered Fall only. (1 lecture, 5 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. Offered Fall, Spring, and Summer. (3 lab)

BEHAVIORAL HEALTH SUPPORT**BHS 200 Introduction to Behavioral Health Support****Credit Hours: 3**

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. Offered Fall, Spring, and Summer.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Spring only.

BIOLOGICAL SCIENCE

BIO 100 Essentials of 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. Offered Fall, Spring, and Summer.



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: None. 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. Offered Fall, Spring, and Summer.



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 Introduction to Ecology**Credit Hours: 3**

Prerequisite: None. Introductory course to the study of ecology. Focus on the scientific method, ecological concepts including populations, communities, ecosystems, natural selection, predator-prey relationships, nutrient cycling and human impact on the natural world. Offered Fall, Spring, and Summer.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR BIOL 100EC Essentials in Biology (Ecology and Conservation)

For additional information: <https://dhe.mo.gov/core42.php>

BIO 112 Principles of Biology with Lab**Credit Hours: 4**

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. Offered Fall, Spring, and Summer. (3 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 113 Cellular Biology**Credit Hours: 4**

Prerequisite: None. This introductory biology course examines the structure and function of animal and plant cells, interactions between cells, intra- and intercellular signaling mechanisms and basic cellular biochemistry. Within the above context, students are also introduced to basic concepts of molecular biology and development. Offered Fall, Spring, and Summer.

BIO 125 General Biology with Lab**Credit Hours: 4**

Prerequisites: None. 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. Offered Fall only. (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 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: 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 or BIO 113 is recommended but not required). Study of gross and microscopic anatomy of the human organs, tissues and systems. Offered Fall, Spring, and Summer. (2 lecture, 2 lab)



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LIFS 100LA Essentials in Human Biology with Lab (Anatomy)

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 or Paramedic 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 inter-relationships at these levels. Offered Fall and Spring. (3 lecture, 1 lab)



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LIFS 150LP Human Biology with Lab (Physiology)

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 with a grade of C or higher. 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. Offered Fall and Spring. (3 lecture, 1 lab)

BIO 221 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 makeup, 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. Offered Fall, Spring, and Summer. (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. Offered Fall, Spring, and Summer.

BADM 103 Legal Environment of Business**Credit Hours: 3**

Prerequisite: ENGL 070 or ENGL 110 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. Offered Fall, Spring, and Summer.

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. Offered Fall, Spring, and Summer.

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. Offered Fall, Spring, and Summer.

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. Offered Fall only.

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. Offered Fall, Spring, and Summer.

BSMT 122 Digital Marketing Essentials**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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Spring only.

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. Offered Fall, Spring, and Summer.

BSMT 211 Data Analytics**Credit Hours: 3**

Prerequisite: CAPP 125. This is an introductory course designed to provide students with the knowledge and skills needed to harness the power of data for informed decision making. This course will cover essential concepts, techniques, and common analytics software. Offered Fall and Spring.

CHEMISTRY**CHEM 101 Introduction to Chemistry with Lab****Credit Hours: 4**

Prerequisite: None. 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. Offered Fall, Spring, and Summer. (3 lecture, 1 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: MATH 114 with grades of C or higher. 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. Offered Fall only. (3 lecture, 1 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. Offered Spring only. (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. Offered Fall only. (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 non-chemistry 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. Offered Fall, Spring, and Summer.



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. Offered Fall and Spring.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR COMM 125 Small Group Communication

For additional information: <https://dhe.mo.gov/core42.php>

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. Offered Spring only.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR COMM 120 Interpersonal Communication

For additional information: <https://dhe.mo.gov/core42.php>

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. Offered Fall and Spring.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR SBSC 100 Introduction to Mass 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. Offered Fall only.

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. Offered Spring only.

COMM 120 History of Film**Credit Hours: 3**

Prerequisite: None. This course is an introduction to film history from the beginning of cinema to current films. The technological, cultural, and aesthetic development in motion pictures will be studied. Students will understand, analyze, and explore the human condition through watching and discussing various films throughout history. Offered Fall and Spring.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR FILM 103 History of Film

For additional information: <https://dhe.mo.gov/core42.php>

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, and nonlinear editing.

COMM 161 Media Productions I**Credit Hours: 3**

Prerequisite: None. Practical application of digital video production skills including digital cameras, digital audio, lighting, field production, and nonlinear editing. Offered Fall and Spring.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 107 Introduction to Filmmaking

For additional information: <https://dhe.mo.gov/core42.php>

COMM 162 Media Productions II**Credit Hours: 3**

Prerequisite: COMM 161. Practical application of digital video production knowledge and skills including advanced digital camera specifications, advanced understanding of camera lens function/application and advanced field production. Builds upon the foundational skills learned in Media Productions I. Offered Spring only.

COMM 163 Digital Video Editing**Credit Hours: 3**

Prerequisite: None. Practical application of basic digital video editing skills using modern NLE software. Offered Spring only.

COMM 164 Digital Storytelling**Credit Hours: 3**

Prerequisite: COMM 161. Theoretical understanding and practical implementation of visual and aural storytelling techniques within modern digital video productions. Offered Spring only.

COMM 165 Graphics for Video**Credit Hours: 3**

Prerequisite: None. Practical application of graphical elements in video production using current VFX and editing software. Offered Spring only.

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. Offered Fall and Spring.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR COMM 220 Argumentation and 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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall, Spring, and Summer.

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. Offered Fall, Spring, and Summer.

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. Offered Spring only.

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. Offered Fall and Spring.

COMPUTER INFORMATION SYSTEMS

CIS 103 Introduction to CIS**Credit Hours: 3**

Prerequisite: None. In this course, students explore the CIS field, covering operating systems, data management, networking, and software development. The focus is on foundational knowledge for CIS careers, including the role of computing in modern society. Offered Fall only.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Fall only.

CIS 168 Game Programming**Credit Hours: 3**

Prerequisite: None. The course structure is designed to offer a comprehensive overview of crucial aspects in video game development, both in 2D/3D. By the end of this course, students will understand fundamental tools and techniques necessary for video game creation. 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. Offered Spring only.

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. Offered Spring only.

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. Offered Fall, Spring, and Summer.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Fall and Spring.

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. Offered Summer only.

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. Offered Fall, Spring, and Summer.

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 inter-relationships. Offered Fall, Spring, and Summer.



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. Offered Fall, Spring, and Summer.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR CRIM 205 Introduction to Criminology

For additional information: <https://dhe.mo.gov/core42.php>

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. Offered Fall and Spring.

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. Offered Fall, Spring, and Summer.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall only.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall, Spring, and Summer.

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.

CYBER SECURITY

CYB 110 Offensive Security

Credit Hours: 3

Prerequisite: NET 101 and NET 106 with grades of C or higher. In this course students will learn techniques regarding governance, risk and compliance concepts, scoping and customer requirements in regards to planning and conducting penetration testing. Performing vulnerability scans along with reconnaissance methods and analyzing the results will be taught along with utilizing those results in order to conduct exploits and attacks. Students will learn how to report on their findings and communicate results back to key stakeholders. Offered Fall only.

CYB 120 Defensive Security

Credit Hours: 3

Prerequisite: NET 101 and NET 106 with grades of C or higher. This course will teach students methods to prevent, detect, and eliminate cyber security threats through rigorous security monitoring. Offered Spring only.

CYB 130 Industrial Cyber Security

Credit Hours: 3

Prerequisite: NET 101 and NET 106 with grades of C or higher. Students will address basic security concepts as they apply to critical infrastructure systems. Concepts addressed in the course will include Industrial Control Systems (ICS), such as Supervisory and Data Acquisition (SCADA) systems, Process Control Systems (PCS), and Distributed Control Systems (DCS), national standards for the protection of critical infrastructure, and risk management concepts and tools for critical infrastructure systems. Students will perform a risk assessment of a specific critical infrastructure sector using an appropriate risk assessment framework and tools, identifying threats and vulnerabilities specific to the sector, and making appropriate recommendations for mitigating risk. Offered Spring only.

CYB 140 Cloud Security Technologies

Credit Hours: 3

Prerequisite: NET 101 and NET 106 with grades of C or higher. In this course students will implement, manage, and monitor security for resources in various cloud or hybrid environments. They will learn to recommend security components and configurations to protect identity and access, data, applications, and networks. Managing security posture, identifying and remediating vulnerabilities and performing threat modeling will also be covered. Offered Fall only.

DANCE

DANC 110 Tap I

Credit Hours: 2

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. Offered Fall odd-numbered years.

DANC 120 Jazz I

Credit Hours: 2

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. Offered Fall even-numbered years.

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. Offered Fall only.

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. Offered Fall only. (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. Offered Fall only.

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. Offered Fall only. (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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall only. (1.5 lecture, 0.5 lab)

DH 117 Community Dental Health II

Credit Hours: 0.5

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. Offered Spring only. (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. Offered Spring only.

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. Offered Spring only. (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. Offered Spring only.

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. Offered Spring only.

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. Offered Summer only. (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. Offered Fall only.

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. Offered Spring only.

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. Offered Summer only.

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. Offered Fall only.

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). Offered Spring only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Summer only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Spring only. (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. Offered Fall only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Summer only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall and Spring.

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 inter-relationships on development. Offered Fall and Spring.

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. Offered Fall, Spring, and Summer.

ECD 109 Observation, Planning, and 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. Offered Fall only.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall, Spring, and Summer.

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. Offered Spring only.

ECD 125 Introduction to Special Individuals and Sensory Integration**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. Offered Fall only.

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. Offered Fall, Spring, and Summer.

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. Offered Fall and as needed in Spring.

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. Offered Fall and Spring.

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. Offered Spring only.

EARTH SCIENCE**EASC 106 Introduction to Geology with Lab****Credit Hours: 4**

Prerequisite: None. 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. Offered Fall and Spring. (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: None. 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. Offered Fall and Spring.



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: None. Introduction to our present knowledge of the universe. Topics include the solar system, stellar astronomy and the structure of the universe. Offered Fall only.



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. Offered Fall, Spring, and Summer.



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. Offered Fall and Spring.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR ECON 102 Introduction to Microeconomics

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: 0.5**

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. Offered Fall, Spring, and Interims.

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. Offered Fall and Spring.

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. Offered Fall, Spring, and Summer.

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. Offered Fall, Spring, and Summer.

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. Offered Fall, Spring, and Summer.

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. Offered Fall, Spring, and Summer.

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. This survey course is an introduction to the exceptional learners and their education in grades pre-K 12 Course provides an opportunity to observe 15 clock hours in a pre-K 12 special education classroom. Students will attain knowledge, skills and dispositions that will enable them to work effectively with exceptional learners in general education or special education. The course will cover the adaptations of daily activities in inclusive classrooms. Offered Fall and Spring.

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. Offered Spring only.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall, Spring, and Summer.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall, Spring, and Summer.

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. Offered Fall and Spring.

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. Offered Fall, Spring, and Summer.

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. Offered Fall, Spring, and Summer.

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. Offered Fall, Spring, and Summer.

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. Offered Fall, Spring, and Summer.



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. Offered Fall, Spring, and Summer.



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. Offered Fall and Spring.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 106 Creative Writing

For additional information: <https://dhe.mo.gov/core42.php>

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. Offered Fall and Spring.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Summer only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Fall, Spring, and Summer.

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. Offered Fall, Spring, and Summer.



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. Offered Fall and Spring.



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. Offered Fall and Spring.

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. Offered Fall only.

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. Offered Fall, Spring, and Summer.



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. Offered Fall only.



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. Offered Spring only.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR LANG 106 Foreign Language II

For additional information: <https://dhe.mo.gov/core42.php>

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. Offered Fall and Spring.

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. Offered Fall only.

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. Offered Fall and Spring.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Spring only.

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. Offered Fall and Spring.

HIT 275 Professional Practice Experience**Credit Hours: 3**

Prerequisite: Consent of program coordinator. This course prepares students in making the transition into the Health Information Management (HIM) career field by applying all program coursework and testing professional competencies needed for employment. The student will be placed in a healthcare setting requiring 80 to 120 hours of application. Simultaneously requiring online coursework consisting of preparation and review to be prepared to take the Registered Health Information Technician (RHIT) credential exam. Students are required to register and attempt the credential exam as a requirement of this course. Offered Fall and Spring.

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. Offered Fall, Spring, and Summer.

HEOC 135 Allied Health Career Development**Credit Hours: 0.5**

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. Offered Fall, Spring, and Summer.

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 are required to attend one, on-ground hands-on day in addition to 100 clinical hours. Students must satisfactorily perform in a laboratory setting as well as pass written tests. Offered Fall and Spring.

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. Offered Fall and Spring.

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, students who pass the course will be qualified to apply through Headmaster to take the two-part, state approved knowledge and skills examination. This is a pass/fail course. Offered Fall and Spring.

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 nonparental 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. Offered Fall and Spring.

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 nonparental medications in a long-term care facility. This is a pass/fail course. Offered Fall and Spring.

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. Offered Fall, Spring, and Summer.

HEATING, VENTILATION, AIR CONDITIONING, REFRIGERATION, AND CONTROLS TECHNOLOGY

HVAC 102 HVAC Fundamentals I**Credit Hours: 3**

Prerequisite: None. Introduction of the theory of heat and the history of HVAC. It also gives the scientific terminology and definition to the components of heat and heat transfer in order to create the basic understanding of refrigeration, refrigerants, the components that make up the refrigeration cycle, and also the measures needed to assure safety in this industry.

HVAC 104 HVAC Fundamentals II**Credit Hours: 3**

Prerequisite: HVAC 102 with a grade of C or higher. This course continues the teaching of HVAC Fundamentals starting with the tools and equipment that are needed to be effective and productive, along with how to put them to use properly. It also covers the types of piping and tubing, soldering and brazing, as well as refrigerant usage, leak detection, evacuation, and system charging.

HVAC 106 HVAC Schematics**Credit Hours: 2**

Prerequisite: IEM 104 with a grade of C or higher. Students will learn to read, draw and interpret wiring diagrams from various HVAC units and familiarize themselves to the nomenclature of symbols and electric circuitry that applies to the HVAC industry. Offered Summer only.

HVAC 108 Electrical Fundamentals**Credit Hours: 3**

Prerequisite: IEM 104 with a grade of C or higher. Students will study the types of electrical current and how they are produced and distributed. Students will also learn about the different types of electric motors and their controls, their purpose and how they operate, as well as how to replace or make repairs.

HVAC 110 Refrigeration and Diagnostics**Credit Hours: 3**

Prerequisites: IEM 104 and HVAC 104 with grades of C or higher. This course is an introduction to refrigeration diagnostics and explains the more advanced theory of refrigeration along with the refrigeration cycle and its components. This course includes various techniques with

refrigerant charging and testing along with advanced troubleshooting techniques.

HVAC 120 Heating Systems**Credit Hours: 3**

Prerequisite: HVAC 102 with a grade of C or higher. This course explains the different types of heating systems available and how each operates in the environment for which they have been designed.

HVAC 130 Air Flow Fundamentals**Credit Hours: 3**

Prerequisite: HVAC 102 with a grade of C or higher. In this course, students will learn about cooling systems and comfort control. Students will also be instructed on the importance of air quality, how to calculate and achieve proper air distribution.

HVAC 132 HVAC Installation and Evaluation**Credit Hours: 3**

Prerequisites: TECH 101 and HVAC 104 with grades of C or higher. This course is designed to show students how to assess a structures quality and determine what it takes to make it more efficient. In this course students will also find out how to calculate heat gain and heat loss for the purpose of new installation, replacement systems, or system repairs.

HVAC 134 Heat Pumps**Credit Hours: 2**

Prerequisite: HVAC 104 with a grade of C or higher. This course teaches the types of heat pumps and how they are applied to an HVAC system as well as how the various components work with each specific unit.

HVAC 136 EPA 608**Credit Hours: 1**

Prerequisite: HVAC 104 with a grade of C or higher. This course covers the requirements for the EPA certification examinations. It includes the up-to-date federal regulations to enable students to know the proper procedures of servicing, recycling, recovering, reclaiming refrigerants in systems, and the laws that protect our environment.

HVAC 140 Commercial Air Conditioning**Credit Hours: 2**

Prerequisite: HVAC 104 with a grade of C or higher. This course covers the commercial side of HVAC/R by exploring the various types of chillers, cooling towers, and rooftop units used in the commercial industry as well as their components and refrigerants, and how they are operated and maintained.

HVAC 160 HVAC Automation Systems**Credit Hours: 3**

Prerequisite: HVAC 104 with a grade of C or higher. This course is designed to educate the student on Building Automation Systems (BAS). Students will learn the purpose

and features of automation in the HVAC industry as well as the communications and configuration that will allow students to more effectively monitor and troubleshoot these types of systems.

HVAC 180 HVAC Internship

Credit Hours: 4

Prerequisite: None. Course is designed to provide the student an opportunity to demonstrate work skills, work ethics, and the ability to work with others in a cooperative work experience within an industry setting. Students work under the supervision of an approved professional or specialist in the field. A minimum of 160 work (clock) hours on the job site is required for successful completion of the course.

HISTORY

HIST 101 U.S. History Before 1877

Credit Hours: 3

Prerequisite: None. 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. Offered Fall, Spring, and Summer.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR HIST 101 American History

For additional information: <https://dhe.mo.gov/core42.php>

HIST 102 U.S. History Since 1877

Credit Hours: 3

Prerequisite: None. 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. Offered Fall, Spring, and Summer.



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: None. Survey of the political, social, military, cultural, and religious history of Europe, Asia and Africa from early human societies to 1500. Offered Fall, Spring, and Summer.



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: None. 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. Offered Fall, Spring, and Summer.



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>

INDUSTRIAL ELECTRICAL MAINTENANCE

IEM 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. Offered Fall and Spring.

IEM 104 Electrical Power

Credit Hours: 3

Prerequisite: IEM 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. Offered Fall and Spring.

IEM 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. Offered Fall and Spring.

IEM 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). Offered Fall and Spring.

IEM 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. Offered Fall and Spring.

IEM 109 Robotics Automation Technician I**Credit Hours: 3**

Prerequisite: IEM 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 system. Course will provide hands on exposure using an industrial robot(s). Offered Fall and Spring.

IEM 112 Control Circuit Troubleshooting**Credit Hours: 3**

Prerequisite: IEM 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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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). Offered Fall and Spring.

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 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.

IEM 180 Problems in IEM**Credit Hours: 1 to 3**

Prerequisite: None. Independent study of a special problem in Industrial Electrical Maintenance under the supervision of an Industrial Electrical Maintenance instructor or industry partner.

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. Offered Fall and Spring.



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. Offered Fall and Spring.



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. Offered Spring only.



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. Offered Fall only.



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. Offered Fall and Spring. (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. Offered Fall and Spring. (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. Offered Fall and Spring. (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). Offered Fall and Spring. (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). Offered Fall and Spring. (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. Offered Fall and Spring. (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. Offered Fall and Spring. (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. Offered Fall and Spring. (1 lecture, 3 lab)

MACH 119 Advanced CNC Machining

Credit Hours: 4

Prerequisite: MACH 118 and MACH 134 with grades 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. Offered Fall and Spring. (1 lecture, 3 lab)

MACH 134 Computer Aided Manufacturing**Credit Hours: 4**

Prerequisite: MACH 117 with a grade of C or higher.
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. Offered Fall and Summer. (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. Offered Spring and Summer. (1 lecture, 3 lab)

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 102/113, MATH 111/117, MATH 104/119. 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. Offered Fall, Spring, and Summer.

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. Offered Fall and Spring.

MATH 102 Review of Essential Mathematics—A

Credit Hours: 2

Prerequisites: MATH 061 with a grade of C or higher or equivalent placement score. Corequisite: MATH 113. 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. 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. Offered Fall, Spring, and Summer.

MATH 104 Review of Essential Mathematics—B

Credit Hours: 2

Prerequisites: MATH 061 with a grade of C or higher or equivalent placement score. Corequisite: 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 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. Offered Fall, Spring, and Summer.

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. Offered Fall, Spring, and Summer.

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. Offered Fall, Spring, and Summer.

MATH 113 Mathematical Reasoning and Modeling**Credit Hours: 3**

Prerequisite: MATH 102, MATH 110, or MATH 112 with a grade of C or higher or equivalent placement score.
Corequisite: MATH 102. 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. Offered Fall, Spring, and Summer.



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. Offered Fall, Spring, and Summer.



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 119 Statistical Reasoning**Credit Hours: 3**

Prerequisite: MATH 104, MATH 110 or MATH 112 with a grade of C or higher or equivalent placement score.
Corequisite: MATH 104. 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. Offered Fall, Spring, and Summer.



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. Offered Fall and Spring.

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. Offered Spring only.

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. Offered Fall and Spring.

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. Offered Fall only.

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. Offered Spring.

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. Offered Summer only.

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. Offered Fall and Spring.

MEA 103 Exploration of the Human Body

Credit Hours: 3

Prerequisite: Acceptance to the Medical Assisting program. This course is designed to provide students with a basic understanding and application of the anatomical and physiological principles of the human body. It serves as a fundamental exploration of the intricate organization and operation of all human body systems, offering insight into how various systems work together to sustain life and maintain homeostasis. This course combines theoretical knowledge with practical applications, allowing students to gain a deep appreciation of the functionality of the human body and its relevance to health sciences and medicine. Students will develop a foundation for further studies in biology and related fields. Students must pass this course with a C 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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall only.

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. Offered Fall only. (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. Offered Summer only. (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. Offered Fall only. (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. Offered Fall only. (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. Offered Spring only. (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. Offered Spring only. (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. Offered Spring only.

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. Offered Fall only.

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. Offered Summer only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Fall only.



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 Fundamentals of 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. Offered Fall only.

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. Offered Fall, Spring, and Summer.



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. Offered Fall, Spring, and Summer.



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. Offered Fall only.



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. Offered Spring only.



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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Spring only.

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.). Offered Fall and Spring.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTRPERF 102B 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.). Offered Fall and Spring.

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.). Offered Fall and Spring.

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.). Offered Fall and Spring.

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.). Offered Fall and Spring.

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.). Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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 semiprofessional 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. Offered Fall and Spring.

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. Offered Fall and Spring.



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. Offered Fall and Spring.



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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

MUS 204 Chamber Singers I**Credit Hours: 1.5**

Prerequisites: 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.). Offered Fall and Spring.



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 205 Chamber Singers II**Credit Hours: 1.5**

Prerequisites: MUS 204 and 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.). Offered Fall and Spring.

MUS 206 Chamber Singers III**Credit Hours: 1.5**

Prerequisites: MUS 205 and 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.). Offered Fall and Spring.

MUS 207 Chamber Singers IV**Credit Hours: 1.5**

Prerequisites: MUS 206 and 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.). Offered Fall and Spring.

MUS 208 Chamber Singers V**Credit Hours: 1.5**

Prerequisites: MUS 207 and 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.). Offered Fall and Spring.

MUS 209 Chamber Singers VI**Credit Hours: 1.5**

Prerequisites: MUS 208 and 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.). Offered Fall and Spring.

MUS 210A Contemporary Choir I**Credit Hours: 1**

Prerequisite: Consent of instructor. Select choir of mixed voices that performs a wide range of vocal styles. Instruction

focuses on vocal skills for those varying styles of music. Offered Fall and Spring.



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 211A Contemporary Choir II

Credit Hours: 1

Prerequisite: MUS 210A and consent of instructor. Select choir of mixed voices that performs a wide range of vocal styles. Instruction focuses on vocal skills for those varying styles of music. Offered Fall and Spring.

MUS 212A Contemporary Choir III

Credit Hours: 1

Prerequisite: MUS 211A and consent of instructor. Select choir of mixed voices that performs a wide range of vocal styles. Instruction focuses on vocal skills for those varying styles of music. Offered Fall and Spring.

MUS 213A Contemporary Choir IV

Credit Hours: 1

Prerequisite: MUS 212A and consent of instructor. Select choir of mixed voices that performs a wide range of vocal styles. Instruction focuses on vocal skills for those varying styles of music. Offered Fall and Spring.

MUS 214A Contemporary Choir V

Credit Hours: 1

Prerequisite: MUS 213A and consent of instructor. Select choir of mixed voices that performs a wide range of vocal styles. Instruction focuses on vocal skills for those varying styles of music. Offered Fall and Spring.

MUS 215A Contemporary Choir VI

Credit Hours: 1

Prerequisite: MUS 214A and consent of instructor. Select choir of mixed voices that performs a wide range of vocal styles. Instruction focuses on vocal skills for those varying styles of music. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

NET 106 Introduction to Network Security

Credit Hours: 3

Prerequisite: None. Corequisite: NET 101. Course will introduce students to a basic understanding of computer, network and organizational security as it relates to the information technology field. Offered Fall and Spring.

NET 120 Network Server

Credit Hours: 3

Prerequisite: None. Corequisite: NET 101. 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. Offered Spring only.

NET 125 Linux Operating Systems

Credit Hours: 3

Prerequisite: None. Corequisite: NET 101. Course will cover the basics of operating and managing a Linux-based operating system. Offered Summer only.

NET 126 Network Client

Credit Hours: 3

Prerequisite: None. Corequisite: NET 101. 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. Offered Fall only.

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. Offered Fall only.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

NET 158 Network Firewalls

Credit Hours: 3

Prerequisites: NET 101 and NET 106 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. Offered Spring only.

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. Offered Fall, Spring, and Summer.

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. Offered Spring only.

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. Offered Fall and Spring.

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. Offered Fall only.

NET 210 Infrastructure Automation

Credit Hours: 3

Prerequisites: NET 101, NET 125, and CIS 120 with grades of C or higher. In this course students will develop software skills with Python, GIT, and common data formats such as XML, JSON, and YAML. Utilizing knowledge gained students will learn how to automate tasks related to networking and infrastructure management. Offered Spring only.

NET 220 Enterprise Linux

Credit Hours: 3

Prerequisites: NET 101 and NET 125 with grades of C or higher. Students will learn to work with Red Hat Enterprise Linux (RHEL) from a systems administration perspective. RHEL is the most commonly utilized Linux OS in the commercial environment. Understanding how to utilize the command line, work with files, as well as manage users and groups are just an introduction to the topics which will be covered. Offered Spring only.

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 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: 0.5**

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring. (1.5 lecture, 0.5 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. Offered Fall and Spring. (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, and nursing documentation. This is a pass/fail course. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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, IV therapy, and client responses. This is a pass/fail course. Offered Fall and Spring.

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. Offered Fall and Summer.

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. Offered Fall and Summer.

NURS 132 Nutrition**Credit Hours: 3**

Prerequisite: Acceptance to Year One of the Nursing (PN) program. The focus of this course is to introduce the learner to

the science and fundamental concepts of human nutrition. The learner will integrate the concepts of digestion, absorption, metabolism, and excretion to facilitate health promotion and reduce or prevent the onset of disease processes. The integration of these principles will aid the learner in providing evidence-based patient care across the lifespan. Offered Fall and Spring.

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. Offered Spring and Summer.

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. Offered Spring and Summer.

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. Offered Spring and Summer.

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. Offered Spring and Summer.

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. Offered Fall and Summer.

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. Offered Summer only.

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 or paramedic transitions course and incorporating current standards of practice and evidence-based care for the entry-level professional nurse, the student's current leadership and management abilities are explored and enhanced. Exploration focuses on the roles and functions of the professional registered nurse in various health care settings. Topics of discussion include cultural awareness, quality improvement, professionalism, leadership and management styles, communication, delegation, disaster management, and priority setting when caring for diverse and aging populations and cultures. Offered Fall and Spring.

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. Offered Fall and Spring.

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 clients in mental health facilities as well as equipping students to face unique psychosocial, spiritual, and physical stressors that healthcare professionals may encounter while carrying out their duties. Application from NURS 215 will be demonstrated in the clinical settings. This is a pass/fail course. Offered Fall and Spring.

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 the practical nursing 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, 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 Gordon's Functional Health patterns framework. Cultural and psychosocial issues, including the involvement of patients in decision-making and best practices for promoting healthy lifestyles and providing patient-centered care are also discussed. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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, inter-professional collaboration, and use of information technology where applicable to care for adults and older adults. This is a pass/fail course. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

NURS 234 Complex Health: Activity and Rest**Credit Hours: 3**

Prerequisite: Acceptance to Year Two of the Associate Degree Nursing (ADN) program. Building upon foundational knowledge obtained from the previous curriculum and completed ADN courses, this course integrates current standards of practice for the professional registered nurse with evidence-based practice into the care of patients experiencing complex features of selected cardiovascular, respiratory, shock states, and traumatic disorders and injuries. Related concepts of nursing care such as pathophysiology, interdisciplinary care planning, age and cultural considerations of care, pharmacological considerations, dosage calculation, and safe and effective care to address the prevention of illness and promotion of health and the restoration and maintenance of health associated with these patient populations, as well as current research, are integrated throughout activities and discussions in this course. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.

OCCUPATIONAL THERAPY

OTA 200 Foundations of Occupational Therapy

Credit Hours: 3

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. Offered Fall only.

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. Offered Fall only.

OTA 210 Activity Analysis and Therapeutic Media

Credit Hours: 3

Prerequisite: Acceptance to the Occupational Therapy Assistant program. This course is designed to foster various occupations or activities used as therapeutic interventions in occupational therapy. Emphasis on awareness of activity demands, contexts, adapting, grading, and safe implementation of occupations or activities. This course also provides knowledge and use of tools, equipment, and basic techniques of therapeutic

media. Emphasis is given to analysis and instruction of activities frequently used as occupational therapy media in multiple community and clinical settings. Offered Fall only.

OTA 215 Mental Health and Geriatric Practice

Credit Hours: 4

Prerequisite: Acceptance to the Occupational Therapy Assistant program. This course presents the role of the Occupational Therapy Assistant in the psychosocial area as well as the geriatric population 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 and geriatric 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. This course integrates the Occupational Therapy process and collaboration with the Occupational Therapist through its review of advanced, appropriate Occupational Therapy therapeutic interventions and techniques used to enhance functional ability and independence in daily life tasks and occupation for the Geriatric and Mental Health populations. The student incorporates knowledge of the influences of environment, individual, family, culture, and access to Occupational Therapy services on occupational performance. Lab activities, in-class activities, and level I fieldwork opportunities will enable students to participate in and apply psychosocial principles to practice. Offered Fall only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Spring only.

OTA 260 Community Practice and Emerging Practice in Occupational Therapy

Credit Hours: 3

Prerequisite: Acceptance to the Occupational Therapy Assistant program. Students will learn the basic roles and functions of an occupational therapy practitioner and the role of occupational therapy in medical, educational, and community models, as well as emerging areas of practice that are predicted to grow in the future. Students explore a variety of work settings, and/or types of practice including OT role delineations in community based and non-traditional settings. The student will study specialty areas through case discussion, enhancement of treatment techniques, review of literature, and current trends. Site visits and volunteer 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. Offered Spring only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Summer only.

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. Offered Summer only.

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. Offered Fall only.

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. Offered Fall only.

PHRM 106 Role of the Pharmacy Technician

Credit Hours: 3

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. Offered Fall only.

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. Offered Fall and Spring.

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. Offered Fall only.

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). Offered Fall only.

PHRM 122 Advanced Top 200 and Over-the-Counter Medications

Credit Hours: 3

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 interactions, as it relates to a pharmacy technician's practice. Offered Spring only.

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. Offered Spring only.

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. Offered Fall and Spring.

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. Offered Fall and Spring.



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. Offered Fall, Spring, and Summer.



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. Offered Fall and Spring.



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. Offered Fall and Spring.

PEAC 125 Varsity Basketball—Women

Credit Hours: 1

Prerequisite: Consent of athletic director. Participation in the women's varsity basketball program. Offered Fall and Spring.

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. Offered Fall only.

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 110 Survey of Physics with Lab

Credit Hours: 5

Prerequisite: MATH 110 or MATH 112 with a grade of C or higher or equivalent placement score. A survey course covering traditional physics topics with applications in biology and medicine. Topics covered include motion, force, energy, sound, fluids, temperature, electricity, and light. Possible applications include sports, balance and stability, sonography, blood flow, medical imaging, nuclear medicine, and human function. (4 lecture, 1 lab)



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PHYS 100L Essentials in Physics with Lab

For additional information: <https://dhe.mo.gov/core42.php>

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 211 Engineering 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 concepts of physics. Topics include motion, forces, energy, momentum, rotation, fluids, and thermodynamics. This is the first course in a calculus-based sequence designed for science and engineering students. Offered Fall only. (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 212 Engineering Physics II with Lab

Credit Hours: 5

Prerequisite: PHYS 211 with a grade of C or higher. A continuation of Engineering Physics I, building on the fundamental concepts of physics. Topics covered include oscillatory motion, electrostatics, magnetism, circuits, electromagnetism, optics, and light. This is the second course in a calculus-based sequence designed for science and engineering students. Offered Spring only. (4 lecture, 1 lab)

PHYS 235 Engineering Statics**Credit Hours: 3**

Prerequisite: PHYS 211 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.

Offered Spring only.

POLITICAL SCIENCE

POLS 101 American/National Government**Credit Hours: 3**

Prerequisite: None. 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. Offered Fall, Spring, and Summer.



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. Offered Spring only.

POLS 109 Civics and the Constitutions**Credit Hours: 0.5**

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. Offered Fall, Spring, and Summer.

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. Offered Fall, Spring, and Summer.



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. Offered Fall and Spring.

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. Offered Fall and Spring.

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. Offered Fall and Spring.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PSYC 200 Lifespan 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. Offered Fall and Spring.

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. Offered Spring only.

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. Offered Summer only.

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. Offered Summer only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall only. (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. Offered Fall only. (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. Offered Spring only. (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. Offered Fall only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Spring only. (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. Offered Spring only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Fall only.

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). Offered Spring only.

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. Offered Spring only.

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. Offered Summer only.

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. Offered Fall, Spring, and Summer.



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. Offered Fall, Spring, and Summer.



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. Offered Fall and Spring.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR SOCI 204 Introduction to Family Studies

For additional information: <https://dhe.mo.gov/core42.php>

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. Offered Fall and Spring.

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. Offered Fall, Spring, and Summer.



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. Offered Fall and Spring.



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. Offered Fall and Spring.



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. Offered Fall, Spring, and Summer.

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. Offered Fall and Spring.

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. Offered Fall, Spring, and Summer.

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. Offered Spring only.

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. Offered Spring only.

SURGERY TECHNOLOGY

SRGT 101 Intro to Surgical Technology

Credit Hours: 2

Prerequisite: Program acceptance. Focuses on professionalism, including communication, teamwork, and employability skills, healthcare facility information, including structure and environment, biopsychosocial concepts, including death and dying, and information technology. Offered Fall only.

SRGT 103 Fundamentals of Surgical Technology

Credit Hours: 7

Prerequisite: Program acceptance. Establishes the perioperative, intraoperative, and postoperative skills of the surgical technologist, including surgical attire, sterile field preparation and maintenance, asepsis, and patient safety. Offered Fall only.

SRGT 105 Surgical Instrumentation

Credit Hours: 4

Prerequisite: Program acceptance. Establishes foundational knowledge of instrumentation concepts, specialty instrumentation, perioperative handling, sterile processing, as well as surgical equipment including electricity and lasers. Offered Fall only.

SRGT 107 Surg Tech Clinical I

Credit Hours: 1

Prerequisite: Program acceptance. The first clinical rotation is designed to introduce the student to the operating room, understanding the scrub roles, and becoming adept to aseptic technique. Cases will be

documented to count toward the program minimum requirement of 120 cases. Offered Fall only.

SRGT 109 Surgical Procedures I

Credit Hours: 4

Prerequisites: Program acceptance. Establishes foundational knowledge of surgical core and specialty procedures from General, Obstetrics/Gynecology, Genitourinary, Ophthalmic, ENT, Orthopedic, and Pediatric specialties. Offered Spring only.

SRGT 111 Surg Tech Clinical II

Credit Hours: 10

Prerequisites: Program acceptance. The second clinical rotation is designed to build upon the acquired skills and experiences from Clinical I, emphasizing organization, time management, and expanding surgical procedure knowledge. Cases will be documented to count toward the program minimum requirement of 120 cases. Offered Spring only.

SRGT 113 Surgical Procedures II

Credit Hours: 2

Prerequisites: Program acceptance. Establishes foundational knowledge of surgical specialty procedures from Oral and Maxillofacial, Plastic and Reconstructive, Vascular, Cardiothoracic, and Neurosurgical specialties, and Emergency/Trauma procedures. Offered Summer only.

SRGT 115 Surg Tech Clinical III

Credit Hours: 4

Prerequisites: Program acceptance. The surgical technology student will be under direct supervision of operating room staff performing all procedures in the first scrub role during the last clinical rotation. Cases will be documented to count toward the program minimum requirement of 120 cases. Offered Summer only.

SRGT 117 Certification Prep and Review

Credit Hours: 1

Prerequisites: Program acceptance. Prepares students for the NBSTSA (National Board of Surgical Technology and Surgical Assisting) Certification Exam. Offered Summer only.

TECHNICAL

TECH 101 Technical Math

Credit Hours: 3

Prerequisite: None. This course is designed to stress applications of practical problems as they apply to trade. Topics include dimensions, algebraic equations, precision, accuracy and tolerance, fundamentals of trigonometry, plane geometry, solid geometry, and statistics. Offered Fall and Spring.

TECH 102 Applied Science

Credit Hours: 3

Prerequisite: TECH 101. This course is 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. Offered Fall and Spring.

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, scenic designer, costume designer, and lighting designer. Students will be required to see at least two live theatre productions for which admission may be charged. Offered Fall and Spring.



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. Offered Spring odd-numbered years.



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. Offered Spring odd-numbered years.



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 115 Theatre Practicum**Credit Hours: 1 to 2**

Prerequisite: None. Includes student participation in plays, either in performance, production, or backstage work. No more than four credit hours of Theatre Practicum may be applied toward an Associate of Arts degree. Offered Fall and Spring.

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. Offered Fall in even-numbered years.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR PERF 104M Stage Makeup

For additional information: <https://dhe.mo.gov/core42.php>

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. Offered Spring even-numbered years.

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. Offered Fall even-numbered years.

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. Offered Fall odd-numbered years.

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. Offered Spring even-numbered years.

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. Offered Fall and Spring.

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 are prepared for the college or university to which they transfer. Acting students will prepare an audition package, and technical students will create a portfolio. Offered Fall and Spring.

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. Offered Fall only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Fall, Spring, and Summer.

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. Offered Fall only.

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. Offered Spring and Summer.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Fall only.

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. Offered Spring only.

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. Offered Spring only.

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. Offered Fall and Spring.

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. Offered Fall and Spring. (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. Offered Fall and Spring.

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. Offered Fall and Spring. (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. Offered Fall and Spring. (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. Offered Fall and Spring. (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. Offered Fall and Spring. (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. Offered Fall and Spring. (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. Offered Fall only. (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. Offered Fall and Spring. (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. Offered Fall and Spring. (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. Offered Fall and Spring. (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. Offered Spring only. (1 lecture, 3 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. Nondestructive 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. Offered Fall and Spring. (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 102 Wellness for the Individual****Credit Hours: 2**

Prerequisite: None. Wellness for the Individual will allow students to learn how to ensure they are working towards a healthy approach to life both physically and mentally. This survey course will examine the anatomy and body systems required for physical wellness, along with dietary choice and behaviors. Coping strategies will be explored to prepare students to remain healthy despite challenges in their lives. Offered Fall, Spring, and Summer.



Note: Missouri Higher Education Core Curriculum (CORE 42) Course Number: MOTR IDSE 102 Wellness for the Individual

For additional information: <https://dhe.mo.gov/core42.php>

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. Offered Fall and Spring.

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. Offered Fall and Spring.

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.

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