

**Johnson County Community College — Missouri S&T**  
**Education BS with Early Childhood, Elementary, or Middle School Teacher Education**  
 Transfer Guide Effective as of Fall 2025

Complete Group 1 - Core Requirements and Group 2 - Major Requirements for major of choice.

**Group 1 - Core Requirements: All Emphasis/Focus Areas Take All Courses**

Education students take all Group 1 - Core Requirements and Group 2 - Emphasis Area Requirements for major of choice.

<u>Johnson County Community College</u>			<u>Semester</u>	<u>Missouri S&amp;T</u>		
ENGL 121	Composition I	3		ENG 1120	Exposition and Argumentation	3
ENGL 122	Composition II	3		ENG 1160	Writing and Research	3
COMS 121	Public Speaking	3		SP&MS 1185	Principles of Speech	3
PHIL 121 or PHIL 124	Intro to Philosophy or Logic and Critical Thinking	3		PHILOS 1105 or PHILOS 1115	Self and World: Intro to Philosophy or Logic and Reasoning: An Introduction	3
POLS 124	American National Government	3		POL SCI 1200	American Government	3
EDUC 121	Introduction to Teaching	3		EDUC 1074	Education in a Diverse Society	3
PSYC 225	Educational Psychology	3		EDUC 2102 or PSYCH 2300	Educational Psychology	1
PSYC 215	Child Development	3		PSYCH 3310	Developmental Psychology	3
		Total Hours	24			Total Hours 22

**Group 2 - Emphasis/Focus Area Requirements:  
Take All Courses for Emphasis/Focus of Choice**

Middle School Teacher Education students take all Group 1 - Core Requirements (above) and Group 2 - Emphasis Area Requirements for chosen emphasis area from list below. See course requirements on following pages.

**Early Childhood**  
**Elementary Education STEM Focus**  
**Middle School English Emphasis**  
**Middle School Mathematics Emphasis**  
**Middle School Science Emphasis**  
**Middle School Social Sciences Emphasis**

Middle School Teacher Education Emphasis Area Requirements are detailed on the following pages.

**Humanities/Social Science (HSS) Electives:** HSS electives may include any history, economics, political science, sociology, psychology, philosophy, fine art, literature, or foreign language. Missouri S&T approved HSS courses are listed at [ugs.mst.edu](http://ugs.mst.edu). Your campus may have additional acceptable options. Consult with your advisor or email [transfer@mst.edu](mailto:transfer@mst.edu) with questions.

## Early Childhood

**Johnson County Community College**

**Semester**

**Missouri S&T**

### Degree Requirements

It is recommended that AAT-track students prioritize coursework in this section and the Group 1 - Core Requirements section before completing any courses from the Additional Degree Requirements section. Students should consult closely with their community college/transfer school advisor to select coursework to total no more than the maximum of 61 transferable credits.

BIOL 121	Intro to Biology for Non-Majors	4	BIO SCI 1113, 1219	General Biology (3) and Lab (1)	4
CHEM 124, 125 or GEOS 130	General Chemistry I and Lab or General Geology	5	CHEM 1310, 1319 or GEOLOGY 1110	General Chemistry I and Lab (5) or Physical and Environmental Geology (3) Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit. Department will substitute CHEM 1310, 1319 or GEOLOGY 1120 for this requirement.	3
MATH 1160 or MATH 11	Intermediate Algebra or College Algebra or higher math	3	MATH 1103 or MATH 1140	Fundamentals of Algebra or College Algebra or higher math Department will substitute MATH 1103 for MATH 1140.	3
PHYS 130 or ASTR 120 or ASTR 122	College Physics I (5) or Fundamentals of Astronomy (3) or Astronomy (4)	3	PHYSICS 1145 or PHYSICS 1505	College Physics I (4) or Astronomy (3) Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit.	3
GEOS 145	World Regional Geography	3	HISTORY 2110	World Regional Geography	3
HIST 140 or HIST 141 or HIST 125 or HIST 151 or HIST 126	U.S. History to 1877 or U.S. History Since 1877 or Western Civ: Ancient World to the Renaissance or World History: Traditional or Western Civ: Scientific Revolution to Modern Age or	3	HISTORY 1300 or HISTORY 1310 or HISTORY 1100* or HISTORY 1200* or	American History to 1877 or American History since 1877 or Early Western Civilization or Modern Western Civilization or *Department will substitute HISTORY 1100 or 1200 for this requirement.	3
ENGL 232	Children's Literature	3	EDUC 3430 or ENGLISH 2240	Diverse Literature for Children or Children's Literature	3
Literature	Literature Elective	3	Literature	Literature Elective	3
PSYC 130	Intro to Psychology	3	PSYCH 1101	General Psychology	3
MUS 121 or MUS 126	Intro to Music Listening or Intro to World Music	3	MUSIC 1150	Music Understanding and Appreciation	3

### Additional Degree Requirements

It is recommended that AAS or Certificate Program students who have completed the coursework below work closely with their community college/transfer school advisor to complete selected courses from the Recommended Transfer Coursework section and the Group 1 - Core Requirements section to total no more than the maximum of 61 transferable credits.

EDUC 130	Foundations of Early Childhood Education	3	EDUC 1055	Intro to Early Childhood Education	3
EDUC 250	Child Health, Safety and Nutrition	3	EDUC 1221	Health, Nutrition, and Safety in Early Childhood Education	3
EDUC 260	Observing and Interacting with Young Children	3	EDUC 2440	Observation and Assessment of Young Children	3
EDUC 234	Families in Society	3	EDUC 2401	School, Family, and Community Partnerships	3
PSYC 215	Child Development	3	EDUC 2211	Child Development	3
	Group 2 Emphasis/Focus Area Requirements	37		Group 2 Emphasis/Focus Area Requirements	39
	Group 1 Core Requirements	24		Group 1 Core Requirements	22
	Total Hours	61		Total Hours*	61

\*S&T advisor permission is required to transfer more than 61 credits toward the S&T degree for Early Childhood Emphasis Area.

**Professional Requirements for Teacher Education Program:** Please view all Professional Standing and Curriculum requirements at <https://teachereducation.mst.edu/earlychildhood/>.

Elementary Education STEM Focus	
<p>1. <b>Science:</b> Understanding basic scientific concepts, the scientific method, and the importance of safety in the laboratory.</p> <p>2. <b>Mathematics:</b> Developing foundational math skills, including addition, subtraction, multiplication, and division, as well as understanding fractions and decimals.</p> <p>3. <b>Engineering:</b> Introducing students to basic engineering principles, design thinking, and the process of building and testing prototypes.</p> <p>4. <b>Technology:</b> Familiarizing students with basic computer skills, internet safety, and the use of educational technology tools.</p>	<p>1. <b>Science:</b> Understanding basic scientific concepts, the scientific method, and the importance of safety in the laboratory.</p> <p>2. <b>Mathematics:</b> Developing foundational math skills, including addition, subtraction, multiplication, and division, as well as understanding fractions and decimals.</p> <p>3. <b>Engineering:</b> Introducing students to basic engineering principles, design thinking, and the process of building and testing prototypes.</p> <p>4. <b>Technology:</b> Familiarizing students with basic computer skills, internet safety, and the use of educational technology tools.</p>

Johnson County Community College			Semester	Missouri S&T		
BIOL 121	Intro to Biology for Non-Majors	4	BIO SCI 1113, 1219	General Biology (3) and Lab (1)	4	
CHEM 124, 125 or GEOS 130	General Chemistry I and Lab or General Geology	5	CHEM 1310, 1319 or GEOLOGY 1110	General Chemistry I and Lab (5) or Physical and Environmental Geology (3) Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit.	3	
MATH 1160 or MATH 11	Intermediate Algebra or College Algebra or higher math	3	MATH 1103 or MATH 1140	Fundamentals of Algebra or College Algebra or higher math Department will substitute MATH 1103 for MATH 1140.	3	
PHYS 130 or ASTR 120 or ASTR 122	College Physics I (5) or Fundamentals of Astronomy (3) or Astronomy (4)	3	PHYSICS 1145* or PHYSICS 1505	College Physics I (4) or Astronomy (3) Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit.	3	
GEOS 145	World Regional Geography	3	HISTORY 2110	World Regional Geography	3	
HIST 125 or HIST 151	Western Civ: Ancient World to the Renaissance or World History: Traditional	3	HISTORY 1100	Early Western Civilization	3	
HIST 126	Western Civ: Scientific Revolution to Modern Age	3	HISTORY 1200	Modern Western Civilization	3	
HIST 140 or HIST 141	U.S. History to 1877 or U.S. History since 1877	3	HISTORY 1300 or HISTORY 1310	American History to 1877 or American History since 1877	3	
ECON 231 or ECON 230	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3	
ENGL 232	Children's Literature	3	EDUC 3430 or ENGLISH 2240	Diverse Literature for Children or Children's Literature	3	
PSYC 130	Intro to Psychology	3	PSYCH 1101	General Psychology	3	
MUS 121 or MUS 126	Intro to Music Listening or Intro to World Music	3	MUSIC 1150	Music Understanding and Appreciation	3	
	Group 2 Emphasis/Focus Area Requirements	39		Group 2 Emphasis/Focus Area Requirements	37	
	Group 1 Core Requirements	24		Group 1 Core Requirements	22	
	Total Hours	63		Total Hours*	59	

Professional Requirements for Teacher Education Program: Please view all Professional Standing and Curriculum requirements at <https://teachereducation.mst.edu/elementaryeducation/>.

## Middle School Language Arts Emphasis Area

<u>Johnson County Community College</u>			<u>Semester</u>	<u>Missouri S&amp;T</u>		
MATH 116 or MATH 171	Intermediate Algebra or College Algebra	3		MATH 1103 or MATH 1140	Fundamentals of Algebra or College Algebra	3
BIOL 121	Intro to Biology for Non-Majors	4		BIO SCI 1113, 1219	General Biology (3) and Lab (1)	4
GEOS 130 or ASTR 120 or ASTR 122 or CHEM 124, 125	General Geology or Fundamentals of Astronomy (3) or Astronomy (4) or General Chemistry I and Lab	5		GEOLOGY 1110 or PHYSICS 1505 or CHEM 1310, 1319*	Physical and Environmental Geology (3) or Introductory Astronomy (3) or General Chemistry (3) and Lab* (1) Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit. *CHEM 1319 is not a degree requirement, will transfer as general elective credit.	3
CS 235 or CS 250 or CS 200	Object-Oriented Programming Using C++ or Basic Data Structures using C++ or Concepts of Programming Algorithms Using C++	4		CS 1500 or CS 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab* (C++) *Department will substitute for this requirement.	3
MUS 121 or MUS 126 or THEA 120	Intro to Music Listening or Intro to World Music or Intro to Theatre	3		MUSIC 1150 or THEATRE 1190	Music Understanding and Appreciation or Theatre via Video	3
HIST 125 or HIST 151 or HIST 126 or HIST 140 or HIST 141	Western Civ: Ancient World to the Renaissance or World History: Traditional or Western Civ: Scientific Revolution to Modern Age or U.S. History to 1877 or U.S. History since 1877	3		HISTORY 1100 or HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Early Western Civilization or Modern Western Civilization or American History to 1877 or American History since 1877	3
ECON 231 or ECON 230	Principles of Microeconomics or Principles of Macroeconomics	3		ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Literature	Literature Elective	3		Literature	Literature Elective	3
UL Literature	Upper Level Literature Elective	3		UL Literature	Upper Level Literature Elective	3
Humanities	Any philosophy, fine art, literature, foreign language	3		Humanities	Any philosophy, fine art, literature, foreign language	3
	Group 2 Emphasis/Focus Area Requirements	34			Group 2 Emphasis/Focus Area Requirements	31
	Group 1 Core Requirements	24			Group 1 Core Requirements	22
	Total Hours	58			Total Hours*	53

\*S&T advisor permission is required to transfer more than 62 credits toward the S&T degree for Middle School English Emphasis Area.

**Professional Requirements for Teacher Education Program:** Please view all program requirements at <https://teachereducation.mst.edu/middleschool/>.

## Middle School Mathematics Emphasis Area

<u>Johnson County Community College</u>			<u>Semester</u>	<u>Missouri S&amp;T</u>		
BIOL 121	Intro to Biology for Non-Majors	4		BIO SCI 1113, 1219	General Biology (3) and Lab (1)	4
GEOS 130	General Geology	5		GEOLOGY 1110	Physical and Environmental Geology	3
ASTR 120 or ASTR 122 or PHYS 130 or CHEM 124, 125	Fundamentals of Astronomy (3) or Astronomy (4) or College Physics I (5) or General Chemistry I and Lab (5)	3		PHYSICS 1505 or PHYSICS 1145 or CHEM 1310, 1319*	Introductory Astronomy (3) or College Physics I (4) or General Chemistry I (3) and Lab* (1) Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit. *CHEM 1319 is not a degree requirement, will transfer as general elective credit.	3
MATH 116	Intermediate Algebra	3		MATH 1103	Fundamentals of Algebra	3
MATH 171	College Algebra	3		MATH 1140	College Algebra	3
MATH 241 and MATH 242	Calculus I and Calculus II	10		MATH 1214 and MATH 1215	Calculus I and Calculus II The combination of JCCC MATH 241 and 242 is equivalent to the combination of Missouri S&T 1214 and 1215. This requirement may also be satisfied with the equivalents of both Missouri S&T MAT 1214 and 1212.	8
CS 235 or CS 250 or CS 200	Object-Oriented Programming Using C++ or Basic Data Structures using C++ or Concepts of Programming Algorithms Using C++	4		CS 1500 or CS 1971,1981	Computational Problem Solving or Intro to Programming Methodology and Lab (C++)	3
MATH 181	Statistics			STAT 1115	Statistics for the Social Sciences I	3
MUS 121 or MUS 126 or THEA 120	Intro to Music Listening or Intro to World Music or Intro to Theatre	3		MUSIC 1150 or THEATRE 1190	Music Understanding and Appreciation or Theatre via Video	3
HIST 125 or HIST 151 or HIST 126 or HIST 140 or HIST 141	Western Civ: Ancient World to the Renaissance or World History: Traditional or Western Civ: Scientific Revolution to Modern Age or U.S. History to 1877 or U.S. History since 1877	3		HISTORY 1100 or HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Early Western Civilization or Modern Western Civilization or American History to 1877 or American History since 1877	3
ECON 231 or ECON 230	Principles of Microeconomics or Principles of Macroeconomics	3		ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Humanities	Any philosophy, fine art, literature, foreign language	3		Humanities	Any philosophy, fine art, literature, foreign language	3
	Group 2 Emphasis/Focus Area Requirements	44			Group 2 Emphasis/Focus Area Requirements	42
	Group 1 Core Requirements	24			Group 1 Core Requirements	22
	Total Hours	68			Total Hours*	64

\*S&T advisor permission is required to transfer more than 60 credits toward the S&T degree for Middle School Math Emphasis Area.

**Professional Requirements for Teacher Education Program:** Please view all program requirements at <https://teachereducation.mst.edu/middleschool/>.

## Middle School Science Emphasis Area

<u>Johnson County Community College</u>			<u>Semester</u>	<u>Missouri S&amp;T</u>		
BIOL 121	Intro to Biology for Non-Majors	4		BIO SCI 1113, 1219	General Biology (3) and Lab (2)	4
EVNR 130	Environmental Science	3		BIO SCI 1173	Intro to Environmental Sciences	3
BIOL 205	General Genetics	3		BIO SCI 2223	General Genetics	3
GEOS 130	General Geology	5		GEOLOGY 1110	Physical and Environmental Geology	3
ASTR 120 or ASTR 122 or PHYS 130 or	Fundamentals of Astronomy (3) or Astronomy (4) or College Physics I (5) or	3		PHYSICS 1505 or PHYSICS 1145	Introductory Astronomy (3) or College Physics I (4) Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit.	3
CHEM 124, 125	General Chemistry I and Lab	5		CHEM 1310, 1319	General Chemistry I and Lab	5
MATH 116 or MATH 171	Intermediate Algebra or College Algebra	3		MATH 1103 or MATH 1140	Fundamentals of Algebra or College Algebra	3
MATH 181	Statistics			STAT 1115	Statistics for the Social Sciences I	3
MUS 121 or MUS 126 or THEA 120	Intro to Music Listening or Intro to World Music or Intro to Theatre	3		MUSIC 1150 or THEATRE 1190	Music Understanding and Appreciation or Theatre via Video	3
HIST 125 or HIST 151 or HIST 126 or HIST 140 or HIST 141	Western Civ: Ancient World to the Renaissance or World History: Traditional or Western Civ: Scientific Revolution to Modern Age or U.S. History to 1877 or U.S. History since 1877	3		HISTORY 1100 or HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Early Western Civilization or Modern Western Civilization or American History to 1877 or American History since 1877	3
ECON 231 or ECON 230	Principles of Microeconomics or Principles of Macroeconomics	3		ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Humanities	Any philosophy, fine art, literature, foreign language	3		Humanities	Any philosophy, fine art, literature, foreign language	3
	Group 2 Emphasis/Focus Area Requirements	38			Group 2 Emphasis/Focus Area Requirements	39
	Group 1 Core Requirements	24			Group 1 Core Requirements	22
	Total Hours	62			Total Hours*	61

\*S&T advisor permission is required to transfer more than 61 credits toward the S&T degree for Middle School Science Emphasis Area.

**Professional Requirements for Teacher Education Program:** Please view all program requirements at <https://teachereducation.mst.edu/middleschool/>.

## Middle School Social Sciences Emphasis Area

<u>Johnson County Community College</u>			<u>Semester</u>	<u>Missouri S&amp;T</u>		
BIOL 121	Intro to Biology for Non-Majors	4		BIO SCI 1113, 1219	General Biology (3) and Lab (1)	4
GEOS 130 or PHYS 130 or ASTR 120 or ASTR 122 or CHEM 124, 125	General Geology (3) or College Physics I (5) or Fundamentals of Astronomy (3) or Astronomy (4) or General Chemistry I and Lab (5)	3		GEOLOGY 1110 or PHYSICS 1505 or PHYSICS 1145 or CHEM 1310, 1319*	Physical and Environmental Geology (3) or Introductory Astronomy (3) or College Physics I (4) or General Chemistry I (3) and Lab* (1) Satisfies the 3-hour science requirement. Any additional credit hours apply to degree totals as general elective credit. *CHEM 1319 is not a degree requirement, will transfer as general elective credit.	3
MATH 116 or MATH 171	Intermediate Algebra or College Algebra	3		MATH 1103 or MATH 1140	Fundamentals of Algebra or College Algebra	3
CS 235 or CS 250 or CS 200	Object-Oriented Programming Using C++ or Basic Data Structures using C++ or Concepts of Programming Algorithms Using C++	4		CS 1500 or CS 1971,1981*	Computational Problem Solving or Intro to Programming Methodology and Lab (C++)*	3
GEOS 145	World Regional Geography	3		HISTORY 2110	World Regional Geography	3
HIST 125 or HIST 151 or HIST 126	Western Civ: Ancient World to the Renaissance or World History: Traditional or Western Civ: Scientific Revolution to Modern Age	3		HISTORY 1100 or HISTORY 1200	Early Western Civilization or Modern Western Civilization	3
HIST 140 or HIST 141	U.S. History to 1877 or U.S. History since 1877	3		HISTORY 1300 or HISTORY 1310	American History to 1877 or American History since 1877	3
MUS 121 or MUS 126 or THEA 120	Intro to Music Listening or Intro to World Music or Intro to Theatre	3		MUSIC 1150 or THEATRE 1190	Music Understanding and Appreciation or Theatre via Video	3
ECON 231 or ECON 230	Principles of Microeconomics or Principles of Macroeconomics	3		ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Humanities	Any philosophy, fine art, literature, foreign language	3		Humanities	Any philosophy, fine art, literature, foreign language	3
	Group 2 Emphasis/Focus Area Requirements	32			Group 2 Emphasis/Focus Area Requirements	31
	Group 1 Core Requirements	24			Group 1 Core Requirements	22
	Total Hours	56			Total Hours*	53

\*S&T advisor permission is required to transfer more than 62 credits toward the S&T degree for Middle School Social Sciences Emphasis Area.