

# Three Rivers College — Missouri S&T

## Applied Math BS with Secondary Education Teacher Certification Transfer Guide

Effective as of Fall 2023

### Three Rivers College

### Missouri S&T

#### Communication Skills (Take all courses)

ENGL 111	College Writing	3	ENGLISH 1120	Exposition and Argumentation	3
ENGL 112	Advanced College Writing	3	ENGLISH 1160	Writing and Research	3
SCOM 110	Public Speaking	3	SPMS 1185	Principles of Speech	3
Total Hours					9

#### Mathematics and Science (Take all courses)

MATH 163	College Algebra for Calculus	3	MATH 1140*	College Algebra* <small>*Required for teacher certification; not a Mathematics BS requirement.</small>	3
MATH 164	Trigonometry	3	MATH 1160*	Trigonometry* <small>*Required for teacher certification; not a Mathematics BS requirement.</small>	2
MATH 171	Analytical Geometry and Calculus I	5	MATH 1214	Calculus I	4
MATH 271	Analytical Geometry and Calculus II	5	MATH 1215	Calculus II	4
MATH 272	Analytical Geometry and Calculus III	5	MATH 2222	Calculus III	4
PHYS 211	General Physics I	5	PHYSICS 1135	Engineering Physics I	4
PHYS 212	General Physics II	5	PHYSICS 2135	Engineering Physics II	4
Total Hours					31
Total Hours					25

#### Social Sciences (Take all courses)

HIST 122 or HIST 111 or HIST 112	World Civilization since the Renaissance or American History to 1877 or American History Since 1877 or	3	HISTORY 1200 or HISTORY 1300 or HISTORY 1310	Modern Western Civilization or American History to 1877 or American History Since 1877	3
GOVT 121	National and State Government	3	POL SCI 1200	American Government	3
PSYC 111	General Psychology	3	PSYCH 1101	General Psychology	3
ECON 212 or ECON 211	Principles of Microeconomics or Principles of Macroeconomics	3	ECON 1100 or ECON 1200	Principles of Microeconomics or Principles of Macroeconomics	3
Total Hours					12
Total Hours					12

#### Humanities (Take all courses)

ARTS 123 or ARTS 110 or MUSC 123 or THEA 120 or PHIL 200	History and Appreciation of Art or Intro to Art or History and Appreciation of Music or History and Appreciation of Theatre or Intro to Philosophy	3	ART 1180 or MUSIC 1150 or THEATRE 1190 or PHILOS 1105	Art Appreciation or Music Appreciation or Theatre via Video or Intro to Philosophy	3
ENGL 231 or ENGL 241 or ENGL 221	English Literature to 1798 or American Literature to 1870 or World Literature to 1600 <small>(or other literature elective)</small>	3	ENGLISH 1211 or ENGLISH 1221 or ENGLISH 1231	British Literature I: The Beginnings to 1800 or American Literature: 1600 to 1865 or World Literature I <small>(or other literature elective)</small>	3
Total Hours					6
Total Hours					6

#### Additional Degree Requirements

**Select additional courses to total up to the maximum transfer credit hours shown below.**

MATH 280	Differential Equations	3	MATH 3304	Elementary Differential Equations	3
CHEM 121 or BIOL 101	General Chemistry I or General Biology	5	CHEM 1310, 1319 or BIO SCI 1113, 1219	General Chemistry I and Lab or General Biology and Lab	5

#### Additional Courses for Teacher Certification Option (Take all courses)

EDUC 230	Foundations of Education	3	EDUC 1040	Perspectives in Education	2
EDUC 210	Educational Psychology	3	PSYCH 2300 (EDUC 2102)	Educational Psychology	3
PSYC 243	Human Development Across the Life Span	3	PSYCH 3310	Developmental Psychology	3
EDUC 260	Education of the Exceptional Learner	3	PSYCH 4310	Psychology of the Exceptional Child	3
Total Hours					12
Total Hours					11

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

#### Maximum credit hours to be transferred to Missouri S&T degree requirements.

**60**

Missouri S&T residency requirements: The last 60 hours of any Missouri S&T degree must be completed at Missouri S&T.  
Students must receive special permission from Missouri S&T to apply more than the maximum credit hours listed above toward the Missouri S&T degree.  
Students are not required to complete all courses on this guide before transferring to Missouri S&T.