

# MIDDLE-LEVEL MATH (4-8), BACHELOR OF SCIENCE IN EDUCATION (BSED)

## Curriculum Guide

### GPA Requirement

GPA must be 3.0 or higher for Teacher Candidacy.

A 3.0 GPA and passing subject area assessment (PECT) or a 2.8 GPA and a *qualifying* passing subject area assessment (PECT) score (as determined by PDE) is required for certification.

### Summary\*

Code	Title	Hours
Rock Studies 2 Requirements		42
Other Basic Requirements		0-3
Major Requirements		73
Electives		5

\* All undergraduate degree programs require a minimum of 120 credits. Some courses meet multiple requirements, but are only counted once toward the 120 credit total required to graduate.

### Rock Studies 2 Requirements

Code	Title	Hours
<b>The Rock</b>		
SUBJ 139	Foundations of Academic Discovery <sup>1</sup>	3
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
STAT 152	Elementary Statistics I	3

Select one of the following: 3

COMM 200	Civil Discourse: Theory & Practice	
PHIL 110	Ethics and Civil Discourse	
POLS 235	Civil Discourse and Democracy	

Subtotal 15

#### Integrated Inquiry

##### *Creative and Aesthetic Inquiry*

Select 3 Credits (<https://catalog.sru.edu/undergraduate/rock-studies/rock-studies-program/>) 3

##### *Humanities Inquiry*

HIST 180 Spotlight on the Past 3

##### *Social Science Inquiry*

POLS 101 American National Government 3

##### *Natural Sciences Inquiry*

SCI 101 Science of Life 3

##### *Physical Sciences Inquiry*

SCI 102 Understanding the Physical World 3

Subtotal 15

#### Additional Rock Studies 2 Requirements (12 credits)

MATH 210	Mathematics for Elementary Teachers I	3
MATH 310	Mathematics for Elementary Teachers II	3
SPED 121	Overview of Special Education	3

Select one of the following: 3

HIST 151	Ancient World to the Age of Global Encounters	
HIST 152	Early Modern to Contemporary World	
HIST 201	Colonial US to the Civil War Era	
HIST 202	US Civil War Era to Present	

Total Hours 42

<sup>1</sup> Course offered in multiple subjects; cannot take course in first major subject.

### Basic Math Requirement

Check with your adviser or a current degree audit report to see if you have been exempted from this course. The credit earned in this course will not be counted toward the 120 credit hour minimum needed to earn a degree.

Complete one of the following: 0-3

Meet required minimum SAT or ACT math score OR	
ESAP 110	Beginning Algebra

Total Hours 0-3

### DIVERSITY, EQUITY, AND INCLUSION REQUIREMENT

Students must take and pass a course with the Diversity, Equity, and Inclusion (DEI) designation prior to graduation. Students can meet this requirement by taking any DEI - designated course in any program at any time during their undergraduate career.

### Major Requirements

- 40 major credits must be taken at SRU or PASSHE
- 40 major credits must be taken at the 300 level or above
- All grades in Professional Education & Specialization must be grades of "C" or above.

Code Title Hours

#### Middle Level Education

SEFE 200 Introduction to Education, Teaching Methods and Field <sup>1</sup> 3

SEFE 230 Production and Utilization of Instructional Technology <sup>1</sup> 3

SEFE 251 Teaching Reading in the Content Areas Grades 4-8 <sup>1</sup> 3

SEFE 300 Middle Level Cognitive Development <sup>1</sup> 3

Select one of the following: 3

SEFE 311 Teaching of Mathematics in the Middle School <sup>1</sup>

SEFE 576 Teaching Integrated Science and Mathematics for Middle and Secondary Education

SEFE 326 ELL Strategies and Practice <sup>1</sup> 3

SEFE 338 Standards-Based Instruction & Assessment in the Inclusionary Classroom <sup>1</sup> 3

SEFE 342 Educational Psychology for Diverse Learners <sup>1</sup> 3

SEFE 370 Educational Measurements, Assessment and Evaluation <sup>1</sup> 3

SEFE 380	History and Philosophy of Education <sup>1</sup>	3
SEFE 426	Practicum in Middle-Level & Secondary Education <sup>1</sup>	1
SEFE 456	Student Teaching - Middle Level Grades <sup>1,2</sup>	12
SPED 121	Overview of Special Education <sup>1,3</sup>	3
SPED 315	Special Education Issues in Diverse Secondary Classrooms <sup>1,2</sup>	3
<b>Subtotal</b>		<b>49</b>
<b>Math Certification Specialization</b>		
Select 13 Credits from the courses listed below:		13
MATH 118	Elementary Geometry	
MATH 131	Discrete Mathematics	
MATH 225	Calculus I	
STAT 152	Elementary Statistics I <sup>3</sup>	
Select 11 credits from the courses listed below:		11
MATH 122	Finite Mathematics with Matrices	
MATH 125	Precalculus	
MATH 230	Calculus II	
MATH 231	Calculus III	
MATH 235	Foundations of Mathematical Proof	
MATH 240	Linear Algebra and Differential Equations	
STAT 252	Introduction to Statistical Modeling	
<b>Subtotal</b>		<b>24</b>
<b>Total Hours</b>		<b>73</b>

<sup>1</sup> Course counts for 50% of Major requirements but not for Major GPA  
<sup>2</sup> SPED 315 & SEFE 456 must be taken in the same semester.  
<sup>3</sup> Credits earned in these courses will be applied to Rock Studies 2.  
 \* Some courses may require pre-requisites. Please see course descriptions to determine if there are any pre-requisites for that specific course.

**Grades 4-6 Core Content Areas**

- To meet the English Language Arts 12 credit Pennsylvania Department of Education requirements, students must complete SEFE 251 – Teaching Reading in the Content Areas Grades 4-8 if they have not completed ENGL 102.

Code	Title	Hours
<b>Social Studies</b>		
HIST 180	Spotlight on the Past <sup>1</sup>	3
POLS 101	American National Government <sup>1</sup>	3
SEFE 380	History and Philosophy of Education <sup>2</sup>	3
Select one of the following:		3
HIST 151	Ancient World to the Age of Global Encounters <sup>1</sup>	
HIST 152	Early Modern to Contemporary World <sup>1</sup>	
HIST 201	Colonial US to the Civil War Era <sup>1</sup>	
HIST 202	US Civil War Era to Present <sup>1</sup>	
<b>English/Language Arts</b>		
ENGL 102	Critical Writing <sup>1</sup>	3
ENGL 104	Critical Reading <sup>1</sup>	3
ENGL 328	Young Adult Literature	3
ENGL 305	Practicum: Teaching Writing	3
<b>Science</b>		

SCI 101	Science of Life <sup>1</sup>	3
SCI 102	Understanding the Physical World <sup>1</sup>	3
Select two of the following classes from two different departments:		6
BIOL 101	General Biology	
BIOL 105	Environmental Biology	
BIOL 110	The Human Body: Fundamentals of Structure and Physiology	
BIOL 209	Human Anatomy and Physiology I	
BIOL 216	Anatomy and Physiology I with Lab	
CHEM 104	Introduction Chemistry I	
CHEM 107	General Chemistry I	
EGEO 100	Environmental Geology	
EGEO 101	Physical Geology	
EGEO 121	Meteorology/Lab	
PHYS 101	Concepts of Science I with Lab	
PHYS 201	Elements of Physics I with Lab	
PHYS 211	General Physics I with Lab	
<b>Subtotal</b>		<b>36</b>
<b>Total Hours</b>		<b>36</b>

<sup>1</sup> Credits earned in these courses will be applied to Rock Studies 2.  
<sup>2</sup> SEFE 380 credit earned will be applied to Professional Core.

**Prerequisites for Admission to Teacher Candidacy**

- Teacher candidacy requires a minimum of 3.0 GPA with no basic skills or a 2.8 GPA with demonstration that basic skills have been met.

Code	Title	Hours
<b>Basic Courses</b>		
ENGL 102	Critical Writing	3
ENGL 104	Critical Reading	3
SEFE 200	Introduction to Education, Teaching Methods and Field	3
SEFE 230	Production and Utilization of Instructional Technology	3
SPED 121	Overview of Special Education	3
<b>Math Requirement</b>		
Select 6 credits from the following:		6
MATH 113	Mathematics as a Liberal Art	
MATH 115	Financial Mathematics	
MATH 117	Quantitative Reasoning	
MATH 118	Elementary Geometry	
MATH 120	Intermediate Algebra	
MATH 122	Finite Mathematics with Matrices	
MATH 123	Introduction to Applied Calculus	
MATH 125	Precalculus	
MATH 131	Discrete Mathematics	
MATH 225	Calculus I	
STAT 152	Elementary Statistics I	
<b>Total Hours</b>		<b>21</b>

## Important Curriculum Guide Notes

This Curriculum Guide is provided to help SRU students and prospective students better understand their intended major curriculum. Enrolled SRU students should note that the My Rock Audit may place already-earned and/or in progress courses in different, yet valid, curriculum categories. Enrolled SRU students should use the My Rock Audit Report and materials and information provided by their faculty advisers to ensure accurate progress towards degree completion. *The information on this guide is current as of the date listed. Students are responsible for curriculum requirements at the time of enrollment at the University.*

PASSHE - Pennsylvania State System of Higher Education Institutions

MIDDLE-LEVEL MATHEMATICS (4-8) - BSED (1233)

This program is effective as of Summer 2023

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