

## MATHEMATICS FOR SECONDARY EDUCATION

<b>Courses required for the first year:</b> MATH 160, MATH 250; second language requirement
<b>Courses recommended for the first year:</b> PSYC 100, MATH 220, MATH 230, POLS 101, Courses Designated with a PA, PP, PN, PL, or G.
<b>Contact:</b> Dr. Stacey Rodman, Mathematics Department Chair (staceyrodman@augustana.edu) or Mike Egan, Mathematics Education Advisor (mikeegan@augustana.edu)

\*Students interested in this major are strongly encouraged to contact one of these advisors prior to registration for Spring Semester.

### The Major in MATHEMATICS FOR SECONDARY EDUCATION

[Mathematics placement](#) is determined by the student's Math Index Score (MIS) and the math courses taken in high school and grades earned.

Mathematics placement can be improved using [ALEKS](#). ALEKS improvement must be **completed** before a student registers for a course.

It is recommended that the student complete MATH 160 Calculus in the fall semester of the 1st year and MATH 250 Discrete Mathematics in the spring semester of the 1st year to allow for flexibility in scheduling. MATH 160 is a prerequisite for MATH 250, so it is not possible to take both classes in the spring. At minimum, students must complete MATH 160 Calculus no later than the spring semester of the first year.

If a student has credit for MATH 160, then MATH 220 Integration: Techniques and Applications (2 cr) and MATH 230 Series: Techniques and Applications (2 cr) is recommended for Fall term first year.

32 credits including 160, 220, 230, 250, 330, 350, 410, 450, 470. Student teaching is the senior inquiry experience.

Candidates can also earn licensure to teach Math in grades 5-8 by completing the major in Mathematics for Secondary Education.

### Required Courses

Course Number	Course Name	Learning Perspective	Prerequisites	Usually offered: F, J, SP, SU*	Credits
MATH 160	Calculus	Q	MIS placement or MATH 140	F,SP	4
MATH 220	Integration: Techniques and Applications		MATH 160	F,SP	2

MATH 230	Infinite Series: Techniques and Applications		MATH 160	F,SP	2
MATH 250	Discrete Mathematics	Q	MATH 160	SP	4
MATH 330	Probability and Statistics		MATH 250	F	4
MATH 350	Linear Algebra		MATH 250	F	4
MATH 410	Real Analysis		MATH 350	SP	4
MATH 450	Algebraic Structures		MATH 350	SP	4
MATH 470	Foundations of Geometry	PH	MATH 350	F	4

### EDUCATION PROFESSIONAL SEQUENCE (Required)

Course Number	Course Name	Learning Perspective	Prerequisites	Usually offered: F, J, SP, SU*	Credits
EDUC 301	Educational Psychology and Assessment		Sophomore standing	F, SP	4
EDUC 310	Computers in Education		EDUC 301; Retention in Teacher Education	SP	1
EDUC 340	Methods of Inclusion	D	EDUC 301; Retention in Teacher Education	F, SP	4
EDUC 370	General Methods		EDUC 301; Retention in Teacher Education	F	4
EDUC 384	Methods 5-12 Math		EDUC 370 or 412; Retention in Teacher Education	SP	4
EDUC 396	Clinical Experience 5-8		EDUC 301 and EDUC 340; Retention in Teacher Education	F, SP	1
EDUC 397	Clinical Experience 9-12		EDUC 301 and EDUC 340; Retention in Teacher Education	F, SP	1
EDUC 412	Methods of Literacy: 5-12		EDUC 301; Retention in Teacher Education	F	4
INTR-EDA9 3	Student Teaching	PH	EDUC 396 and EDUC 397; Retention in Teacher Education	F, SP	10

EDUC 422	Clinical Seminar	PH	Co-requisite: Student Teaching and EDUC 450	F, SP	1
EDUC 450	School and Society	PH	Co-requisite: Student Teaching and EDUC 422	F, SP	2

### **Major Overview**

This major is required for teaching licensure in Illinois in grades 9-12. Students completing this major along with all other licensure requirements are eligible for high school teaching positions in mathematics in Illinois. Students who complete this major will have met most requirements for licensure to teach math in grades 5-8.

\*Fall, J term, Spring, Summer; see [Academic Calendar](#) for specific dates

Updated November 2023