## MATHEMATICS AND SECONDARY EDUCATION (B.A.S.)

To earn a B.A.S. in Mathematics in preparation for teaching at the secondary level, students are required to complete all the courses required for a B.A. in Mathematics, and must also complete the requirements for the Secondary Education major. Students complete a minimum of 120 credits to earn a bachelor's degree, including 41 – 44 credits of core courses (https://catalog.salve.edu/undergraduate/curriculum-degree-programs/), 53 credits of Mathematical Sciences courses, and 43 credits of Secondary Education courses. See Education Department (https://catalog.salve.edu/undergraduate/academic-programs/education/) for requirements of the Secondary Education (B.A.S.) major.

Students seeking the degree of Bachelor of Arts in Mathematics are required to take the following courses:

Code	Title	Credits
MTH-173	Discrete Mathematics	3
MTH-195	Calculus I	4
MTH-196	Calculus II	4
MTH-203	Calculus III	4
MTH-211	Linear Algebra	3
MTH-213	Differential Equations	3
MTH-315	Geometry	3
MTH-411	Analysis I	3
MTH-412	Analysis II	3
MTH-421	Abstract Algebra	3
MTH-490	Senior Seminar Capstone	3
STA-341	Statistical Theory I	3
STA-342	Statistical Theory II	3
CSC-103	Computer Programming I	3
Science core requirement		
PHY-205	Principles of Physics I	4
PHY-206	Principles of Physics II	4
Total Credits		53

## **GPA requirement**

To remain in the Mathematics major program, a student must maintain an average of C in all required courses for the Mathematics major, with no grade less than C- in any of the Mathematics major foundational courses, which consist of:

Code	Title	Credits
MTH-173	Discrete Mathematics	3
MTH-195	Calculus I	4
MTH-196	Calculus II	4
MTH-203	Calculus III	4
MTH-211	Linear Algebra	3

## Degree Plan for Mathematics & Secondary Education (B.A.S.) (Starting in an odd year)

Course	Title	Credits
First Year		
Fall		
FYT-101	First Year Studio	1
UNV-101	University Seminar	3
MTH-195	Calculus I	4
EDC-120	Introduction to Race and Inequity in American Education	3
CSC-103	Computer Programming I	3
Core Course		3
	Credits	17
Spring		
UNV-102	University Seminar II	3
MTH-196	Calculus II	4
MTH-173	Discrete Mathematics	3
Core Course		3
Core Course		3
	Credits	16
Second Year		
Fall		
PHL-225	Quest for the Good Life	3
SCD-212	Teaching Literacy in the Content Area	3
SCD-220	Child and Adolescent Development and the Theories of Learning	3
SCD-298	Secondary Field Experience in a Multicultural Society I	1
MTH-211	Linear Algebra	3
MTH-203	Calculus III	4
	Credits	17
Spring		
GST-098	Sophomore Studio <sup>1</sup>	1
RTS-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions	3
MTH-213	Differential Equations	3
SCD-299	Secondary Field Experience in a Multicultural Society II	1
SED-211	Introduction to the Characteristics of Students with Exceptionalities	3
Core Course		3
Core Course		3
Third Year	Credits	17
Fall		
STA-341	Statistical Theory I	3
MTH-421	Abstract Algebra	3
SCD-320	Curriculum, Instruction and Assessment in the Secondary School I	3
SCD-321	Practicum I for Curriculum, Instruction and Assessment in the Secondary School I	1
PHY-205	Principles of Physics I	4
Core Course		3
Spring	Credits	17
SCD-310	Strategies for Teaching Secondary English Learners	2
STA-342	Statistical Theory II	3
SCD-322	Practicum II for Curriculum, Instruction and	1
	Assessment in Secondary School II	
SCD-323	Curriculum Instruction and Assessment In the Secondary School II	3
PHY-205	Principles of Physics I	4
Core Course		3
	Credits	16

Course

Fourth Year		
Fall		
MTH-411	Analysis I	3
MTH-315	Geometry	3
MTH-490	Senior Seminar Capstone	3
SCD-440	Practicum in Secondary Education	3
SCD-410	Classroom Management	3
Core Course		3
	Credits	18
Spring		
SCD-441	Secondary Student Teaching	12
SCD-432	Student Teaching Seminar Capstone	1
MTH-412	Analysis II	3
	Credits	16
	Total Credits	134

<sup>&</sup>lt;sup>1</sup> This weekend workshop may be taken in either the fall or spring semester of sophomore year.

## Degree Plan for Mathematics & Secondary Education (B.A.S.) (Starting in an even year)

Credits

Title

Course	Title	Credits
First Year Fall		
	F W O F	
FYT-101	First Year Studio	1
UNV-101	University Seminar	3
MTH-195	Calculus I	4
EDC-120	Introduction to Race and Inequity in American Education	3
CSC-103	Computer Programming I	3
Core Course		3
	Credits	17
Spring		
UNV-102	University Seminar II	3
MTH-196	Calculus II	4
MTH-173	Discrete Mathematics	3
Core Course		3
Core Course		3
	Credits	16
Second Year		
Fall		
PHL-225	Quest for the Good Life	3
SCD-212	Teaching Literacy in the Content Area	3
SCD-220	Child and Adolescent Development and the Theories of Learning	3
SCD-298	Secondary Field Experience in a Multicultural Society I	1
MTH-211	Linear Algebra	3
MTH-203	Calculus III	4
	Credits	17
Spring		
GST-098	Sophomore Studio <sup>1</sup>	1
RTS-225	The Quest for the Ultimate: Dialogue with Global Religious Traditions	3
MTH-213	Differential Equations	3
SCD-299	Secondary Field Experience in a Multicultural Society II	1
SED-211	Introduction to the Characteristics of Students with Exceptionalities	3
Core Course		3
Core Course		3
	Credits	17

Third Year		
Fall		
MTH-411	Analysis I	3
MTH-315	Geometry	3
SCD-320	Curriculum, Instruction and Assessment in the Secondary School I	3
SCD-321	Practicum I for Curriculum, Instruction and Assessment in the Secondary School I	1
PHY-205	Principles of Physics I	4
Core Course		3
	Credits	17
Spring		
MTH-412	Analysis II	3
SCD-310	Strategies for Teaching Secondary English Learners	2
SCD-322	Practicum II for Curriculum, Instruction and Assessment in Secondary School II	1
SCD-323	Curriculum Instruction and Assessment In the Secondary School II	3
PHY-205	Principles of Physics I	4
Core Course		3
	Credits	16
Fourth Year		
Fall		
STA-341	Statistical Theory I	3
MTH-421	Abstract Algebra	3
MTH-490	Senior Seminar Capstone	3
SCD-440	Practicum in Secondary Education	3
SCD-410	Classroom Management	3
Core Course		3
	Credits	18
Spring		
SCD-441	Secondary Student Teaching	12
SCD-432	Student Teaching Seminar Capstone	1
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This weekend workshop may be taken in either the fall or spring semester of sophomore year.