

Bachelor of Science (B.S.) in Mathematics – Academic Option

Curriculum Map

Required Coursework – 120 hrs.

General Education Requirements (40 hours)

English Composition – 9 hours

	Sem	Grade
___ ENGL 1113 Freshman English I		
___ ENGL 1213 Freshman English II		
___ Communications Elective _____		

Mathematics – 3 hours

___ MATH 1513 College Algebra		
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Natural Science – 8 hours

___ BIOL 1304 Principles of Biology I		
___ PHYS 2014 General Physics I		

U.S. History and Government – 6 hours

___ HIST 1313 or HIST 1323 US History		
___ POLS 1013 American Government		

Social Science – 6 hours

___ ECON 2013 Elements of Economics		
___ Soc. Science e.g., PSYC 1113, SOC 1113, CJ 1013		

Humanities – 6 hours

___ HUM		
___ HUM		

Student Success – 1 hour

___ UCSS 1111 Student Success Seminar		
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Liberal Arts and Science Electives – 1 hour

___ Math Major Requirements courses will count		
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Major Requirements (49 hours)

Mathematics Core – 33 hours

___ MATH 1513 College Algebra		
___ MATH 1613 Plane Trigonometry		
___ MATH 1824 Calculus I		
___ MATH 2424 Calculus II		
___ MATH 2434 Calculus III		
___ MATH 3333 Linear Algebra		
___ MATH 3513 Foundations of Mathematics		
___ MATH 4323 Modern Algebra		
___ MATH 4453 Introduction to Real Analysis		
___ MATH 4763 Probability and Statistics		

Upper Level Mathematics Electives – 12 hours

	Sem	Grade
___ MATH _____		
___ MATH _____		
___ MATH _____		
___ MATH _____		

Choose from:

Math 3443 Discrete Math
 Math 3663 Topology
 Math 3713 College Geom.
 Math 4000 Probs. in Math
 Math 4073 Num. Analysis
 Math 4123 Complex Variables
 Math 4413 Ordinary Diff. Eqs.
 Math 4423 Partial Diff. Eqs.

Co-Requisite Requirement – 4 hours

___ PHYS 2114 General Physics II		
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Electives – Sufficient to bring upper level hours to 40 and total credit hours to 120

Minor Requirements (~20 hours)

Math majors in the academic option are required to have a minor in some other academic field. Hours designated toward the minor are included in the 120 hours required for the major.

Minor: _____

Recommended Plan of Study

First Semester – 16 hours

MATH 1513 College Algebra
MATH 1613 Plane Trigonometry
ENGL 1113 Freshman English I
HIST 1313 or HIST 1323 US History
Social Science e.g., PSYC 1113, SOC 1113, CJ 1013
UCSS 1111 Student Success Seminar

Second Semester – 14 hours

MATH 1824 Calculus I
ENGL 1213 Freshman English II
BIOL 1304 Principles of Biology I
Humanities – 3 hours

Third Semester – 14 hours

MATH 2424 Calculus II
PHYS 2014 General Physics I
POLS 1013 American Government
Humanities – 3 hours

Fourth Semester – 17 hours

MATH 2434 Calculus III
PHYS 2114 General Physics II
ECON 2013 Elements of Economics
Minor Area Courses – 6 hours

Fifth Semester – 15 hours

MATH 3513 Foundations of Mathematics
MATH 3333 Linear Algebra
3000/4000 MATH Elective – 3 hours
Minor Area Courses – 6 hours

Sixth Semester – 15 hours

3000/4000 MATH Elective – 6 hours
Minor Area Course – 3 hours
Additional Electives – 6 hours

Seventh Semester – 12 hours

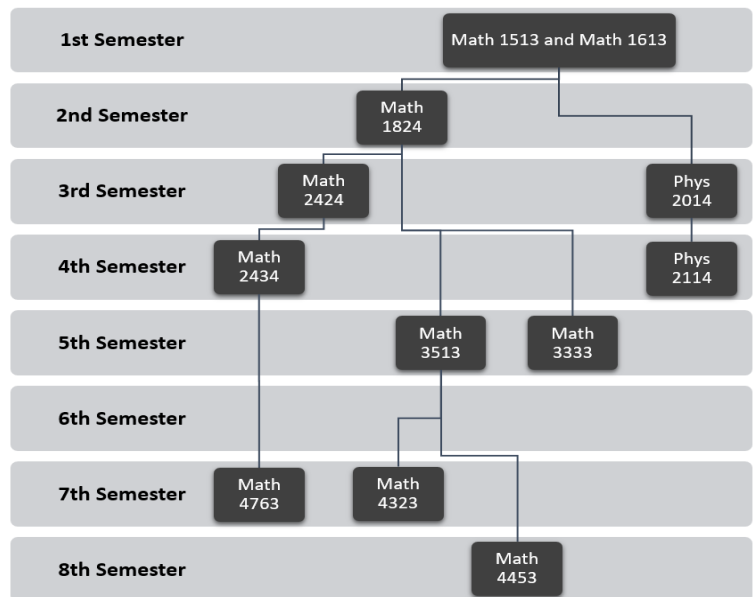
MATH 4323 Modern Algebra
MATH 4763 Probability and Statistics
3000/4000 MATH Elective – 3 hours
Minor Area Course – 3 hours

Eighth Semester – 17 hours

MATH 4453 Introduction to Real Analysis
3000/4000 MATH Elective – 3 hours
Minor Area Course – 3 hours
Additional Electives – 8 hours

This is a sample course sequence timeline only. This does not represent a contract, nor does it guarantee course availability. A student may require more than eight semesters to complete the degree.

Math and Physics sequence to be followed:



Notes to Advisees:

- Math 1715 College Alg. and Trigonometry may be substituted for Math 1513 and Math 1613.
- No more than 12 semester hrs may be used for both general educ. and major requirements.
- All mathematics courses toward the math major must have a grade of C or better.

Course Rotation:

Fall only courses:

- MATH 2424 Calculus II
- PHYS 2014 Physics I
- MATH 3513 Found. Of Mathematics
- MATH 4763 Probability and Statistics

Spring only courses:

- MATH 1824 Calculus I
- MATH 2434 Calculus III
- PHYS 2114 Physics II
- MATH 4323 Modern Algebra

