

School of Natural and Social Sciences

School of Natural and Social Sciences

Dean, Richard L. Sutherland

Mathematics Department

Department Chair, John Noonan

Faculty

John Noonan, PhD

Denise S. Parks, BA

Bradley S. Whitaker, EdD

Program Objectives

The courses and curriculum of the mathematics program are designed to achieve the following student outcomes:

- demonstrate a problem-solving approach to investigate and understand mathematical content;
- use mathematics to describe patterns, relations and functions, and to model and solve problems;
- formulate and solve problems from mathematical and everyday situations, thus connecting mathematics to other disciplines and real-world problems;
- demonstrate a mastery of fundamental mathematical and quantitative skills;
- make and evaluate mathematical conjectures and arguments, and validate mathematical thinking;
- communicate mathematical ideas in oral and written form using everyday language, mathematical language, and mathematical symbols;
- demonstrate an understanding of axiomatic systems in the branches of mathematics and the inter-relationships within mathematics;
- evidence an appreciation of the historical development in mathematics that includes the contributions of groups and cultures; and
- evidence the knowledge and skills necessary for entry level positions in mathematical professions, for teaching mathematics, and for graduate study in mathematics.

Mathematics (MAT)

Note: Students are required to take MAT0080 Basic Algebra Tutorial and MAT0083 Basic Algebra if their ACT mathematics subscore is below 17, or if the SAT mathematics subscore is below 460. Also, students are required to take MAT0093 Algebra if the ACT mathematics subscore is 17 or 18, or if the SAT mathematics subscore is 460-490. Credit hours for these courses do not count toward graduation.

Departmental Programs

Bachelor of Science in Mathematics

Required Courses

MAT1034G Calculus I	4
MAT2034 Calculus II	4
MAT3034 Calculus III	4
CSC/MAT1053 Elementary Discrete Mathematics	3
CSC1024G Computer Science I	4
MAT2063G Introduction to Statistics	3
MAT3013 Linear Algebra	3
MAT3053 Modern Algebra	3
MAT4001 Technical Writing in Mathematics	1

Elective Courses

Select 12 credit hours from the following:	12
MAT3043 Differential Equations	
MAT3063 Probability and Statistics	
MAT3083 Number Theory	
MAT3023 Advanced Discrete Mathematics	
MAT4073 Numerical Methods	
aMAT4089 Special Topics in Mathematics	
aMAT5019 Independent Study	
aMAT5029 Mathematics Internship	

Total 41 Hours

Mathematics

The student with a major in mathematics must complete a minor in another discipline.

Note: Students who wish to teach in senior high school, in multi-age education, or in vocational settings must complete general education and professional education courses which are listed in the School of Education and Professional Studies section of this catalog.

Bachelor of Science in Integrated Mathematics Education

Required Courses

MAT1034G Calculus I	4
MAT2034 Calculus II	4
MAT3034 Calculus III	4
MAT/CSC1053 Elementary Discrete Mathematics	3
MAT3013 Linear Algebra	3
MAT3053 Modern Algebra	3
MAT3083 Number Theory	3
MAT3073 Geometry for Educators	3

CSC1013G Introduction to Computing	3
MAT2063G Introduction to Statistics	3
MAT3063 Probability and Statistics	3
MAT3002 History of Mathematics	2
MAT4002 Content Area Teaching Methods in Mathematics	2
Required Education Courses	49

Total 89 Hours

Mathematics Minor

MAT1034G Calculus I	4
MAT2034 Calculus II	4
MAT2063G Introduction to Statistics	3
MAT3013 Linear Algebra	3
Mathematics electives (Select from courses numbered 3000 or above.)	3-4

Total 17-18 Hours