

Place required courses here

# CURRICULUM MAP MATH AND STATISTICS BS in Ed.

- MATH 1571 Calculus 1
- MATH 1572 Calculus 2
- CSIS 1590- Survey of Computer Science and Information Systems
- FNLC 1550 Elementary Foreign Language
- MATH 2673 Calculus 3
- CSIS 2610 Programming and Problem-Solving
- FNLC 2600 Intermediate
- MATH 3720 Linear Algebra and Matrix Theory
- STAT 3743 Probability and Statistics
- MATH 3750 History of Mathematics
- MATH 3721 Abstract Algebra
- MATH 3751 Real Analysis I
- MATH 4830 Foundations of Geometry
- MATH 4896 Senior Undergraduate Research Project OR
- MATH 4697H Thesis
- MATH 3832 Euclidean Transformations
- MATH 3922 Abstract Algebra 2 OR
- MATH 3828 Number Theory OR
- MATH 3835 Introduction to Combinatorics and Graph Theory OR
- MATH 3845 Operations Research OR
- MATH 3705 Differential Equations OR some other approved course

Course Cluster (Y)

Learning Outcome

Learning Outcomes/Goals stated here.	Course Cluster (Y)																		K = Knowledge / Comprehension A = Application / Analysis S = Synthesis / Evaluation		
	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y			
Students will develop and demonstrate the ability to reason mathematically by constructing mathematical proofs and recognizing and analyzing accurate numerical data in appropriate core courses. Students will learn that truth in mathematics is verified by careful argument, and will demonstrate the ability to make conjectures and form hypotheses, test the accuracy of their work, and effectively solve problems.	A	A	K	K	A	A	K	A	A	S	S	S	S	S	S	S	S	S	S	S	A
Students will learn to identify fundamental concepts of mathematics as applied to science and other areas of mathematics, and to interconnect the roles of pure and applied mathematics.	A	A	K	K	A	S	K	S	A	S	S	S	S	S	S	S	S	S	S	S	S
Students will demonstrate that they can communicate mathematical ideas effectively by completing a senior capstone project involving an investigative or pedagogically based mathematical project and presenting their findings and results in both a written format and as an oral presentation to faculty and other students.	K	K			K			K	K	K	K	K	K	S	S	K	A	A	A	A	K