

CONTENT KNOWLEDGE (Declarative Knowledge, Technical Skills): Graduates in mathematics will understand basic concepts in three core areas of mathematics: algebra, analysis, and probability and statistics. Graduates in mathematics will apply these concepts to concrete examples arising in each of these areas.

Both B. A. mathematics majors and B. S. mathematics majors are required to complete the following capstone courses: MAS 4301 (Modern Algebra), MAA 4200 (Modern Analysis), and STA 4442 (Probability and Statistics I). In addition, B. S. mathematics majors complete MAS 4107 (Linear Algebra). In each of these courses, students submit homework problems and take examinations designed to assess each student's knowledge of basic concepts and ability to use these concepts in particular applications.

COMMUNICATION (Written Communication, Oral Communication): Graduates in mathematics will produce writing that is well-organized and grammatically correct, and they will express mathematical ideas clearly and concisely.

CRITICAL THINKING (Analytical skills): Graduates in mathematics will analyze and solve a variety of mathematical problems.

Both B. A. mathematics majors and B. S. mathematics majors complete MAT 4937 (Mathematical Problem Solving). In this course, students solve a wide variety of mathematical problems, write up and submit detailed solutions to these problems, and present solutions orally in class.

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