

MAT: Mathematics Courses

Courses

MAT 1033 Intermediate Algebra

College of Sci and Engineering, Department of Mathematics & Statistics

4 sh (may not be repeated for credit)

Provides preparation in the elements of algebra that are required for higher mathematics and statistics courses. Covers basic principles and techniques of the following topics: factoring algebraic expressions, manipulation of algebraic fractions, radicals and exponents; complex numbers, linear, quadratic and rational equations, systems of linear inequalities and their graphical representation, introduction to functions. College preparatory algebra or appropriate score on placement test is required prior to taking this course.

MAT 1905 Directed Study

College of Sci and Engineering, Department of Mathematics & Statistics

1-12 sh (may be repeated indefinitely for credit)

MAT 3905 Directed Study

College of Sci and Engineering, Department of Mathematics & Statistics

1-12 sh (may be repeated indefinitely for credit)

MAT 4500 Undergraduate Proseminar in Mathematics/Statistics

College of Sci and Engineering, Department of Mathematics & Statistics

1 sh (may not be repeated for credit)

Each senior (except students with the secondary track specialization) shall, under the supervision of a project advisor, independently investigate a topic or topics in mathematics/statistics or mathematics education. The student shall submit a formal written report and make an oral presentation of the results of his/her investigations. The goal of the proseminar is to provide students with an opportunity to integrate the experience and knowledge they have gained during their undergraduate studies. Graded on satisfactory/unsatisfactory basis only. Senior standing and permission is required.

MAT 4905 Directed Study

College of Sci and Engineering, Department of Mathematics & Statistics

1-12 sh (may be repeated indefinitely for credit)

MAT 4935 Proseminar Topics

College of Sci and Engineering, Department of Mathematics & Statistics

2 sh (may not be repeated for credit)

This course provides students with a comprehensive introduction to technical writing and project time management in a supervised research setting. "Research" is defined as mentored, but self-directed, work that enables individual students or a small group of students to explore an issue of interest and to communicate and disseminate results. Projects may involve inquiry, design, investigation, discovery, or application, depending on the topic. Typically, this course is taken along side the 1-hour proseminar course. By the end of the course, students will complete his or her proseminar final paper using Latex, which includes an abstract, introduction, problem statement (significance of study), literature review, methods section, and references.

MAT 5905 Directed Study

College of Sci and Engineering, Department of Mathematics & Statistics

1-12 sh (may be repeated indefinitely for credit)

MAT 6903 Mathematics Research 1

College of Sci and Engineering, Department of Mathematics & Statistics

3 sh (may not be repeated for credit)

This course will give students the opportunity to engage in group and independent research projects. Research topics and materials vary according to instructor with the thrust being applied or theoretical mathematics. Technical reports and oral presentations will be expected of each student. Students must have completed 15 hours of graduate course work in the program and have maintained at least a 3.0 GPA. Students must also commit to both fall and spring sections of the course.

MAT 6904 Mathematics Research 2

College of Sci and Engineering, Department of Mathematics & Statistics

3 sh (may not be repeated for credit)

Prerequisite: [MAT 6903](#)

This course will give students the opportunity to engage in group and independent research projects. Research topics and materials vary according to instructor with the thrust being applied or theoretical mathematics. Technical reports and oral presentations will be expected of each student.

MAT 6905 Directed Study

College of Sci and Engineering, Department of Mathematics & Statistics

1-12 sh (may be repeated indefinitely for credit)

MAT 6910 Capstone Projects in Mathematics

College of Sci and Engineering, Department of Mathematics & Statistics

3 sh (may not be repeated for credit)

This course will give students the opportunity to engage in group and independent research projects. Research topics and materials may vary according to the instructor with the thrust being applied or theoretical mathematics/Statistics. Technical reports and oral presentations will be expected of each student.

MAT 6930 Proseminar in Mathematics

College of Sci and Engineering, Department of Mathematics & Statistics

1 sh (may not be repeated for credit)

Each M.A. or M.A.T. candidate (except those who choose the thesis option) shall, under the direction of a project advisor, independently investigate a topic or topics in mathematics / statistics or mathematics education through the study of journal articles or other appropriate sources. The candidate shall submit a formal written report and make an oral presentation of the results of his / her investigations. The goal of the proseminar is to provide students an opportunity to integrate the total experience gained during their graduate training. Graded on satisfactory / unsatisfactory basis only. M.A. candidacy and permission is required.

MAT 6971 Thesis

College of Sci and Engineering, Department of Mathematics & Statistics

1-6 sh (may be repeated for up to 8 sh of credit)

Graded on satisfactory / unsatisfactory basis only. Permission is required.