

Undergraduate Research Experience I (2) Undergraduate Research Experience II (1)

(Effective Fall 2015)

Prerequisite: Approval of the department chair. Math/Stat 498 is required for 499.

Catalog Description: **498 Undergraduate Research Experience I (2)** Introduction to research methodologies and tools including LaTeX and MathSciNet. Presenting mathematics in written and oral formats. Ethics in research. This course includes substantial directed individualized study leading to the preparation of a significant paper. Cannot receive credit for both Math 498 and Stat 498. Grading on a pass or fail basis.

499 Undergraduate Research Experience II (1) The presentation of mathematics works in both oral and written formats. This course will finalize the significant paper began in Math/Stat 498 and based on the students individual research. This will require that it be presented at a regional or national meeting. Grading on a pass or fail basis.

Learning Outcomes for Major: This course addresses one or more of the student learning outcomes for the major. Upon completion of his/her degree from the University of Tennessee at Martin with a major in mathematics, the graduate will be able to:

- i. apply mathematical concepts and principles to perform numerical and symbolic computations.
- ii. use technology appropriately to investigate and solve mathematical and statistical problems.
- iii. write clear and precise proofs.
- iv. communicate effectively in both written and oral form.
- v. demonstrate the ability to read and learn mathematics and/or statistics independently.

Teaching Objectives: The student will:

1. Become familiar with MathSciNet.
2. Write a paper using LaTeX.
3. Present talks to local and regional audiences.
4. Discover mathematics that is new (at least to the student).

Text(s): The text(s) will be determined by the course coordinator and individual student advisors (so may be different for each of the students). These will not be ordered by the department through the bookstore.

Disability Services: The University of Tennessee provides reasonable accommodations (academic adjustments and auxiliary aids) to ensure equal access to educational content and university programs for students with disabilities. Students who are eligible for and who request accommodations through the Disability Services office must provide instructors with a letter of accommodation. The Disability Services office is located in the Student Success Center, 203 Clement Hall, (731) 881-7605.