

MA495 FEScUE Seminar
“TRE: Team Research”
Spring 2010

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Professor Estep’s Assistant

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Objectives

The primary objective of the course is to prepare students to work on undergraduate mathematical biology projects as members of an interdisciplinary team. Students will learn about specific analysis, probability, and statistics techniques using a combination of lecture and computer lab activities.

Computing

Students will work primarily in MATLAB and will work in the PRIMES computing lab.

Grading

As this course is project-oriented, individual grades will be assessed on the quality of the projects as well as on the individual's contributions to the group.

Meeting time

Class: Tuesday, Thursday 2:00 - 4:00
Laboratory: Friday 2:00-4:00

Laboratory

PRIMES computer lab

*Note that students are expected to know and follow the guidelines for the lab. Please read:
<http://www.math.colostate.edu/FAQ/primes.html>*

Course outline

1. Sensitivity Analysis
2. Basic Probability
3. Continuous Probability Densities
4. Expected Value and Variance
5. Simulation and Random Numbers
- 6. Material specific to the summer research projects.**