

Math 377

Mathematical Models

Course Description

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Office Hours: M,Tu,W 1:00-2:00

Autumn 2005
MW 2:00-3:15
Room: YR 115
Section: 001

Prerequisites: MATH 265, MATH 274, COSC 236, and at least junior standing.

Catalog Description: Developing appropriate mathematical models and techniques to solve mathematical problems in sociology, psychology, economics, management science, and ecology.

Learning Objectives: Students shall learn how to

1. Take a real world problem and recast it in mathematical terms;
2. Learn the appropriate mathematics to solve the problem;
3. Solve the problem;
4. Interpret the results; and
5. Use the information gained to improve the model.

Academic Integrity: The nature of higher mathematics requires that students adhere to accepted standards of academic integrity. Violations of academic integrity include cheating, plagiarism, falsification and fabrication, complicity in academic dishonesty, personal misrepresentation and proxy, bribes, favors and threats. Cheating is a serious offense that will have grave consequences for your academic life.

Students who violate these standards will either fail the course outright or, at the instructor's discretion, may merely receive a zero on any assignment for which the student receives inappropriate assistance. Violations of these standards will be referred to the administration for possible additional action.

Required Instructional Material: There is no required text for this course.

Methods of Instruction: We shall use group work, class discussion, and lectures.

Attendance: Attendance is expected; you should only miss a class for a compelling reason. If you do miss a class, you are responsible for any material that you miss, including any homework assignments given in that class.

Assignments: Students in this course will be assigned a number of projects problems. These problems will be completed in small groups, and will take from one to three weeks to complete. In addition to these project problems, the occasional homework assignment or quiz may be given. Students will complete a final project. These will be no formal midterm examinations or final examination.

Guidelines for Homework and Papers:

1. Late work will not be accepted without a compelling reason.
2. Assignments are required to be neat, clean, and paper-clipped or stapled.
3. Assignments must include the author's name, and a brief description of the assignment.
4. Students are allowed to discuss homework problems with their classmates, however all work that is turned in must be the student's own work.
5. All papers must follow the usual rules for good English grammar, spelling and composition.

Any assignment that does not meet these criteria may receive a deduction in score, or simply be rejected.

Quizzes: Occasional unannounced quizzes may be given. For purposes of determining the final grade, they shall be treated as a homework assignment.

Final Grade: Final grades shall be determined by the following method:

Homework	10%
Project Papers	60%
Final Project	30%

Note the weight of the final project.

The last day to withdraw from the course with a grade of "W" is November 9.

Help: If you have difficulty completing a homework assignment, do not hesitate to ask for help, either from your friends, or from me. You are welcome to stop by my office, for whatever reason, and at whatever time, even if there are no office hours scheduled then. If you wish, you may also simply send an e-mail message.

Web Page: My web page at <http://www.towson.edu/~moleary> has an archive of most of the projects and all of the old exams that I have given while at Towson.