

MAT 200: Logic, Language, and Proof Fall 2006

Text: *An Introduction to Mathematical Reasoning: numbers, sets and functions*, by Peter Eccles. (Cambridge University Press)

In addition, we will use supplemental material from the course web page at

<http://www.math.sunysb.edu/~scott/mat200.fall106/>

About this course: The basic goal of the course is to introduce the students to mathematical reasoning and proofs; the first part of the course will be concerned with logic and proofs, with particular applications to numbers, sets and functions. The remainder of the course will be concerned with mathematical reasoning, using Euclidean geometry as the model. The emphasis in this part of the course will be on the interplay among geometric figures and reasoning, formal logic and language.

Homework: Working out problems is an integral part of the course; homework will be collected weekly, graded and returned. Students are encouraged to work on the problems in small groups. However, each student is required to write up his or her own work.

Most of the homework assignments will require statements that are both mathematically correct and are written in grammatically correct, complete English sentences. The work turned in must, of course, be legible, so students are strongly encouraged to use word processors to write up their homework. **Work that does not meet these standards will be returned, ungraded, for correction and resubmission.** Since homework may be discussed in class after it is collected, *late homework can not be accepted.*

Reading: The textbook is intended to be read. Reading the assigned sections before the lecture. This will greatly increase your comprehension, and enable you to ask intelligent questions in class.

Examinations and grading: There will be two in-class exams, and the always thrilling final exam. The specific dates and times will be announced on the class web page, approximate dates are below.

| What | When | | % of Final Grade |
|--------------------------------|----------------------|--------------|------------------|
| Exam 1 | some day in October | 9:35–10:30am | 25% |
| Exam 2 | some day in November | 9:35–10:30am | 25% |
| Final Exam | Wed, December 20 | 8:00–10:30am | 30% |
| Homeworks, Participation, etc. | | | 20% |

Make sure that you can attend the exams at the scheduled times; **make-ups will not be given.** If one midterm exam is missed because of a serious (documented) illness or emergency, the semester grade will be determined based on the balance of the work in the course.

Disabilities: If you have a physical, psychological, medical or learning disability that may impact on your ability to carry out assigned course work, I strongly urge that you contact the staff in the Disabled Student Services office (DSS), ECC room 128, (631)-632-6748. DSS will review your concerns and determine, with you, what accommodations are necessary and appropriate. All information and documentation of disability is confidential. Such arrangements should be made early in the semester (well before the first exam) so that we can accommodate your needs.

Students requiring emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For more information, see <http://www.ehs.stonybrook.edu/fire/disabilities.shtml>.

Instructor: Prof. S. Sutherland / Math 5D-148 / 632-7306 / scott@math.sunysb.edu
Other section: Travis Waddington / Math 3-122 / ratatosk@math.sunysb.edu
Office hours to be announced.

Homework and Schedule: The list of homework assignments and the most current schedule of topics can be found on the class web page. It will change, so check it regularly.