

MAT 200: Logic, Language, and Proof Spring 2010

Text: *An Introduction to Mathematical Reasoning: numbers, sets and functions*, by Peter Eccles.

We will also use the Geometry notes from the course web page at <http://www.math.sunysb.edu/scott/mat200.spr10/>

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. Another portion 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. The third part will return to the text, and cover some important foundational ideas used in a number of areas of mathematics.

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. The specific assignments can be found on the [class web page](#).

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.*

Some of the homework problems will be assigned but not collected. This is not because they are not important; rather, the answers for them are in the back of the book. You should work these problems carefully, then compare your results to the solution in the book. These problems are just as important as the graded ones, and you should give them your full attention.

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	late February	in class	25%
Exam 2	late March	in class	25%
Final Exam	Tuesday, May 18	2:15–4:45pm	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.

Instructor: Prof. S. Sutherland / Math 5-112 / 632-7306 / scott@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.

Disabilities: If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact Disability Support Services at <http://studentaffairs.stonybrook.edu/dss/> or (631) 632-6748. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Students who require assistance during emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information go to the following website:

<http://www.stonybrook.edu/ehs/fire/disabilities.shtml>

Academic Integrity: Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is **always** wrong. Faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at

<http://www.stonybrook.edu/uaa/academicjudiciary/>

Critical Incident Management: Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Judicial Affairs any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn.