MAT 118: Mathematical Thinking Fall 2007

Text: Excursions in Modern Mathematics, sixth edition by Peter Tannenbaum.

About this course: There is much more to mathematics than just calculations and solving equations. In this course we will examine several mathematical topics accessible to students with an understanding of high-school mathematics. These will be selected from among the following: voting methods; the mathematics of money; probability; graphs, paths, and networks; tilings and polyhedra; game theory; and other topics.

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

Homework and Quizzes: You can not learn mathematics without doing mathematics. Each week a homework assignment will be posted on the course web page at

http://www.math.sunysb.edu/~scott/mat118.fall07

These will be due the following week in recitation. While you may work together with other students on the homework assignments, write up your own solutions in your own words. The goal of the homework is for you to understand the material, not to merely hand in some paper. Late homeworks will *not* be accepted.

Examinations: There will be two in-class exams, and the ever-popular final exam. The specific dates and times will be announced on the class web page.

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.

Grading:

| What | When | | % of Final Grade |
|--------------------------------|-------------------|----------------|------------------|
| Exam 1 | Mid-October | 9:35–10:30 am | 25% |
| Exam 2 | November sometime | 9:35-10:30 am | 25% |
| Final Exam | Wednesday, Dec 19 | 8:00-10:30 am | 25% |
| Homeworks, Participation, etc. | | | 25% |

Math Learning Center: The Math Learning Center, in Math S-240A, is there for you to get help with Calculus. It is staffed most days and some evenings—your lecturer or TA may hold some of his or her office hours there. A schedule should be posted outside the room and at the Math Undergraduate Office.

Disabilities: If you have a physical, psychological, medical or learning disability that may impact your course work, please contact Disability Support Services, ECC (Educational Communications Center) Building, room 128, (631) 632-6748. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential.

Students requiring emergency evacuation are encouraged to discuss their needs with their professors and Disability Support Services. For procedures and information, go to the following web site:

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

Lecturer: Prof. S. Sutherland / Math 5D-148 / 632-7306 / scott@math.sunysb.edu Office hours to be announced.

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.