SYLLABUS MAT118: MATHEMATICAL THINKING

1. About this course

The goal of this course is to explore many branches of mathematics and use them in different real world situations.

2. Text

*Excursions in Modern Mathematics*, by Peter Tannenbaum. The book is available at the campus bookstore. However, there are many other stores where the same book can be obtained for a substantial lower price. Generally speaking, you should avoid the Campus Bookstore: often you will find what you need for substantial lower prices elsewhere.

3. Calculators

A calculator is **not required** for this course, but you may find using a graphing calculator helpful. However, be careful how you use it. Many students become dependant on their calculators, and wind up being unable to do anything without them. In this course, **no calculators will be allowed on exams.**
4. Homework

You *can not* learn mathematics without working problems. Do all of the assigned problems, as well as additional ones to study. If you do not understand how to do something, get help from your TA, your lecturer, your classmates, or in the Math Learning Center. You are encouraged to study with and discuss problems with others from the class, but write up your own homework, and make sure you understand how to do the problems.

Each week 5 Homework exercises will be collected of which two will be graded. Indeed, doing exercises is a crucial part, maybe the most important, part when learning Mathematics.

- The homework counts for 15 percent of the final grade.
- The homework is due at recitation of each week.
- Each week there will also be suggested problems. Among the suggested problem are problem closely related to the homework questions. If you work reasonably hard, there is a good chance that this will be a successful algorithm. Not only for the homework, also for the other exams. Most problems on the exams will be slight variations of the more difficult Homework problems.
- The recitation instructors will discuss problems similar to the suggested problems.
- The recitation instructors will discuss the three homework exercises which were not graded.
5. Examinations and Grading

There will be two midterm exams, and the ever-popular final exam. The dates and times are listed below; the locations will be announced later. Success on the exams will require correct and efficient solutions to the more difficult of the suggested problems.

<table>
<thead>
<tr>
<th>What</th>
<th>When</th>
<th>% of Final Grade</th>
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</thead>
<tbody>
<tr>
<td>Midterm</td>
<td>TBA</td>
<td>30%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>Wed, Dec 10 8:30pm–11:00 pm</td>
<td>40%</td>
</tr>
<tr>
<td>Homework</td>
<td>weekly</td>
<td>30%</td>
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Make sure that you can attend the exams at the scheduled times; **make-ups will not be given**. If you have evening classes, resolve any conflicts now. 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.

6. 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. Furthermore, the lectures will not always be able to cover all of the material for which you will be responsible.

7. Office Hours

All lectures and TAs must hold at least three scheduled office hours per week. They are there to help you, so make use of these hours. You may go to any hours for any of the people associated with the course; the various office hours are listed on the **Office Hours** section on the mat 118 webpage

http://www.math.sunysb.edu/ marco/Marco Martens_files/MAT 118/mat 118.html

You can also make appointments at other times.

8. Math Learning Center

The Math Learning Center (MLC)

http://www.math.sunysb.edu/MLC/

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.

9. 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

10. 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/

11. 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.