MAT 122 Fall 2011 Overview of Calculus

# **Syllabus**

### **Lectures and Recitations**

Lectures meet on Tuesdays and Thursdays from 9:50 to 11:10 AM in Engineering 145. The instructor is Prof. Eric Malm.

Recitation		Day	Time	Location	TA
R02	81186	Mon	9:35–10:30 AM	Physics P116	Chirasree Chatterjee
R03	81187	Wed	9:35-10:30 AM	Physics P116	Chirasree Chatterjee
R04	81188	Tue	2:20-3:15 РМ	Chemistry 128	Marcelo Disconzi

### **Websites**

We will use Blackboard (http://blackboard.stonybrook.edu) to send course announcements and to post materials, solution sets, and homework and exam grades. Students are responsible for checking the site daily for announcements and course materials. Additional course information may appear on the instructor's and TAs' websites.

#### Office Hours and Contact Information

Eric Malm, Instructor

Office Hours: Mon 10:30–11:30 am, Tue 11:30 am to 12:30 pm, Fri 1–2 pm, in the Math Learning

Center (Math S-240A), or by appointment

E-mail: emalm@scgp.stonybrook.edu

Website: http://www.ericmalm.net/work/teaching/mat122/

Chirasree Chatterjee, Teaching Assistant, R02 and R03

Office Hours: Wed 1–2 pm, Physics D-101; Wed 2–3 pm and Thu 1–2 pm, MLC

E-mail: chira@math.sunysb.edu

Marcelo Disconzi, Teaching Assistant, R04

Office Hours: Tue 10–11 am and 1–2 pm, MLC; Tue 4–5 pm, Math 2-114

E-mail: disconzi@math.sunysb.edu

Website: http://www.math.sunysb.edu/~disconzi/Teaching/MAT122-Fall-11/MAT122-Fall-11.html

Students should feel free to attend the office hours of the instructor, either teaching assistant, or the Math Learning Center (Math Tower S-240A), open Mon-Thu 10 AM to 6 PM, Fri 10 AM to 2 PM.

## **Course Description**

**Overview:** The basics of calculus in a self-contained, one-semester course. Properties and applications of polynomial, exponential, and logarithmic functions. Derivatives: slopes, rates of change, optimization, integrals, area, cumulative change, and average. The fundamental theorem of calculus. Emphasis on modeling examples from business and economics. Students who subsequently wish to enroll in MAT 125 or 131 will be required to take MAT 130 as a pre- or corequisite to either course or to score level 4 on the mathematics placement examination before taking either course. 3 credits.

MAT 122 Fall 2011 Overview of Calculus

**Prerequisites:** MAP 103 or level 3 on the mathematics placement exam. Prerequisite must be met within one year prior to beginning the course. Students who are unsure of their background in algebra should see the instructor or one of the teaching assistants for help.

**Text:** The required course textbook is *Applied Calculus*, Fourth Edition (2010), by Debra Hughes-Hallett, et al. (ISBN 978-0-470-17052-6) Copies are available from the SBU Bookstore and from online retailers.

**Equipment:** The student must have a graphing calculator, preferably a TI-83, TI-84 (any flavor), TI-86, or TI-89. Calculators are available from the SBU Bookstore and from online retailers.

### Assessment

**Homework:** Homework will be due weekly on Thursdays by noon, and will typically focus on lecture and reading material from the previous week. You may submit your assignment to either the instructor or your TA at any time before the due date. Solution keys will be posted on Blackboard shortly after the due date, so late assignments are not accepted. The lowest two homework scores will be dropped when computing the homework average.

Your name, recitation section, assignment number, and date must be printed at the top of the front page of each homework assignment. If the assignment has multiple pages, it must be fastened together with a staple in the upper left-hand corner of the page. Students should make their assignments legible and should show work when appropriate. The course staff reserves the right not to grade assignments that do not follow these policies.

Discussing and working together on assignments is strongly encouraged, but you must be sure to write up your assignment on your own.

**Exams:** There will be a total of three exams: two midterms and a comprehensive final exam. Calculator use will *not* be allowed on exams. Exam dates:

- Midterm #1: Monday, Sep 26, 8:30–10 PM
- Midterm #2: Tuesday, Nov 8, 8:30-10 PM
- Final Exam: Thursday, Dec 15, 8–10:45 AM

There is no provision for making up exams or dropping exam scores, so it is *critically important* that you be able to attend each exam. If you absolutely cannot attend one or more of the exams, you should take this course during a different term.

**Quizzes and Class Participation:** There will be weekly quizzes administered at the start of each recitation section. The quizzes will cover material from the previous week's homework. The lowest two quiz scores will be dropped when computing the quiz average.

**Grading:** The scores from homework, exams, and quizzes will be weighted as follows to determine the overall course grade:

Midterm I: 20% Midterm II: 20% Final: 33% Homework: 20% Quizzes: 7%

MAT 122 Fall 2011 Overview of Calculus

### How to Get Help

Your first resource for help in the class should be the office hours of the instructor, the teaching assistants, and the Math Learning Center. Your fellow students are also an excellent resource for help, and we strongly encourage students to work and study together in small groups.

### **Stony Brook University Policies**

Americans with Disabilities Act: 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, if any, are necessary and appropriate. All information and documentation is confidential.

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. Faculty in the Health Sciences Center (School of Health Technology & Management, Nursing, Social Welfare, Dental Medicine) and School of Medicine are required to follow their school-specific procedures. 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 University Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' ability to learn. Faculty in the HSC Schools and the School of Medicine are required to follow their school-specific procedures. Further information about most academic matters can be found in the Undergraduate Bulletin, the Undergraduate Class Schedule, and the Faculty-Employee Handbook.

3