

# MATHEMATICS 123 D1: Calculus I

Fall Semester 2003

**Instructor:** Takashi Kimura

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**Phone:** (617)353-1486 **Office:** MCS 234

**Lectures:** MWF 2:00-3:00 in CAS B12

**Discussion Sections:** D2: Tu 8:30-9:30 in MCS B31, D3: Tu 3:30-4:30 in SOC B59, D4: W 8:00-9:00 in MCS B31, D5: W 9:00-10:00 in MCS B33, D6: 12:00-1:00 in MCS B31.

**Text:** *Calculus, Concepts and Contexts*, 2nd edition, by J. Stewart, (Brooks/Cole Publishing Company), ISBN:0-534-37718-1.

**My Office Hours:** To be announced.

**Teaching Fellow (TF):** Caleb Shor

**TF's Office:** PSY 229

**Content:** Calculus is an important mathematical tool which allows one to solve a wide variety of problems arising in science and engineering. The first part of the course, differential calculus, is the study of rates of change of functions. The latter, integral calculus, is related to the average values of functions. The material is nontrivial. The best way to see if you have mastered the material is to do the homework problems.

**Web Pages:** This class has a Web page which can be viewed with a Web browser (such as Netscape). Documents distributed in class, homework assignments, and related information will be posted on the Web page. The URL is

<http://math.bu.edu/people/kimura/Fall103/123/>

**Homework:** Homework will generally be assigned and posted on the class Web page on Friday and due at the beginning of class the following week. Late homework will not be accepted. Students may discuss homework with each other (and are encouraged to do so) but all written work must be prepared independently. Remember that in order to receive full credit both your answer and reasoning must be correct (the same goes for exams). Homework solutions will be on reserve in the Science and Engineering library located at 38 Cummington Street.

**Exams:** There will be three in-class exams given at roughly equally spaced intervals throughout the course in addition to the final exam. All exams will be closed book. **There will be NO makeup exams in this course.** If you miss exam, you will receive a zero for the exam. The only valid excuse for missing an exam is a serious illness which must be certified by a doctor's note.

**The Final:** You will be held responsible for all of the course material in the final exam.

**Calculator:** A calculator with graphing capabilities is required for this course. Calculators will be used as a tool to solve problems on the homeworks and exams. The official calculator recommended for the course is the TI-86 manufactured by Texas Instruments. **Note: Unless otherwise specified on exams and homeworks, only exact solutions will be given full credit.** For example, if the answer to a problem is  $\sqrt{2}$  and you are not asked to provide an approximate solution then you will not receive full credit for writing down 1.414.

**Class Help:** There are three main options. The first is to see me or the TF during our office hours (or by appointment). The second is to go to the math department's tutoring room in MCS 144 while the tutor is available (the schedule should be posted on the door of MCS 144). Finally, if you feel that you are falling far behind, you can make an appointment to receive private or group tutoring by calling the University Resource Center (353-7077).

**Grades:** Your final grade is determined by three categories – the exams, the homework, and the final. Grades are based upon the formula:

$$\text{Final Grade} = \frac{3}{8}(\text{Exam Average}) + \frac{1}{4}(\text{Homework Average}) + \frac{3}{8}(\text{Final Exam})$$

The final grade is curved.