V63.0021-1 MW 9:55-10:45, 1021 Main Dr. D. A. Edwards WWH619 Calculus I Fall 1994 Office Hours: T 1-2 R 9-10 or by appointment x8-3136, edwardsd@cims.nyu.edu

Introduction

Welcome to Calculus I! The focus of this course will be on the *applications* of calculus, rather than the *theory* behind it (except when explaining the theory will enhance your understanding of the concepts). I will be passing around a sheet today asking each of you what you think your major might be. Then I will try to present examples from those subjects so that you can see how calculus is applied to your area of interest.

The text for this course is *Calculus: Early Transcendentals*, 2nd ed., by James Stewart. If you are not taking Calculus III, you may purchase the shorter version of the former text, *Single Variable Calculus: Early Transcendentals*. The text is required, since you will be assigned both reading and homework problems from the book.

You will also need a scientific calculator for class. The calculator should include trigonometric, exponential, and logarithmic functions, but need not include any other features. You may use calculators for all homework assignments. Unless expressly told otherwise, standard scientific calculators may be used for quizzes and exams as well. Graphing and programmable calculators may not be used for quizzes and examinations.

You should address most questions to your recitation section leaders, who should be able to answer any questions you might have. However, if you are continuing to have difficulty, or have a question, problem, or interesting application you would like me to address in class, you may contact me during my office hours or make an appointment.

You may bring tape recorders to lecture. However, unattended tape recorders will not be permitted.

Exams

There will be three exams in the course. The first two will be one hour long and will take place during a regular lecture hour. The final exam will be three hours long. Please be prepared to show picture identification in order to enter the examination room. Attached to each examination will be a course evaluation form, so that I may receive your suggestions for how the course could be improved.

Recitation Sections

In addition to the lectures, you are also registered for two recitation sections meeting on Tuesday and Friday. In these sections the TAs will present solutions to problems which parallel closely the ones assigned for homework. They may also answer any questions you might have about the material covered in lecture that week. TAs can **NOT** address specific questions about any homework problems not already turned in.

Assessment

Your grade for the course will be determined in two stages. First your *raw score* will be calculated from your exam scores, with the final counting as the equivalent of two exams. However, if including your homework and/or quiz scores will improve your score, I will let each count for 10% of your grade. Therefore, doing the homework, attending recitation sections, and taking the quizzes *can only help* your grade.

Then each of the raw scores will be scaled to determine final grades. During this scaling process I will consult the TAs to see if they think that anyone's raw score does not adequately reflect their knowledge of the material. Therefore, it is beneficial for you to attend recitation sections regularly and get to know your TA.

Homework

Homework will be assigned every Monday during lecture (the first assignment is attached to this introduction), and it will be due in your recitation section the following Tuesday. **ABSOLUTELY NO LATE HOMEWORK WILL BE ACCEPTED!** (Subject to the university calendar policy on religious holidays. Prior arrangements must be made with your TA.) Since calculus is a subject where the material for one section builds on the section before, it is critical that you keep up to date on the homework: hence the stringent policy. However, to calculate your semester-long homework average, I will drop your two lowest homework scores. Therefore, low scores for assignments where you were pressed for time can be erased as long as you don't have too many of them.

Though you may not copy directly from another's paper or use someone else's ideas as your own, I encourage you to discuss the homework problems with your classmates. Any scientific endeavor is rarely done in a vacuum; therefore it is to your advantage to learn the benefits of collaborating.

Homework assignments should be folded like a book with the following information on the "front cover:"

Name Section Number and TA Name Assignment Number Date

You will turn in your assignments this way so that the grader can put your grade on the inside, thus ensuring your privacy. I will make every effort to ensure that your graded homework is returned in a timely manner.

Each homework assignment will consist of ten questions and be worth 25 points. Of those, five randomly selected problems will *not* be graded. For these questions, you will receive one point if you attempted the problem. For the five problems that will be graded, you may receive up to four points, depending on the completeness and accuracy of your solution.

Quizzes

Quizzes will be given on Tuesdays in recitation section. They will take fifteen minutes each, and you will need to bring your own paper. They will cover any material presented in lecture up to the week before the quiz. Before computing your quiz average, I will drop your lowest quiz score.

Schedule

week of September 12: Appendix B, review chapter

week of September 19: Sections 1.1-1.5

September 20: Quiz 1 (covers Appendix B and the review chapter)

week of September 26: Sections 1.6-2.1

October 3: Exam I (covers the review chapter and Chapter 1)

October 5: Sections 2.2-2.3

week of October 10: Sections 2.4-2.6 week of October 17: Sections 2.7-2.10

October 18: Quiz 2 (covers Sections 2.1-2.6)

week of October 24: Sections 3.1-3.3 week of October 31: Sections 3.4-3.7

November 1: Quiz 3 (covers Sections 2.7-3.3)

week of November 7: Sections 3.8-4.2

November 14: Exam II (covers Chapters 2 and 3)

November 16: Section 4.3

week of November 21: Sections 4.3-4.6 week of November 28: Sections 4.7-5.2

November 29: Quiz 4 (covers Sections 4.1-4.6)

week of December 5: Sections 5.3-5.5 week of December 12: Sections 5.6-5.7

December 15: Review sessions for final

December 19, 8:00-9:50 am: Final Exam (covers entire course, but especially Chapters 4 and 5)