MATH 20A
Fall 2002

Instructors:
MWF, 10:00–10:50 Lecture: Professor P. Ebenfelt, AP&M 7432; phone: 822-4961; pebenfelt@ucsd.edu.
MWF, 11:00–11:50 Lecture: Professor J. W. Helton, AP&M 6161; phone: 534-2653; helton@ucsd.edu.
MWF, 12:00–12:50 Lecture: Professor J. D. Eggers, AP&M 5802; phone: 534-4239; jeggers.math.ucsd.edu.
MWF, 3:00–3:50 Lecture: Professor V. Vu, AP&M 6101; phone: 534-2634; vanvu@math.ucsd.edu.
MW, 7:00–8:20 pm Lecture: Professor S. Baouendi, AP&M 6260; phone: 534-6347; sbaouendi@ucsd.edu.

Subject material: We shall cover parts of chapters 1, 2, 3, 4, and 5 of *Calculus (Early Transcendentals, 4th Edition)* by James Stewart. (Only the single variable part of the book, also sold separately, will be needed for Math 20A and Math 20B.) The course may be described briefly as differential calculus plus a smidgeon of integral calculus, with emphasis on the understanding of graphical, algebraic and numerical methods in roughly equal proportions. Examples and exercises from real world applications will be used to illustrate the concepts. If you find the going too tough, you may, after consulting with an advisor, transfer to Math 10A, where they cover essentially the same material at a slower rate, and generally with less difficult homework. You should make such a switch as soon as possible to avoid grade penalties.

Reading: IT IS VERY IMPORTANT THAT YOU READ THE ASSIGNED MATERIAL IN ADVANCE OF THE LECTURE. This will be expected and it will enable you to maximize what you get out of the lectures.

Exams and grading: There will be two midterm exams, given during the Fourth Hour (7:00–7:50 pm), on Tuesday October 22 and on Tuesday November 19. The first midterm will account for 20% of your course grade and the second will account for 25% of your course grade. The final exam will be held Monday December 9, 7–10 pm, and will be worth 40% of the course grade. There will be no makeup exams. The remaining 15% of your course grade will be accounted for by homework assignments to be handed in weekly. In addition, in order to pass the course, you must also receive a passing grade on the final. Students should buy blue books (available at the bookstore or general store co-op) in which to write their exam solutions. (The class will not normally meet in the fourth hour on Tuesdays except for the two midterm exams.)

Calculus lab: A lab for Math 20A students will be open Monday through Friday, 9 am –8 pm, (except Wednesday, 12 – 1:30) in AP&M 2402. There will usually be at least 2 tutors/TAs available to help with homework, calculators, and coursework. **We strongly recommend that you make use of the Calculus lab.**

Calculators: It is important that you bring your graphing calculator (preferably a TI-85 or TI-86) and the textbook to each lecture and recitation. The calculator will be used as an aid in learning concepts, not just as a means of computation. Help with using TI graphing calculators will be available in the Calculus lab. (The use of calculators which allow symbolic manipulations, such as TI-89 or TI-92, is not permitted during exams.)

Homework: There will be 2 categories of homework— “individual recommended” and “group”. Group homework is to be turned in each week at your Section Meeting, on Thursday. Late homework will not be accepted. Individual recommended homework is not to be turned in, but you are responsible for the subject matter covered in the assignments. The first assignment will be given at the first lecture on Friday, September 27. You should do it individually and turn it in at the first recitation section on Thursday, October 3. After that, homework will be assigned in the Wednesday lecture, being due Thursday of the following week. **IT IS OF GREAT IMPORTANCE THAT YOU MAKE EVERY EFFORT TO COMPLETE THE HOMEWORK ASSIGNMENTS, AND THAT YOU SEEK HELP WITH PROBLEMS YOU HAVE NOT BEEN ABLE TO Handle.** You can get help with homework assignments in the calculus lab. A student solutions manual (available in the bookstore) has complete solutions for all of the odd-numbered problems in the text.

Groups: Ideally, groups should consist of 2 or 3 individuals, but they may have from 1 to 4 members. The TAs will help you form your groups during the first recitation section meeting. Members of a group must be registered for the same recitation section. **Group homework should be handed in with the names AND SECTION NUMBER of the group members listed on it. Only those who contributed to the group effort should be listed.**

Webpage: Course information, including homework assignments, will be available, starting the second week of classes, at the Math 20A website: [http://math.ucsd.edu/courses/math20a](http://math.ucsd.edu/courses/math20a)