

Math 213 — Calculus III §1
Syllabus
Fall 1997

<u>Text:</u>	“Calculus and Analytic Geometry” by Thomas and Finney, 9 th (single-variable) edition.
<u>Time/Place:</u>	TTh 2 to 3:50 p.m. at JB 383.
<u>Instructor:</u>	Dr. Chetan Prakash.
<u>Instructor’s Office</u>	JB 327 Phone: 880-5390 e-mail: cprakash@wiley.csusb.edu
<u>Office Hours:</u>	MW 3 to 3:50 p.m; TTh 1 to 1:50 p.m. and by appointment.
<u>Material to be covered:</u>	§§5.2-5.7, Chapter 8 (except §8.11) and Chapter 9 (except §§9.1-3. Some sections (TBA) are for home study.

The Course: Calculus III covers applications of integration to a variety of measurement and physical problems, the parametrization of curves and polar coordinates, and the elements of infinite sequences and series. We expect to spend approximately the first half of the quarter on sequences and series and the other half on integration and polar coordinates.

Prerequisite: Calculus II. It will ease your way if you allow some time for reviewing that material.

Recommended Homework: It is recommended that you do all relevant exercises in the sections we cover (answers to the odd-numbered ones are given in the text). Worked solutions to many of these exercises may be found in students’ study guides to this text; however you are strongly encouraged to look at study guides only *after* having worked them yourself. There are also review questions and miscellaneous exercises at the end of each chapter – these are useful when revising for a midterm or final.

Solutions to the above-mentioned exercises are not to be handed in or graded, but we will discuss any questions you have regarding them at the beginning of each class. Please keep in mind that these discussions will be of use to you only if you have at least attempted them beforehand. Do not spend more than 20 minutes on any exercise; most exercises will take considerably less time. *Do please discuss the exercises with each other or with me.*

Doing homework exercises after reading the text and notes is the single best way to do well in this course. At the end of each class you will know what section(s) are to be covered at the next meeting. It will help you a great deal if you can also study the text *before* coming to class.

Graded Homework: Homework for grading will be assigned every few days in class, but will be collected on Thursdays, starting in the second week of term. There will generally be 5 questions in each of the sets. These sets may involve some writing and will involve more thought than drill-type exercises. You may discuss the exercises with each other or with a tutor, but are on your honor to write solutions independently.

Readings: You will also be asked to study §8.10 and §9.8 outside of class: i.e., we will not have lectures on these topics, but will discuss the exercises at the appropriate time.

Feedback Exercises: We will have two 2-hour, non-cumulative, in-class midterm tests. The first will be on Tuesday October 28; the second on Tuesday November 25; You will be informed of the material to be covered at least 2 days prior to the test. The final will be on Thursday December 11 from 2-3:50 p.m.

Tests will contain true-false and multiple choice questions, as well as show-your-work questions for partial credit.

Grading: The lower of the two midterm grades will be dropped and replaced by the final grade, if higher. The midterms and final will each be worth 100 points, as will your collected homeworks, for a total weight of 400. The final grade will be calculated from:

A	90-100%	A-	86-89%	B+	82-85%	B	78-81%
B-	74-77%	C+	70-73%	C	66-69%		
C-	62-65%	D+	58-61%	D	54-57%	D-	50-53
						F	below 50%

Notes:

1. The responsibility for learning the material is yours. Please expect to spend, on average, 2 hours of home work for each hour in class. *Read the sections we are to cover before coming to class.* It is my responsibility to facilitate your learning by pointing the way, helping you with specific problems you bring to class or to my office hours, and giving you feedback on your progress. However, watching me work exercises or reading someone else's solutions is not enough — you must do it yourself. Sincerity of effort will lead you to the joy of doing mathematics. This is a fast-paced course, so it will not be possible to discuss all questions during class time. Do please utilize as many resources as you can, e.g., my office hours, the Learning Center (whose tutors are free of charge), and study groups with other students. By all means look up other texts if they seem more readable to you. Some texts you might find useful are those by Anton, Finney and Thomas, Strang, and by Stein and Barcellos.
2. Please keep up to date with the material, and try not to miss any midterms or home assignments. You are responsible for bringing calculators (*no graphing calculators please*) to the exams. **Late homework will not be accepted, and makeups for midterms will not be given without compelling and documented reasons for your lateness/absence.** *If you are forced to be absent, I will need to have made prior arrangements with you regarding makeups.*
3. You can always get in touch with me by leaving a message, either by phone or e-mail. I should get back to you within a working day. If you live outside the local calling area, expect me to ask you to call me back.
4. Do make chapter summaries for yourself and use the review questions and miscellaneous exercises at the end of each chapter as practice tests. At the end of class on the day before the midterm we will discuss any questions you have.
5. Graded work (quizzes, midterms, homework) will generally be returned, along with solutions, within **one week** after being handed in.
6. Final grades will not be posted at the end of term. If you desire to know your grade before the start of the next term, please leave a stamped, self-addressed envelope with me.

Midterms on Tuesday, October 28 and Tuesday, November 25
Final on Thursday December 11 from 2-3:50 p.m.
Departmental web page: <http://www.math.csusb.edu>