

MATH 143-01: Calculus III
Cal Poly
Spring 2007

Instructor: Dr. S. Cooper

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Office Hours: MF 10:30 am – 11:30 am, TR 1:00 pm – 2:30 pm & by appointment.

Correspondence: The best way to reach me is via email. However, emails will only receive a reply if they include an appropriate title and the sender's full name.

Class Times & Location: MTRF 9:10 am – 10:00 am, Building 38 – Room 221.

Required Background: MATH 142.

Course Webpage: www.calpoly.edu/~sucooper/courses_spring07/coursedetails.html & blackboard.

Textbook: *Multivariable Calculus*, 5th Edition, James Stewart, Thomson Brooks/Cole, 2003.

Content: We will cover Chapters 11 – 12, Sections 13.1 – 13.5, and Chapter 14 of the textbook.

Learning Objectives: The student should:

- * Understand parametric equations and polar coordinates, and their applications.
- * Understand vector algebra and elementary differential vector calculus.
- * Be able to test infinite series for convergence.
- * Be able to calculate power series and Taylor series.

Homework & Quizzes: Homework questions will be assigned each lecture. Once a week (see “Dates to Remember”), either homework will be collected or a quiz will be given. It will not be previously announced which task will be performed. These evaluations will be used to check that homework is being completed and to gauge your progress with the material.

FAQ: During most classes, questions based on the previous lesson will be posed. Students will either volunteer or be chosen at random to answer. Each student will start with 20 points. If the question is answered correctly, then the student is removed from the FAQ pool (and loud applause is gained!). If a question is answered incorrectly, then 3 points will be deducted and the student remains in the FAQ pool. If a student does not attempt to answer (e.g. is absent), then 10 points will be deducted. In the end, every student will answer a FAQ. This may be an uncomfortable exercise, but a part of mathematics is thinking and presenting ideas in a calm and clear fashion. The questions asked are *not* intended to be tricky or embarrassing. Rather, this exercise is intended to motivate regular attendance, regular studying of definitions, theory, identities, and to build your confidence. Respect for others is expected.

Exams: There will be 2 in-class exams given. Also, there will be a cumulative final examination.

Course Grades:	Homework/Quizzes (Best 7 out of 8)	20%
	FAQ	5%
	Exams 1 & 2	20% each
	Final Exam	35%

At the instructor's discretion, the lower of the two exam scores may be dropped, and the weight transferred to the final. The weight of the final will not be reduced.

Calculator Policy: No calculators or other aids will be allowed during exams. All quiz and exam questions will be designed so that they can be answered without calculators.

Missed Homework/Quizzes and Exams: There will be no make-up homework/quizzes for *any* reason. If you have to miss a homework/quiz, then a grade of zero will be given and this will count as your dropped homework/quiz. A missed exam will count as zero unless alternate arrangements are made *before the test* or acceptable official documentation (such as a doctor's note) explaining the situation is presented.

Academic Dishonesty: You will be expected to submit only work that is your own. This will help us gauge your understanding, progress, and abilities for the material. If any dishonesty is caught, then a grade of F will be given in the course.

Dates to Remember (Homework/Quizzes, Exams, Final Exam, and Holidays):

Tuesday, April 3	Homework/Quiz 1
Tuesday, April 10	Homework/Quiz 2
Tuesday, April 17	Homework/Quiz 3
Tuesday, April 24	Homework/Quiz 4
Tuesday, May 1	EXAM 1
Tuesday, May 8	Homework/Quiz 5
Tuesday, May 15	Homework/Quiz 6
Friday, May 25	EXAM 2
Monday, May 28	Memorial Day (No Class)
Thursday, May 31	Homework/Quiz 7
Tuesday, June 5	Homework/Quiz 8
Friday, June 8	Last Class
Tuesday, June 12	FINAL (7:10 am – 10:00 am, Building 38 – Room 221)

Expectations & Tips on How to be Successful in MATH 143:

- * It will be expected that you are comfortable with the material from MATH 141 & 142.
- * An essential part of the learning process occurs during class. You are expected to attend classes.
- * Starting with the first class, study in-depth and regularly. You are expected to study *25 – 35 hours a week outside the classroom*. Thus, at a minimum you should be studying *2 hours for every one hour of class*. Read “University Expectations” on the course webpage for more ideas.
- * You are expected to read the material to be covered *before* the lecture and to do the assigned exercises *before* the next class period.
- * Be an active participant and considerate to others during class discussions (*especially for FAQ*).
- * Do not rely on solution manuals! These are readily available and it is tempting to just copy the solutions. However, struggling through the exercises on your own is an important phase of the learning process.
- * Get help as soon as you need it: ask questions in class and office hours; form a study group with your classmates; consider getting a tutor, etc.
- * For exam preparation, practice exercises that have not been assigned. The review exercises at the end of each chapter in the textbook are an excellent source of additional questions.
- * Everyone wants you to succeed. Please speak with me regarding any concerns you may have.
- * Relax and have fun with the course!