

MATH 3C: Analytic Geometry and Calculus

Ticket #10110, Fall 2009

INSTRUCTOR: Jody Cochran

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OFFICE: SM 363

OFFICE PHONE: (949) 582-4556

OFFICE HOURS: MW 12 - 1:30 pm, TTh 9:30 – 10:30 am, or by appointment

WEBSITE: www.saddleback.edu/faculty/jcochrane

TEXTBOOK: Calculus, Eighth Edition, Anton, Bivens & Davis

MEETING TIMES: MWF 9:00 - 10:25 am, SM 201

PREREQUISITE: MATH 3B (Analytic Geometry and Calculus) or an equivalent second semester college course in calculus.

COURSE OVERVIEW: This 5-unit course provides a study of vector calculus, including vector derivatives, partial derivatives, gradients, multiple integrals, Green and Stokes theorems, and divergence theorem. (AA/AS General Education-Math Competency; Transfer: CSU-B4-Mathematics/Quantitative Reasoning)

STUDENT LEARNING OUTCOMES: Students who successfully complete this course will be able to:

1. demonstrate proficiency in the critical thinking and computational skills necessary to set up and solve problems involving functions of more than one variable.
2. demonstrate proficiency in the visualization and computational skills necessary to work with functions of more than one variable using rectangular, cylindrical and spherical coordinates.
3. demonstrate the ability to visualize and sketch objects in 3-dimensional space.

GRADING

The total points possible for this class are as follows:

Quizzes	100 points
Exams	360 points
<u>Final Exam</u>	<u>180 points</u>
TOTAL	640 points

Grades will be assigned according to the following scale:

90 – 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
Below 59%	F

Your class grade is final. There will be no extra credit assignments offered in this class.

HOMEWORK

Homework problems will be assigned during each class meeting, but will not be collected or graded. To succeed in this class you must do the homework. Solving problems on your own is the only way to test your understanding of a concept.

This is an advanced class, so expect the homework to be challenging. The homework sets are designed to push you beyond mere repetition and practice. You will most likely need to get help on the homework, so be prepared to ask questions.

QUIZZES

A take-home quiz worth 10 points will be given most weeks. The tentative due dates of the quizzes can be found on your class calendar. There will be a total of 11 quizzes during the semester, and your one lowest score will be dropped. **Make-up quizzes, early or late, will NOT be allowed for any reason.**

EXAMS

There will be 3 exams given during the semester, each worth 120 points. **No make-up exams will be given** unless you (a) have a documented, verified emergency; AND (b) notify me before or on the day of the exam. If you miss an exam without following these guidelines, you will receive a grade of zero on that exam.

FINAL EXAM

The final exam for this class is scheduled for Monday, December 14, from 10:15 am – 12:15 pm. The exam is worth 180 points and is **cumulative**. About half of the exam will cover Chapter 16, and about half of the exam will cover material from the previous chapters.

ACADEMIC HONOR CODE

Students are responsible for adhering to the Saddleback College Academic Honor Code, outlined in the Student Handbook. Cheating, in any form, **WILL NOT BE TOLERATED**. A student found cheating on an exam or quiz will receive a zero on the exam or quiz, and **this score will not be dropped**. A more detailed description of the Division of Math, Science & Engineering policy on cheating can be found on my website.

ATTENDANCE AND CLASSROOM POLICIES

Attendance: All students are expected to attend each class meeting on time. If you do miss class for any reason, you are responsible for material that was covered in your absence. **Students may be dropped after 6 missed hours of class, according to Saddleback College policy.** If you *choose* to drop the course, it is your responsibility to do so.

Calculators: Scientific calculators are permitted for use on all quizzes and exams. **Graphing calculators and cell phones may not be used.** Under no circumstances will you be allowed to share a calculator with a classmate during a quiz or exam.

Class Conduct:

1. Please do not talk in class as it is a distraction to other students. If you cannot refrain from talking, you will be asked to change seats or leave the class.
2. Cell phone disruptions will not be tolerated in my classroom. Turn them off and put them away before you enter the class.
3. Respect your peers.
4. Eating and drinking is not permitted in the classroom with the exception of bottled water.

STUDENTS WITH DISABILITIES

All students who have been authorized for academic adjustments and/or accommodations for examinations should submit the proper authorization forms *within the first two weeks* of the course.

IMPORTANT DATES TO REMEMBER

Friday, 9/4: Last day to drop with a refund

Friday, 9/25: Last day to elect CR/NC grading option; last day to drop without "W" (withdrawal) grade

*Thursday, 11/5: Last day to drop with "W" grade

**Note: If you are enrolled in the class after 11/5 you will receive a grade for the class.*

HOW TO SUCCEED IN THIS CLASS

1. In the book, read the material to be covered BEFORE class to become familiar with new words and concepts.
2. Attend every class meeting on time.
3. Participate during lecture by taking careful notes and asking questions.
4. Review the notes after class and practice the problems done as examples in class.
5. Try the homework problems before the next class meeting, making note of which problems you are unable to solve. DO NOT fall behind!
6. Ask questions as they arise about any material that is unclear, either in class, during my office hours, or in LAP.
7. Work to understand the "why" of math, not just the "how." *Understanding*, not memorizing, is the goal.

EXTRA HELP

Free tutoring is available through the Learning Assistance Program (LAP). LAP is located in Library 114 and is open 8 a.m. – 8 p.m. Monday through Thursday and Fridays from 8 a.m. to 2 p.m.

CLASS TIMELINE

The schedule that follows is tentative. We will try to follow this schedule closely, but changes may occur. It is your responsibility to stay current with the class and be aware of such changes.