

Cedar Crest College
Calculus IV - MAT 212 00 2
Spring 2010
MWF 8:00 am-8:50 am CUR 206

Professor: Dr. Michael Sarver
Office: Curtis 219

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Office Hours

Monday, Wednesday, Friday 9:00 a.m. - 9:50 a.m.
Monday, Wednesday 1:00 p.m. - 3:00 p.m.
Additional office hours are available by appointment.

Required Text:

Stewart, Multivariable Calculus, 6th ed., Thomson-Brooks/Cole, 2008.

Course Description:

We will discuss how the techniques of Calculus I and II can be generalized to three dimensional (and higher dimensional) problems.

Course Outcomes:

Upon successful completion of the course the student should be able to

- ★ Perform basic computations in three dimensional coordinate systems
- ★ Perform vector operations such as addition, dot product, and cross product and apply these operations in problems involving curves and surfaces in R³
- ★ Demonstrate an understanding of multivariable functions.
- ★ Demonstrate an understanding of partial differentiation and its applications.
- ★ Demonstrate an understanding of multiple integration and its applications.

Assessment:

There will be three exams each accounting for 25% of your final average. The remaining 25% will consist of four quizzes.

The grade scale that I will use to assign final grades is A (93 and up), A- (90-93), B+ (87-90), B (83-87), B- (80-83), C+ (77-80), C (73-77), C- (70-73), D+ (67-70), D (60-67), F(Below 60).

Attendance in class is expected of all students and mandatory on exam days, but it will not be factored numerically into your grade. Make-up exams will be given only with prior notification and documentation of a legitimate excuse. There are **no** makeups for missed quizzes

Notes

• I fully support the Cedar Crest College Honor Code and the Classroom Protocol code as stated in the Customs Book. Appropriate classroom behavior is implicit in the Cedar Crest College Honor Code. Such behavior is defined and guided by complete protection for the rights of all students and faculty to a courteous, respectful classroom environment. That environment is free from distractions such as late arrivals, early departures, inappropriate conversations and any other behaviors that might disrupt instruction and/or compromise students' access to their Cedar Crest College education.

- Students should not make any travel arrangements for the end of the semester until after the final exam schedule is published.
- Cell phones should be turned off for the duration of the class period.
- Collaboration on daily homework is expected and encouraged, but any work turned in for a grade should be your own. Violations of the college plagiarism policy will be reported to the dean and result in a grade of zero for the particular assignment / exam.
- It is vitally important for you to keep current with the work. Students who fall behind early quickly find themselves in a hole that is very difficult, if not impossible, to get out of. I'm more than willing to meet with you during my office hours or otherwise

to help you succeed, but you must make the effort. Feel free to drop by my office, even if it's not my scheduled office hour.

- The format of the course will be lecture/discussion with much emphasis on homework discussion. In order for this to work it is vitally important for you to come to class prepared.
- It will be beneficial for you to have read the day's material before coming to class.
- Students with documented disabilities who may need academic accommodations should discuss these needs with me during the first two weeks of class. Any student who wishes to request accommodations should contact the Advising Center.

Tentative Schedule

Date	Day	Sections
Jan 20	Wednesday	Intro, 13.1
Jan 22	Friday	13.2
Jan 25	Monday	13.3
Jan 27	Wednesday	13.3,13.4
Jan 29	Friday	13.4
Feb 01	Monday	13.5
Feb 03	Wednesday	Quiz #1
Feb 05	Friday	13.6
Feb 08	Monday	13.6, Review
Feb 10	Wednesday	Exam #1
Feb 12	Friday	14.1
Feb 15	Monday	14.2
Feb 17	Wednesday	14.3
Feb 19	Friday	14.3,14.4
Feb 22	Monday	14.4
Feb 24	Wednesday	Quiz #2
Feb 26	Friday	15.1
Mar 01	Monday	15.2
Mar 03	Wednesday	15.2
Mar 05	Friday	15.3
Mar 08	Monday	Spring Break
Mar 10	Wednesday	Spring Break
Mar 12	Friday	Spring Break
Mar 15	Monday	15.4
Mar 17	Wednesday	15.4
Mar 19	Friday	15.5
Mar 22	Monday	15.5
Mar 24	Wednesday	15.6
Mar 26	Friday	Exam #2
Mar 29	Monday	15.6
Mar 31	Wednesday	15.7
Apr 02	Friday	No Class
Apr 05	Monday	No Class
Apr 06	Tuesday	15.7
Apr 07	Wednesday	15.8
Apr 09	Friday	Quiz #3
Apr 12	Monday	15.8
Apr 14	Wednesday	16.1
Apr 16	Friday	16.2
Apr 19	Monday	16.3
Apr 21	Wednesday	16.3
Apr 23	Friday	Quiz #4
Apr 26	Monday	16.4
Apr 28	Wednesday	16.4,16.5
Apr 30	Friday	16.5,16.6
May 03	Monday	16.6
May 05	Wednesday	Review
TBA		Final Exam