

Fall- Math 274

MWF 8:30-9:35 in RS 13

Instructor: Dr. Catherine Crockett
email: catherinecrockett@pointloma.edu
office phone: 619-849-2723
Office RS 226
Office Hours: MW 1-3:30; T Th 3-4; F 11-12 or by appointment
Text: *Multivariable Calculus*, 7th edition By James Steward
Other Materials: A scientific calculator.

Important Dates:

- Exam 1: Monday, September 26**
- Exam 2: Wednesday, October 26**
- Exam 3: Wednesday, November 30**
- Final Exam: Wednesday, December 14 8-10:00 am**

Course Description

Conceptual development of the calculus of functions of more than one variable supported by the use of a symbolic computer algebra system. Limits and continuity, partial derivatives, chain rule, extreme values, Taylor's theorem, multiple integrals, line and surface integrals, Green's Theorem and Stokes' Theorem.

Learning Outcomes

Students will understand the theory of algorithms and computation.
Students will be able to demonstrate facility with analytical concepts.
Students will be able to demonstrate facility with algebraic structures.
Students will be able to apply their mathematical knowledge to solve problems.
Students will be comfortable using technology to solve problems.
Students will communicate effectively orally and in writing.
Students will have an understanding of the historical development, contemporary progress and societal role of mathematics.

Grading: Grades for the course will be based on the following:

Homework (25%),

Three exams (15% each; total of 45 %)

Final exam (30%)

Grading Scale: Approximate minimal percentages required to obtain a given grade are:

Grading Scale in percentages				
	A	B	C	D
+		(87.5, 90)	(77.5, 80)	(67.5, 70)
	[92.5, 100]	[82.5, 87.5]	[72.5, 77.5]	[62.5, 67.5]
-	[90, 92.5)	[80, 82.5)	[70, 72.5)	[60, 62.5)

Homework (25%): Homework will be assigned every class meeting. All homework assigned in a week will be due **at the start of class** the next Wednesday. No late homework will be accepted except by prior arrangement or with a documented emergency. The object of the homework is to learn how to do the problems so I expect to see calculations on your homework using the terminology and methods of the class and not just an answer. Homework will be scored on a combination of completeness (with work shown) and correctness. A random selection (the same for all people) of the problems will be graded on any homework assignment. The two lowest homework scores will be dropped.

Exams(15% each): There are three in-class exams. If you do not take an exam you will receive a zero for it. Late exams may be taken only by prior arrangement with me or a well documented emergency beyond your control. The examination schedule is included in the daily schedule. I do not intend to accept excuses such as poor communication with parents, benefactors, sport team sponsors and/or travel agents.

Final Exam (30%) : The final is comprehensive and is given on Wednesday , December 14 8:00 to 10:00 am. The final exam date and time is set by the university at the beginning of the semester and may not be changed by the instructor. Only in the case that a student is required to take three exams during the same day of finals week is an instructor authorized to change the exam date and time for that particular student.

Please note: The Final Exam is COMPREHENSIVE.

December 14, (Wednesday) at 8 - 10:00

Attendance: Attendance is expected at each class session. In the event of an absence you are responsible for the material covered in class and the assignments given that day. See the Point Loma Nazarene University Catalog for a statement of the university's policy respect to attendance. Remember that missing more than one and a half week's worth of classes can result in a failing grade. After you miss the equivalent of 4 class periods, you will be warned of impending de-enrollment. If you miss the equivalent of 9 class periods, you will be de-enrolled.

Class Enrollment:

It is the student's responsibility to maintain his/her class schedule. Should the need arise to drop this course (personal emergencies, poor performance, etc.), the student has the responsibility to follow through (provided the drop date meets the stated calendar deadline established by the university), not the instructor. Simply ceasing to attend this course or failing to follow through to arrange for a change of registration (drop/add) may easily result in a grade of F on the official transcript.

Academic Accommodations:

While all students are expected to meet the minimum academic standards for completion of this course as established by the instructor, students with disabilities may require academic accommodations. At Point Loma Nazarene University, students requesting academic accommodations must file documentation with the Disability Resource Center (DRC), located in the Bond Academic Center. Once the student files documentation, the Disability Resource Center will contact the student's instructors and provide written recommendations for reasonable and appropriate accommodations to meet the individual needs of the student. This policy assists the university in its commitment to full compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities (ADA) Act of 1990, and ADA Amendments Act of 2008, all of which prohibit discrimination against students with disabilities and guarantees all qualified students equal access to and benefits of PLNU programs and activities.

Students with learning disabilities who may need accommodations should discuss options with the instructor during the first two weeks of class.

Academic Honesty:

The Point Loma Nazarene University community holds the highest standards of honesty and integrity in all aspects of university life. Academic honesty and integrity are strong values among faculty and students alike. Any violation of the university's commitment is a serious affront to the very nature of Point Loma's mission and purpose.

Academic dishonesty is the act of presenting information, ideas, and/or concepts as one's own when in reality they are the results of another person's creativity and effort. Such acts include plagiarism, copying of class assignments, and copying or other fraudulent behavior on examinations. For more details on PLNU's policy go to: <http://www.pointloma.edu/experience/academics/catalogs/undergraduate-catalog/point-loma-education/academic-policies>

A student who is caught cheating on any item of work will receive a zero on that item and may receive an "F" for the semester. See the PLNU Catalog for a further explanation of the PLNU procedures for academic dishonesty.

Side Note: Turn off any cell phone, pager or things that make noise while you are in class. Also, do not text or work on other classes while in class -to do so is disrespectful to your classmates and me- and may lower your grade.

General Advice:

You learn mathematics by doing it yourself. You should expect to spend approximately two hours outside of class for every one hour in class working on homework and going over concepts. When doing homework, please note it is normal to not be able to do every problem correct on the first attempt. Do not be discouraged, instead seek help.

Please note this schedule is tentative. Any changes will be announced.

Week	Monday	Tuesday	Wednesday	Thursday	Friday
1	8/29 No Class	8/30 Introduction 12.1	8/31 12.2 and 12.3	9/1	9/2 12.3 and 12.4
2	9/5 No Class	9/6	9/7 12.5	9/8	9/9 12.6
3	9/12 13.1 and 13.2	9/13	9/14 13.2 and 13.3	9/15	9/16 13.4
4	9/19 14.1 and 14.2	9/20	9/21 14.2	9/22	9/23 Review
5	9/26 Exam 1	9/27	9/28 14.3	9/29	9/30 14.4
6	10/3 14.5	10/4	10/5 14.6	10/6	10/7 14.7
7	10/10 14.8	10/11	10/12 15.1 and 15.2	10/13	10/14 15.3
8	10/17 15.4	10/18	10/19 15.5	10/20	10/21 No Class Fall Break Day
9	10/24 Review	10/25	10/26 Exam 2	10/27	10/28 15.6

10	10/31 15.7	11/1	11/2 15.8	11/3	11/4 15.9
11	11/7 15.10	11/8	11/9 16.1	11/10	11/11 16.2
12	11/14 16.3	11/15	11/16 16.4	11/17	11/18 16.5
13	11/21 16.6	11/22	11/23 No Class	11/24 No Class	11/25 No Class
14	11/28 Review	11/29	11/30 Exam 3	12/1	12/2 16.7
15	12/5 16.8	12/6	12/7 16.9	12/8	12/9 Review
Final Exams Week	12/12	12/13	12/14 Final exam 8-10 a.m	12/15	12/16