

Point Loma Nazarene University

Department of Mathematical, Information and Computer Science

MTH274-1 Calculus III
Class Time MWF 10:55 am – 12:05 pm
Location RS 219

Instructor Jesus Jimenez, Ph.D.
Office RS 218
Phone 619-849-2634
Email jjimenez@pointloma.edu
Office Hours MTW 1:15 pm – 3:15 pm or by appointment

Textbook Calculus, 8th Edition
Author James Stewart

Important Dates

Exam 1 9-20-2017

Exam 2 10-23-2017

Exam 3 11-20-2017

Final Exam 12-15-2017 at 10:30 am

Late Assignment/Exam Policy All assignments are to be submitted/turned in by the beginning of the class session when they are due—including assignments posted in Canvas. Incompletes will only be assigned in extremely unusual circumstances.

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.

Grade Distribution

Three partial exams @ 150 points each	450
Final Exam	300
Homework	250
Total	1000

Grading Scale

	A	B	C	D	F
+		>86%	>76%	>66%	<59%
	>90%	>83%	>73%	>63%	
–	>88%	>80%	>70%	>59%	

Course Requirements

Prerequisites
MTH174.

PLNU MISSION: TO TEACH ~ TO SHAPE ~ TO SEND

Point Loma Nazarene University exists to provide higher education in a vital Christian community where minds are engaged and challenged, character is modeled and formed, and service becomes an expression of faith. Being of Wesleyan heritage, we aspire to be a learning community where grace is foundational, truth is pursued, and holiness is a way of life.

DEPARTMENT MISSION

The Mathematical, Information, and Computer Sciences department at Point Loma Nazarene University is committed to maintaining a curriculum that provides its students with the tools to be productive, the passion to continue learning, and Christian perspectives to provide a basis for making sound value judgments.

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.

COURSE LEARNING OUTCOMES FOR MTH274

- 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 able to use technology to solve problems.
- Students will be able to speak about their work with precision, clarity and organization.
- Students will be able to write about their work with precision, clarity and organization.
- Students will collaborate effectively in teams.
- Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
- Students will be able to understand and create arguments supported by quantitative evidence, and they can clearly communicate those arguments in a variety of formats.

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.

Regular and punctual attendance at all classes is considered essential to optimum academic achievement. If the student is absent from more than 10 percent of class meetings, the faculty member can file a written report which may result in de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice until the university drop date or, after that date, receive the appropriate grade for their work and participation.

See [http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#Class Attendance](http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#Class_Attendance) in the Undergraduate Academic Catalog.

ACADEMICS ACOMODATIONS

If you have a diagnosed disability, please contact PLNU's Disability Resource Center (DRC) within the first two weeks of class to demonstrate need and to register for accommodation by phone at 619-849-2486 or by e-mail at DRC@pointloma.edu.

See Disability Resource Center for additional information. For more details see the PLNU catalog:

[http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#Academic Accommodations](http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#Academic_Accommodations)

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

ACADEMIC HONESTY

Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others.

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. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for that assignment or examination, or, depending on the seriousness of the offense, for the course.

Faculty should follow and students may appeal using the procedure in the university Catalog. See

[http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#Academic Honesty](http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#Academic_Honesty) for definitions of kinds of academic dishonesty and for further policy information.

THE FINAL EXAM POLICY

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. This schedule can be found on the university website and in the course calendar. No requests for early examinations will be approved.

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 consider changing the exam date and time for that particular student.

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CREDIT HOUR

In the interest of providing sufficient time to accomplish the stated course learning outcomes, this class meets the PLNU credit hour policy for a 4 unit class delivered over 16 weeks. Specific details about how the class meets the credit hour requirements can be provided upon request.

Meeting	Day	Date	Section	Homework Problems	Due
1	Tue	8/29/17	12.1 - 12.2	12.1 2, 5, 7, 11, 13, 18, 21, 26, 32, 38, 42, 45 12.2 4, 13, 18, 25, 27, 31, 34, 37, 43, 51	9/1/17
2	Wed	8/30/17	12.3	5, 7, 9, 12, 14, 23, 26, 31, 41, 51, 61, 63	9/1/17
3	Fri	9/1/17	12.4	1, 5, 11, 16, 19, 25, 30, 33, 39, 44, 47, 53	9/6/17
4	Mon	9/4/17		Labor Day (No classes)	
5	Wed	9/6/17	12.5	4, 10, 13, 20, 28, 40, 51, 56, 59, 67, 70, 82	9/8/17
6	Fri	9/8/17	12.6	4, 9, 13, 21, 26, 29, 31, 34, 43, 50	9/11/17
7	Mon	9/11/17	13.1	5, 12, 17, 23, 26, 28, 38, 47, 50, 53	9/13/17
8	Wed	9/13/17	13.2	3, 8, 12, 20, 25, 36, 40, 53, 55, 57	9/15/17
9	Fri	9/15/17	13.3	2, 6, 7, 11, 14, 18, 25, 27, 33, 46, 56, 59	9/18/17
10	Mon	9/18/17	13.4	1, 4, 11, 19, 23, 33, 44	9/20/17
11	Wed	9/20/17		Exam 1	
12	Fri	9/22/17	14.1	2, 5, 7, 8, 10, 21, 22, 28, 32, 33, 36, 44, 46, 79	9/25/17
13	Mon	9/25/17	14.2	2, 6, 16, 25, 34, 37, 39, 42	9/27/17
14	Wed	9/27/17	14.3	3, 10, 14, 14, 23, 32, 44, 47, 60, 63, 72, 74, 76, 91	9/29/17
15	Fri	9/29/17	14.4	2, 4, 6, 15, 17, 20, 22, 25, 34, 40	10/2/17
16	Mon	10/2/17	14.5	1, 6, 9, 14, 15, 17, 27, 31, 35, 43, 59	10/4/17
17	Wed	10/4/17	14.6	1, 4, 8, 13, 18, 23, 32, 38, 46, 64, 67	10/6/17
18	Fri	10/6/17	14.7	1, 4, 6, 12, 18, 21, 23, 32, 41, 59	10/9/17
19	Mon	10/9/17	14.8	3, 10, 15, 16, 19, 26, 29, 32, 49	10/11/17
20	Wed	10/11/17	14.8		10/13/17
21	Fri	10/13/17	15.1	1, 3, 6, 7, 13, 24, 29, 34, 35, 37, 47, 49	10/16/17
22	Mon	10/16/17	15.2	2, 5, 8, 11, 15, 19, 25, 30, 36, 45, 56, 57, 67	10/18/17
23	Wed	10/18/17		Fall Break (No classes)	10/23/17
24	Fri	10/20/17	15.2		
25	Mon	10/23/17		Exam 2	
26	Wed	10/25/17	15.3	2, 4, 5, 7, 15, 22, 33, 35, 36, 39	10/27/17
27	Fri	10/27/17	15.4	1, 3, 9, 15, 17, 22, 28, 32	10/30/17
28	Mon	10/30/17	15.5	1, 2, 9, 12, 14, 23, 24	11/1/17
29	Wed	11/1/17	15.6	2, 4, 8, 9, 13, 20, 24, 27, 34, 37, 43, 47	11/3/17
30	Fri	11/3/17	15.7	2, 3, 6, 9, 15, 21, 26, 27, 31	11/6/17
31	Mon	11/6/17	15.8	1, 3, 8, 13, 15, 17, 20, 21, 28, 30, 32, 41, 44	11/8/17
32	Wed	11/8/17	15.9	2, 5, 8, 12, 17, 22, 25	11/10/17
33	Fri	11/10/17	16.1	3, 9, 12, 14, 18, 22, 25, 33, 35	11/13/17
34	Mon	11/13/17	16.2	2, 7, 12, 17, 20, 33, 37, 42, 45, 52	11/15/17
35	Wed	11/15/17	16.3	2, 6, 7, 11, 12, 19, 21, 22, 23, 25, 33, 36	11/17/17
36	Fri	11/17/17	16.4	2, 6, 9, 12, 17, 26, 29	11/20/17
37	Mon	11/20/17		Exam 3	11/27/17
38	Wed	11/22/17		Thanksgiving (No classes)	
39	Fri	11/24/17		Thanksgiving (No classes)	
40	Mon	11/27/17	16.5	1, 7, 10, 14, 21, 24, 27, 32, 33, 37	11/29/17
41	Wed	11/29/17	16.6	1, 3, 6, 13, 18, 23, 32, 46, 64	12/1/17
42	Fri	12/1/17	16.7	5, 9, 16, 23, 30, 40, 44, 47	12/4/17
43	Mon	12/4/17	16.7		
44	Wed	12/6/17	16.8	1, 2, 6, 11, 13, 16, 18	12/15/17
45	Fri	12/8/17	16.8		
46	Mon	12/11/17			
47	Wed	12/13/17			
48	Fri	12/15/17		Final Exam (10:30 am - 1:00 pm) Comprehensive	