



Department of Mathematical, Information, Computer Sciences
 College of Natural and Social Sciences
 MTH144-2 (Calculus with Applications)
 4 units

Spring 2018

Meeting days: MWF 10:55 am – 12:05 am

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Meeting location: RLC 108

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Textbook: Calculus & its Applications. Goldstein, Lay, Schneider, Asmar. Pearson, 14th Edition.

Office: Rhor Science 218

Course Requirements: MTH123 or MTH133, or equivalent.

Office Hours: M 1:15 – 2:15, T R 1:15 – 2:30

Resources: Library, Computer Lab, Math Tutoring Center.

Exam 1: 2/5/18

Exam 2: 3/14/18

Exam 3: 4/16/18

Final Exam: 5/4/18, Friday (10:30 am – 1:00 pm)

University Mission

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 is an expression of faith. Being of Wesleyan heritage, we strive 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

Differential and integral calculus of the elementary functions of one variable. Limits, continuity, derivatives, integrals and applications.

General Education

This course is one of the components of the General Education Program at Point Loma Nazarene University, under the category of *Developing Cognitive Abilities*. By including this course in a common educational experience for undergraduates, the faculty supports the pursuit of personal awareness and skill development, focusing on the analytical, communicative, and quantitative skills necessary for successful living in society.

General Education Learning Outcomes for this Course:

- A. Students will demonstrate effective written and oral communication skills, both as individuals and in groups.
 1. Students will be able to formulate a mathematical model from a verbal description of a problem.
- B. Students will use quantitative analysis, qualitative analysis, and logic skills to address questions and solve problems.
 2. Students will be able to solve non-routine problems using logic and quantitative techniques.
 3. Students will be able to construct solutions to problems using computational techniques.

Financial Literacy

A portion of PLNU's mathematics general education is focused on financial literacy. Part of this class will examine issues related to borrowing and saving money, budgeting and the use of credit cards using some of the concepts introduced in calculus.

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 [Attendance Policy](#) in the in the Undergraduate Academic Catalog.

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

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 under [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 [the catalog](#) for definitions of kinds of academic dishonesty and for further policy information.

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.

Copyright Protected Materials

Point Loma Nazarene University, as a non-profit educational institution, is entitled by law to use materials protected by the US Copyright Act for classroom education. Any use of those materials outside the class may violate the law.

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. Note that if you have an online or hybrid class then you need to provide further details of the amount of time spent in various activities. We have samples in the department.

Homework

Homework will be assigned every class meeting. A homework assignment is late if it is not received at the start of class on the due date. No late homework will be accepted. However, the two lowest homework scores will be dropped. Please be sure that your homework is stapled together and the problems are in order. Homework will be scored on a combination of completeness and correctness. A random selection (the same for all people) of the problems will be graded on any homework assignment.

Late Work

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.

Partial Exams Policy

Tests and the Final Exam will include problems and questions over material assigned in the text, readings and handouts, as well as material presented in class.

No examination shall be missed without **prior consent by me** or a well-documented emergency beyond your control. A score of zero will be assigned for an examination that is missed without prior consent 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.

Grade Distribution

Three partial exams @ 15 % each	45 %
Final Exam	30 %
Homework	25 %
Total	100 %

Grading Scale

Course grades will be assigned according to the following scale:

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)

Cell Phones

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 me and your classmates.

General Advice

The key to success in this class is to attend lectures regularly and do your homework. 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.

Tentative Schedule and Homework assignment: While topic order may change — the test dates will not.

Week	Day	Date	Section	Homework	Due Date
1	Tue	1/9/18	1.1	7, 8, 11, 12, 16, 20, 24, 28, 31, 47, 59, 60	1/12/18
	Wed	1/10/18	1.2	2, 3, 4, 15, 16, 17, 18, 23, 24	1/12/18
	Fri	1/12/18	1.3	6, 9, 11, 12, 16, 17, 20, 24, 25, 28, 30, 33, 36, 49, 50, 55, 54, 71, 72	1/17/18
2	Mon	1/15/18		Martin Luther King Day (No Class)	
	Wed	1/17/18	1.4	2, 3, 4, 6, 7, 10, 11, 14, 17, 22, 23, 29, 32, 34, 37, 40, 43, 45	1/19/18
	Fri	1/19/18	1.5	1-6, 13, 16, 18, 29, 31	1/22/18
3	Mon	1/22/18	1.6	1, 4, 7, 8, 11, 16, 21, 24, 29, 41, 49-52, 57, 62	1/24/18
	Wed	1/24/18	1.7	4-7, 21-27, 37, 40, 45	1/26/18
	Fri	1/26/18	1.8	2, 3, 6, 7, 8, 12, 15, 18, 19, 31, 33	1/29/18
4	Mon	1/29/18	2.1	17, 18, 20, 21, 22, 27, 28, 33, 34, 39, 40	1/31/18
	Wed	1/31/18	2.2	1-4, 7, 8, 10, 11, 19, 24, 37, 44	2/2/18
	Fri	2/2/18	2.3	2, 4, 7, 17, 20, 23, 35, 38, 42, 43, 44	2/5/18
5	Mon	2/5/18		Exam 1 (1.1 – 2.3)	
	Wed	2/7/18	2.5		
	Fri	2/9/18	2.5	1, 3, 4, 6, 10, 11, 15, 23, 24, 27, 28	2/12/18
6	Mon	2/12/18	3.1	1, 3, 4, 8, 10, 11, 19, 26, 27, 39, 42, 45, 52, 53, 60, 61	2/14/18
	Wed	2/14/18	3.2	3, 5, 10, 11, 12, 13, 17, 20, 41, 44, 57, 59	2/16/18
	Fri	2/16/18	3.3	2, 5, 9, 10, 15, 27, 31, 32, 43, 46	2/19/18
7	Mon	2/19/18	3.3		
	Wed	2/21/18	4.1	11, 12, 19, 20, 21, 40, 41	2/23/18
	Fri	2/23/18	4.2	2, 5, 11, 14, 19, 20, 25, 26, 29, 31, 43, 44	2/26/18
8	Mon	2/26/18	4.3	13, 15, 26, 27, 32, 36, 37, 38, 45, 46	2/28/18
	Wed	2/28/18	4.4	1, 5, 6, 7, 12, 13, 16, 23, 27, 30, 34, 35, 38, 39, 40	3/2/18
	Fri	3/2/18	4.5	7, 8, 9, 12, 13, 19, 21, 25, 31	3/12/18
9	Mon	3/5/18		Spring Break (No Class)	
	Wed	3/7/18		Spring Break (No Class)	
	Fri	3/9/18		Spring Break (No Class)	
10	Mon	3/12/18	5.1	1, 4, 5, 11, 12, 14, 15, 22, 31	3/14/18
	Wed	3/14/18		Exam 2 (2.4 – 4.5)	
	Fri	3/16/18	5.2	1, 4, 5, 6, 7, 25, 27	3/19/18
11	Mon	3/19/18	6.1	7, 8, 9, 10, 12, 15, 16, 17, 22, 26, 29, 34, 41, 44, 49, 55, 60	3/21/18
	Wed	3/21/18	6.2	5, 7, 8, 10, 11, 12, 16, 19, 27, 28, 35, 43	3/23/18
	Fri	3/23/18	6.3	1, 3, 6, 7, 8, 11, 14, 19, 20, 23	3/26/18
12	Mon	3/26/18	6.4	1-6, 8, 9, 14, 15, 29, 43, 44, 45	3/28/18
	Wed	3/28/18	6.5	2, 3, 5, 9, 10, 11, 22, 23, 29, 31	4/4/18
	Fri	3/30/18		Easter Break (No Class)	
13	Mon	4/2/18		Easter Break (No Class)	
	Wed	4/4/18	8.1	1, 4, 5, 6, 7, 13, 14	4/6/18
	Fri	4/6/18	8.2	2, 7, 13, 21, 31, 34, 35, 36, 39	4/9/18
14	Mon	4/9/18	8.3	2, 5, 12, 15, 16, 21, 22, 32, 35, 36, 40, 43, 47, 48, 51	4/11/18
	Wed	4/11/18	8.4	4, 5, 7, 8, 14, 18, 21, 22, 24, 30, 31, 36, 38, 39, 40	4/13/18
	Fri	4/13/18	9.1	2, 3, 4, 7, 8, 12, 13, 17, 18, 22, 25, 26, 39, 40, 44, 45, 48, 49, 51	4/18/18
15	Mon	4/16/18		Exam 3 (5.1 – 8.4)	
	Wed	4/18/18	9.2	2, 3, 7, 8, 10, 11, 16, 19, 20, 26, 29, 30, 31, 32	4/20/18
	Fri	4/20/18	9.3	5, 6, 7, 9, 10	4/23/18
16	Mon	4/23/18	11.1	5, 7, 19, 20	4/25/18
	Wed	4/25/18	11.2	5, 7, 8	4/27/18
	Fri	4/27/18		Finance Mathematics	5/2/18
Final Exam Week	Mon	4/30/18		Finance Mathematics	
	Wed	5/2/18			
	Thu	5/3/18			
	Fri	5/4/18		Final Exam 10:30 am – 1:00 pm	