
**Point Loma
Nazarene University**

**Department of Mathematical, Information
and Computer Sciences**

MTH 1074 Calculus II

4.0 units

Spring 2021

MWF 8:30- 9:25 Zoom/ RS 295

T: 8:15- 9:10 Zoom

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Ph.D.**

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**Office hours: By Appointment in
Zoom**

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 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:

A continuation of Calculus I supported by the use of computer graphics and a symbolic computer algebra system. Methods of integration, sequences, series, elementary differential equations, polar coordinates and parametric equations.

Prerequisites: MTH 1064 or MTH 1044, or equivalent.

COURSE LEARNING OUTCOMES

- 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 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 gather relevant information, examine information and form a conclusion based on that information.
- 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.

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

Stewart, James. *Calculus, 8th ed.* Boston, Cengage, 2016. This is a digital text. The text will be available once the student signs up to the WebAssign website. Some course assignments will be completed on WebAssign which will be integrated with CANVAS.

COURSE CREDIT HOUR INFORMATION

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 15 weeks. Specific details about how the class meets the credit hour requirement can be provided upon request. (Based on 37.5 hours of student engagement per credit hour.)

Distribution of Student Learning Hours	
Category	Time Expectation in Hours
Class participation- Zoom/ face-to-to	42.0
Reading & Video Assignments	36.0
Written Homework	28.0
Online Homework	22.0
Collaborative Activity Labs	17.0
Exams	3.0
Final Exam	2.5
Total Hours	150.5

ASSESSMENT AND GRADING

Graded Components

- Collaborative Activity Labs:** The labs are due at the scheduled dates and times, and are submitted ONLY in Word, Excel, or .pdf format in Canvas (e.g. Google Docs and Apple Numbers are not permitted). These labs are to be completed in pairs. (Please sign up in CANVAS for your lab partner). There is almost a century of research showing that academic achievement, productivity, and self-esteem improve dramatically when students work together in groups. This method emphasizes teamwork, cooperation and support by others, rather than isolation and competition in learning.
- Homework:** Online homework (denoted OH) will be completed in WebAssign. Written Homework will be assigned every class meeting. All Written homework assigned in a week will be due on Monday of the following week. No late homework will be accepted except by prior arrangement (with me) or with a documented emergency. The object of the homework is to learn how to do the problems so there should be calculations on your homework using the terminology and methods of the class and not just an answer. Written 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 Written homework scores will be dropped.

- **Notes and Videos:** Each section will have videos to watch and you should take notes. Your notes will be submitted in a weekly Canvas Discussion to provide evidence you are keeping up.
- **Examinations and the Final Examination.** Examinations and the Final Examination 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 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 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.
- **Late work will not be accepted** without prior consent or a well-documented emergency. Up to a maximum of one homework assignment will be accepted up to 3 days late provided that consent is received from the professor before it is due. Homework assignments that are submitted late without prior consent will be recorded with a score of zero.
- The examination schedule is included in the daily schedule. This instructor does not intend to accept excuses such as poor communication with parents, benefactors, surf team sponsors and/or travel agents.

Grading Distribution	Percent
Three Examinations at 15% each	45
Final Exam	25
Lab Final Examination	3
Labs	5
Lab Exam	2
Written Homework	10
Online Homework	5
Videos Notes	3
Participation	2
Total	100

Grading Scale

Grades are based on the number of points accumulated throughout the course with the following exception. A student must pass at least one of Exam 1, Exam 2, or the Final Exam in order to pass the class. That is, a score of 60% must be achieved on one of the Exams, or else the final grade will be an F regardless of all other point totals. Approximate minimal percentages required to obtain a given grade are:

Standard Grade Scale Based on Percentages					
	A	B	C	D	F
+		87.5- 90	77.5-80	67.5-70	
	92.5 -100	82.5-87.5	72.5-77.5	62.5 -67.5	0-60
_	90-92.5	80-82.5	70-72.5	60-62.5	

STATE AUTHORIZATION

State authorization is a formal determination by a state that Point Loma Nazarene University is approved to conduct activities regulated by that state. In certain states outside California, Point Loma Nazarene University is not authorized to enroll online (distance education) students. If a student moves to another state after admission to the program and/or enrollment in an online course, continuation within the program and/or course will depend on whether Point Loma Nazarene University is authorized to offer distance education courses in that state. It is the student's responsibility to notify the institution of any change in his or her physical location. Refer to the map on [State Authorization](#) to view which states allow online (distance education) outside of California.

INCOMPLETES AND LATE ASSIGNMENTS

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.

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.

PLNU COPYRIGHT POLICY

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.

PLNU ACADEMIC HONESTY POLICY

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 [Academic Policies](#) for definitions of kinds of academic dishonesty and for further policy information.

PLNU ACADEMIC ACCOMMODATIONS POLICY

While all students are expected to meet the minimum standards for completion of this course as established by the instructor, students with disabilities may require academic adjustments, modifications or auxiliary aids/services. At Point Loma Nazarene University (PLNU), these students are requested to register with the Disability Resource Center (DRC), located in the Bond Academic Center. (DRC@pointloma.edu or 619-849-2486). The DRC's policies and procedures for assisting such students in the development of an appropriate academic adjustment plan (AP) allows PLNU to comply with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act. Section 504 (a) prohibits discrimination against students with special needs and guarantees all qualified students equal access to and benefits of PLNU programs and activities. After the student files the required documentation, the DRC, in conjunction with the student, will develop an AP to meet that student's specific learning needs. The DRC will thereafter email the student's AP to all faculty who teach courses in which the student is enrolled each semester. The AP must be implemented in all such courses.

If students do not wish to avail themselves of some or all of the elements of their AP in a particular course, it is the responsibility of those students to notify their professor in that course. PLNU highly recommends that DRC students speak with their professors during the first two weeks of each semester about the applicability of their AP in that particular course and/or if they do not desire to take advantage of some or all of the elements of their AP in that course.

PLNU ATTENDANCE AND PARTICIPATION POLICY

Remote students and/or all student (while we are in tier purple)

Students taking online courses are expected to attend each week of the course. Attendance is defined as participating in an academic activity within the online classroom which includes posting in a graded activity in the course. (Note: Logging into the course does not qualify as participation and will not be counted as meeting the attendance requirement.)

Students who do not attend at least once in any 3 consecutive days will be issued an attendance warning. Students who do not attend at least once in any 7 consecutive days will be dropped from the course retroactive to the last date of recorded attendance.

Policy for non-remote students and meeting face-to-face.

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 [Academic Policies](#) for further information about class attendance.

SPIRITUAL CARE

Please be aware PLNU strives to be a place where you grow as whole persons. To this end, we provide resources for our students to encounter God and grow in their Christian faith. If students have questions, a desire to meet with the chaplain or have prayer requests you can contact the [Office of Spiritual Development](#)

week	Monday	Tuesday	Wednesday & Friday	Saturday
	Zoom class for all	Zoom class for remote students	Zoom/ face- to-face (two groups)	
1 3/1-3/5	Introduction Section 6.1	Sections 6.6 & 6.7	Sections 6.6 & 6.7	<u>Due:</u> OH 6.1, 6.6, 6.7 Lab #1
2 3/8- 3/12	U-sub review and section 6.8 <u>Due:</u> Notes for sections 7.1 & 7.2 OH 6.8, 7.1, 7.2 Written Homework #1	Sections 7.1 & 7.2	Sections 7.1 & 7.2	<u>Due:</u> Lab #2
3 3/15- 3/19	Section 7.3 <u>Due:</u> Notes for section 7.4 OH 7.3 & 7.4 Written homework #2	Section 7.4	Section 7.4	<u>Due:</u> Lab #3
4 3/22-3/26	Section 7.7 <u>Due:</u> Notes for section 7.8 OH 7.7 & 7.8 Written homework #3	Section 7.8	Section 7.8	<u>Due:</u> Lab #4
5 3/29-4/2	Section 8.1 <u>Due:</u> OH 8.1 Written Homework #4	Review for Exam #1	Review for Exam #1 *Wednesday group join Tuesday's zoom class	<u>Due:</u> Lab #5
6 4/5-4/9	Exam #1 <u>Due:</u> Notes for sections 8.2 & 8.3 OH 8.2 & 8.3	Sections 8.2 & 8.3	Sections 8.2 & 8.3	<u>Due:</u> Lab Exam
7 4/12-4/16	Section 9.1 <u>Due:</u> Notes for sections 9.2 & 9.3 OH 9.1, 9.2, 9.3 Written Homework #5	Sections 9.2 & 9.3	Sections 9.2 & 9.3	<u>Due:</u> Lab #6
8 4/19-4/23	Sections 9.4 <u>Due:</u> Notes for section 9.5 OH: 9.4, 9.5 Written Homework #6	Sections 9.5, Review	Sections 9.5, Review	<u>Due:</u> Lab #7

9 4/26-4/30	Exam #2 <u>Due:</u> Notes for sections 10.1 & 10.2 OH: 10.1 & 10.2 Written Homework #7	Sections 10.1, 10.2	Sections 10.1, 10.2	<u>Due:</u> Nothing
10 5/3-5/9	Section 10.3 <u>Due:</u> Notes for sections 10.4 & 10.5 OH: 10.3, 10.4, 10.5 Written Homework #8	Sections 10.4,10.5	Sections 10.4,10.5 *Wednesday group join Tuesday's zoom class	<u>Due:</u> Lab #8
11 5/10 – 5/14	Sections 11.1 & 11.2 <u>Due:</u> Notes for sections 11.3 & 11.4 OH: 11.1, 11.2, 11.3,11.4 Written Homework #9	Sections 11.3 & 11.4	Sections 11.3 & 11.4	<u>Due:</u> Lab #9
12 5/17 – 5/ 21	Sections 11.5 & 11.6 <u>Due:</u> Notes for section 11.7 OH 11.5, 11.6, 11.7 Written Homework #10	Section 11.7, Review	Section 11.7, Review	<u>Due:</u> Lab #10
13 5/24 – 5/28	Exam #3 <u>Due:</u> Notes for sections 11.8 & 11.9 OH: 11.8, 11.9 Written Homework #11	Sections 11.8 & 11.9	Sections 11.8 & 11.9	<u>Due:</u> Lab Final
14 5/31-6/4	Sections 11.10 &11.11 <u>Due:</u> OH 11.10 & 11.11 Written Homework #12	Review	Review	
Finals week 6/7-6/11			Final Exam 7:30-10:00 <u>Due:</u> Written Homework #13	