


## Syllabus for Calculus III

	Mathematics, Information, and Computer Sciences College of Natural and Social Sciences MTH2074-1 Calculus III (4 units) Pre – requisites: MTH1074, C- or higher.
	Fall 2021: August 30 – December 17

Meeting days: MWF	Instructor: Jesús Jiménez-Reyes, Professor of Mathematics	
Meeting times: 8:30 am – 9:35 am	Phone: 619 – 849 – 2634	
Meeting location: RS 265	Email: jjimenez@pointloma.edu	
Exam 1: 9/22/21 Wednesday Exam 2: 10/27/21 Wednesday Exam 3: 11/22/21 Monday	Textbook Calculus 8 <sup>th</sup> Edition by James Stewart CENGAGE Learning ISBN: 978 – 1 – 285 – 74062 – 1	
Final Exam Date	Office hours:	Tue, Thu 9:30 am – 12:00 pm
12/17/21 (Friday) 7:30 am – 10:00 am		Wed 11:00 am – 12:00 pm and 1:00 – 3:30 pm

**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**

- 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 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.

**REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES**

Calculus 8<sup>th</sup> Edition by James Stewart  
 CENGAGE Learning  
 ISBN: 978 – 1 – 285 – 74062 – 1

**COURSE CREDIT HOURS 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 is provided below.

Homework	40.00
Reading the text	50.00
Lecture meetings	50.00
Quizzes	10.00
Partial exams	3.50
Final exam	2.50
<b>TOTAL</b>	<b>156.00</b>

**GRADE COMPONENTS**

The grade components are homework, quizzes, partial exams, discussions, class attendance, and the final examination.

**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.

**GRADING SCALE**

A passing grade requires getting at least 60% in one of the two exams or on the final exam. Grades are based on the number of points accumulated throughout the course. Approximate cumulative 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]

**GRADING DISTRIBUTION**

Grade Distribution	
Three partial exams at 15% each	45%
Final Exam	25%
Quizzes	10%
Homework	20%
<b>Total</b>	<b>100%</b>

**OTHER FACTORS THAT AFFECT GRADES**

- Quizzes, partial exams, 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 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. This instructor does not intend to accept excuses such as poor communication with parents, benefactors, surf team sponsors and/or travel agents.

**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.

**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.

**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**

PLNU is committed to providing equal opportunity for participation in all its programs, services, and activities. Students with disabilities may request course-related accommodations by contacting the Educational Access Center (EAC), located in the Bond Academic Center ([EAC@pointloma.edu](mailto:EAC@pointloma.edu) or 619-849-2486). Once a student's eligibility for an accommodation has been determined, the EAC will issue an academic accommodation plan ("AP") to all faculty who teach courses in which the student is enrolled each semester.

PLNU highly recommends that students speak with their professors during the first two weeks of each semester/term about the implementation of their AP in that particular course and/or if they do not wish to utilize some or all of the elements of their AP in that course.

Students who need accommodations for a disability should contact the EAC as early as possible (i.e., ideally before the beginning of the semester) to assure appropriate accommodations can be provided. It is the student's responsibility to make the first contact with the EAC.

**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 ATTENDANCE AND PARTICIPATION POLICY**

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.

See [Academic Policies](#) in the Undergraduate Academic Catalog. If absences exceed these limits but are due to university excused health issues, an exception will be granted.

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% of class meetings, the faculty member can file a written report which may result in de-enrollment. If the absences exceed 20%, 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 the Undergraduate Academic Catalog 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](#)

### **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.

### **THE FINAL EXAM IS A COMPREHENSIVE EXAMINATION.**

**DATE:** 12/17/2021 (Friday) from 7:30 am – 10:00 am

Successful completion of this class requires taking the final examination on its scheduled day.

The final exam date, time and place 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.

**DAILY SCHEDULE**

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