Instructor	Jesús Jiménez PhD, Professor of Mathematics
Class Time	Monday, Wednesday 8:30 am – 9:25 am, Friday 7:25 am – 8:20 am and 8:30 am - 9:25 am
Location	F 7:25 am – 8:20 am **RS 236**, MWF 8:30 – 9:25 am **RS 236**
Textbook	Calculus I by Marsden J. and Weinstein A. eTexBook Download
Office	RS 218
Office Hours	Monday 1:00 pm – 4:00 pm, (Tuesday or Thursday) 11 am – 12:00 pm, 3:00 pm – 4:00 pm
eMail	jjimenez@pointloma.edu
Pre-requisites	(MTH123 or MTH133) or equivalent
Phone	619-849-2634
Final Exam	**December 17 (**Wednesday**) 7:30 am - 10:00 am**

Course Description

Calculus of the elementary functions of one variable. Limits, continuity, derivatives, methods of integration and applications.

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.

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.

Course Learning Outcomes

1. Students will be able to demonstrate facility with analytical concepts.
2. Students will be able to demonstrate facility with algebraic structures.
3. Students will be able to use technology to solve problems.
4. Students will be able to speak about their work with precision, clarity and organization.
5. Students will be able to write about their work with precision, clarity and organization.
6. Students will collaborate effectively in teams.
7. Students will be able to identify, locate, evaluate, and effectively and responsibly use and cite information for the task at hand.
8. Students will be able to gather relevant information, examine information and form a conclusion based on that information.
9. 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.

GE Learning Outcome: Students will be able to solve problems that are quantitative in nature:

1. Students will be able to formulate a mathematical model from a verbal description of a problem.
2. Students will be able it solve non-routine problems using logic and quantitative techniques.
3. Students will be able to construct solutions to problems using computational techniques

Grading

Grades for the course will be based on homework and activities (15%), lab (10%), three exams (15% each; total of 45 %), and a final exam (30%).

Homework and Activities (15%)

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, typically two class sessions after it is assigned. No late homework will be accepted. Please be sure that the problems are clear and 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.   The activities will be assigned during the Friday lab time and similar rules apply.

Lab (10 %)

The lab grade consists of **weekly labs** (30%), one **midterm exam** (30%) and a **final exam** (40%).

Three Tests (15% each) **and Final Exam** (30%)

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.

Please note: The Final Exam is COMPREHENSIVE**. December 17, (Wednesday) 7:30 am - 10:00 am**

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)

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 working on homework and going over concepts for every one hour in class. 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, seek help instead.

Attendance

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 has the option of filing a written report which may result in de-enrollment. If the absences exceed 20 percent, the student may be de-enrolled without notice. If the date of de-enrollment is past the last date to withdraw from a class, the student will be assigned a grade of W or WF consistent with university policy in the grading section of the catalog. See Academic Policies in the (undergrad/graduate as appropriate) 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:
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 request academic accommodations. At Point Loma Nazarene University, students must request that academic accommodations by filing 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. See Academic Policies in the (undergrad/graduate as appropriate) academic catalog.

Academic Honesty
Students should demonstrate academic honesty by doing original work and by giving appropriate credit to the ideas of others. As explained in the university catalog, 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. Violations of university academic honesty include cheating, plagiarism, falsification, aiding the academic dishonesty of others, or malicious misuse of university resources. A faculty member who believes a situation involving academic dishonesty has been detected may assign a failing grade for a) that particular assignment or examination, and/or b) the course following the procedure in the university catalog. Students may appeal also using the procedure in the university catalog. See Academic Policies for further information.

FERPA Policy
In compliance with federal law, neither PLNU student ID nor social security number should be used in publicly posted grades or returned sets of assignments without student written permission. This class will meet the federal requirements by (Note: each faculty member should choose one strategy to use: distributing all grades and papers individually; requesting and filing written student permission; or assigning each student a unique class ID number not identifiable on the alphabetic roster.). Also in compliance with FERPA, you will be the only person given information about your progress in this class unless you have designated others to receive it in the "Information Release" section of the student portal. See Policy Statements in the (undergrad/ graduate as appropriate) academic catalog.

Final Exam: Date and Time
Successful completion of this class requires taking the final examination **on its scheduled day**. The final examination schedule is posted on the Class Schedules site. No requests for early examinations or alternative days will be approved.

Cell Phones
Turn off any cell phone while you are in class. Also, do not work on other classes while in class - to do so is disrespectful to me and your classmates. You may be asked to leave the class for such behavior, **resulting in an absence**.

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.

Mon		Wed		Fri	
9/1/2014		9/3/2014	Review of Precalculus	9/5/2014	Review of Precalculus
Labor Day		R.2: Intervals and Absolute Value		R.3, R.4: Exponentes and Straight Lines	
9/8/2014	1.1	9/10/2014	1.2	9/12/2014	1.2
Introduction to the Derivative		Limits		Limits	
9/15/2014	1.3	9/17/2014	1.4	9/19/2014	1.5
The Derivatives as a Limit. Leibniz Notation		Differentiating Polynomials		Products and Quotients	
9/22/2014	1.5	9/24/2014	1.6	9/26/2014	2.1
Products and Quotients		The Linear Approximation and Tangent Lines		Rates of Change and the Secon Derivative	
9/29/2014	2.1	10/1/2014	2.2	10/3/2014	2.2
Rates of Change and the Secon Derivative		The Chain Rule		The Chain Rule	
10/6/2014		10/8/2014	2.3	10/10/2014	2.4
EXAM 1		Fractional Powers and Implicit Differentiation		Related Rates and Parametric Curves	
10/13/2014	2.5	10/15/2014	2.5	10/17/2014	3.1
Antiderivatives		Antiderivatives		Continuity and Intermediate Value Theorem	
10/20/2014	3.2	10/22/2014	3.3	10/24/2014	
Increasing and Decreasing Functions		The Second Derivative Test and Concavity		Fall Break	
10/27/2014	3.4	10/29/2014	3.5	10/31/2014	3.6
Drawing Graphs		Maximum-Minimum Problems		The Mean Value Theorem	
11/3/2014		11/5/2014	4.1, 4.2	11/7/2014	4.3
EXAM 2		Sumation, Sums and Areas		The Definition of Integral	
11/10/2014	4.4	11/12/2014	4.5	11/14/2014	4.6
The Fundamental Theorem of Calculus		Definite and Indefinite Integrals		Applications of the Integral	
11/17/2014	5.1	11/19/2014	5.2	11/21/2014	5.3
Polar Coordinates and Trigonometry		Differentiation of Trigonometric Functions		Inverse Functions	
11/24/2014	5.4	11/26/2014		11/28/2014	
The Inverse Trigonometric Functions			Thanksgiving Recess		Thanksgiving Recess
12/1/2014	5.5	12/3/2014		12/5/2014	6.1
Graphing and Word Problems		EXAM 3		Exponential Functions	
12/8/2014	6.2	12/10/2014	6.3	12/12/2014	6.4
Logarithms		Differentiation of Exponential and Logs		Graphing and Word Problems	
12/15/2014		12/17/2014		12/19/2014	
		Final Exam (7:30 am - 10:00 am)			

Lab Calendar						
Week	**Date**	**Activity**		**Week**	**Date**	**Activity**
1	5-Sep	Coke		8	31-Oct	Work 1
2	12-Sep	Aids 1		9	7-Nov	Work 2
3	19-Sep	Aids 2		10	14-Nov	Population
4	26-Sep	Aids 3		11	21-Nov	Finance 1
5	3-Oct	Aids 4		12	28-Nov	Finance 2
6	10-Oct	Review		13	5-Dec	Finance 3
7	17-Oct	**Exam 1**		14	12-Dec	**Final**