MTH 164-1	Calculus 1
Class Time	MWF 8:30 am – 9:35 am and F 7:30-8:20 am
Location	RS 101

Instructor	Dr. Catherine Crockett
Office	RS 226
Phone	619-849-2723
Email	catherinecrockett@pointloma.edu
Office Hours	MWF 11-12, T & Th 10:45-11:45, MW 1-2 or by appointment

Textbook:	Calculus, 7th Edition by James Stewart
Prerequisite:	MTH 123 or 133 (or equivalent).

Important Dates

Exam 1	October 1	(Monday)
Exam 2	October 31	(Wednesday)
Exam 3	November 19	(Monday before Thanksgiving)
Final exam	December 14	(Friday 8-10 am)

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.

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.

GE Learning Outcome1A Students will demonstrate effective written and oral communication skills, both as individuals and in groups.

Students will be able to formulate a mathematical model from a verbal description of a problem.

GE Learning Outcome1B Students will use quantitative analysis, qualitative analysis, and logic skills to address questions and solve problems.

Students will be able it solve non-routine problems using logic and quantitative techniques.

Students will be able to construct solutions to problems using computational techniques.

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 in which a student is registered is considered essential to optimum academic achievement. Therefore, regular attendance and participation in each course are minimal requirements to be met. There are no allowed or excused absences except when absences are necessitated by certain university-sponsored activities and are approved in writing by the Provost. Whenever the number of accumulated absences in a class, for any cause, exceeds ten percent of the total number of class meetings, the faculty member has the option of filing a written report to the Vice Provost for Academic Administration which may result in de-enrollment, pending any resolution of the excessive absences between the faculty member and the student…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 (no grade). There are no refunds for courses where a de-enrollment was processed." (see catalog for full text)

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 require academic accommodations. At Point Loma Nazarene University, students requesting academic accommodations must file 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. This policy assists the university in its commitment to full compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities (ADA) Act of 1990, and ADA Amendments Act of 2008, all of which prohibit discrimination against students with disabilities and guarantees all qualified students equal access to and benefits of PLNU programs and activities.
Students with learning disabilities who may need accommodations should discuss options with the instructor during the first two weeks of class.

Academic Honesty:
The Point Loma Nazarene University community holds the highest standards of honesty and integrity in all aspects of university life. Academic honesty and integrity are strong values among faculty and students alike. Any violation of the university's commitment is a serious affront to the very nature of Point Loma's mission and purpose.

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. Such acts include plagiarism, copying of class assignments, and copying or other fraudulent behavior on examinations. For more details on PLNU's policy go to:
http://www.pointloma.edu/experience/academics/catalogs/undergraduate-catalog/point-loma-education/academic-policies
A student who is caught cheating on any item of work will receive a zero on that item and may receive an "F" for the semester. See the PLNU Catalog for a further explanation of the PLNU procedures for academic dishonesty.

Final Exam: Date and Time
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. 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 change the exam date and time for that particular student.

Grading: Grades for the course will be based on homework (25%), three exams (15% each; total of 45 %), and a final exam (30%).

Homework (25%): 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.

Tests and Final Exam (15% each and 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 14 , (Friday) at 8:00 a.m. to 10:00 a.m.

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.

Sources of Help:

1. Me. If you have questions, ask me. See office hours.
2. FREE TUTORING- Math Learning Center, RS-230. Hours are posted on the door.
3. Other classmates. Form study groups! Work together!

Week	Monday	Wednesday	Friday
1	8/27 No Class **Meets on Tuesday** **Introduction**	8/29 1.1 Four ways to Represent a Function 1.2 Mathematical Models	8/31 1.3 New Functions from Old Functions
2	9/3 No Class Labor Day	9/5 1.4 The Tangent and Velocity Problems	9/7 1.5 The Limit of a Function

3	9/10 1.6 Calculating limits using the limit laws	9/12 1.7 The precise definition of a limit	9/14 1.8 Continuity
4	9/17 2.1 Derivatives and rates of change	9/19 2.2 The derivative as a function	9/21 2.3 Differentiation formulas
5	9/24 2.4 Derivatives of Trigonometric functions	9/26 2.5 The chain Rule	9/28 Review
6	10/1 **Exam #1**	10/3 2.6 Implicit Differentiation	10/5 2.7 Rates of Change
7	10/8 2.8 Related rates	10/10 2.8 Related rates	10/12 2.9 Linear Approximations and differentials
8	10/15 3.1 Maximum and Minimum Values	10/17 3.2 The Mean Value Theorem	10/19 No Class Fall Break Day
9	10/22 3.3 How derivatives affect the shape of a graph	10/24 3.4 Limits at infinity	10/26 3.5 Summary of curve sketching
10	10/29 Review	10/31 **Exam #2**	11/2 3.7 Optimization Problems
11	11/5 3.7 Optimization Problems	11/7 3.9 Anti derivatives	11/9 4.1 Areas and distances
12	11/12 4.2 The definite integral 4.3 The fundamental theorem of calculus	11/14 4.3 The fundamental theorem of calculus	11/16 Review
13	11/19 **Exam #3**	11/21 No Class	11/23 No Class
14	11/26 4.4 Indefinite integrals and the Net change theorem	11/28 4.5 The substitution rule	11/30 5.1 Area between curves
15	12/3 5.2 Volumes	12/5 5.3 Volumes by cylindrical shells	12/7 Review Last day of classes
Final Exams Week	12/10	12/12	12/14 **Final exam 8-10**