Fall 2014- Math 123: Pre-Calculus Mathematics

MWF 8:30-9:25 in RLC 108

Instructor: Dr. Catherine Crockett

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Office hours: MWF 11-12, MW 1:30- 3:00, T & TH 1:30- 2:30 or by appointment

Textbook: *Precalculus with Calculus Previews*, 5th Ed. By Dennis G. Zill and Jacqueline M. Dewar

Prerequisite: Mathematics 113 (or equivalent).

Important Dates:

Exam #1: **October 13**

Exam #2**: November 24** (the Monday before Thanksgiving)

Final Exam: **December 17** (start time 7:30 am)

Course Description: This course is designed to give a basic introduction to   functions and skills necessary for the study of calculus. We will study polynomial, rational, exponential, logarithmic, and trigonometric functions, coordinate geometry, and graphing.

Class Learning Outcomes:

Students will develop an ability to graph functions including polynomial and trigonometric functions.
Students will develop an ability to solve functions including polynomial and trigonometric functions.

Class time will be used to:
Discuss some topics in the text
Lecture on topics <u>not </u>in the text.
Respond to questions on subject material
Take quizzes and exams

Course Philosophy :

Mathematics is learned primarily by **doing** Mathematics–not simply listening to it; that is, the effective learning of mathematics is an active process, involving participation. Thus, the course aims to maximize student involvement, hence student achievement. Individual concepts in mathematics are **learned** (mastered as opposed to memorized) by thinking and working through numerous examples and exercises which involve these concepts; by this process mathematical concepts become familiar, and less abstract.

The instructor is responsible for overall planning, for directing instructional activities, and for evaluation of student achievement. You are ultimately responsible for your own achievement. For example, you are

responsible for meeting all scheduled activities of the course, such as class meetings, problem assignments, exams, and the final examination; you are also responsible for regular work outside of class in preparation for class lectures and discussions.

Grading: Grades for the course will be based on homework (25%), quizzes (10%), two exams (35%), and a final exam (30%).

Homework (25% of the grade): **Please see the attached homework schedule.** 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 except by prior arrangement or with a documented emergency. 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. The three lowest homework scores will be dropped.

Quizzes (10% of the grade): Quizzes will be given in class throughout the semester (please see the calendar for dates). There are no make-up quizzes; however your lowest two quiz scores will be dropped.

Tests and Final Exam (35% and 30% of the grade): 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 <u>prior consent by me</u> 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.

Please note: I do not intend to accept excuses such as miscommunication with parents, benefactors, sport team sponsors and/or travel agents.

Please note: **The Final Exam is COMPREHENSIVE.**

December 17: 7:30- 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)

- **This semester we are using the LMS (learning management system) called Canvas.**
  In this system, you will find handouts from class and your grades.
  TO access go to: https://canvas.pointloma.edu/login
  From there you can login using your PLNU user name and password.

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 as approved in writing by the Provost for specific students participating in certain university-sanctioned activities. Excused absences still count toward the 10%-20% limits, but allow students to make up work, quizzes, or tests missed as a result of a university-sanctioned activity. Activities of a unique nature, such as labs or other activities identified clearly on the syllabus, cannot be made up except in rare instances when instructors have given advanced, written approval for doing so. Whenever the number of accumulated absences in a class, for any cause, exceeds ten (10) percent of the total number of class meetings, the faculty member should send an e-mail to the student and the Vice Provost for Academic Administration (VPAA) warning of attendance jeopardy. If more than twenty (20) percent of the total number of class meetings is reported as missed, the faculty member or VPAA may initiate the student's de-enrollment from the course without further advanced notice to 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 consistent with university policy in the Grading section of the catalog. There are no refunds for courses where a de-enrollment was processed. For more details see the PLNU catalog: http://catalog.pointloma.edu/content.php?catoid=14&navoid=1089#Class_Attendance

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 their courses as established by the instructors, students with special needs 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 contacts the student's instructors and provides 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 special needs and guarantees all qualified students equal access to the benefits of PLNU programs and activities. For more details see the PLNU catalog: http://catalog.pointloma.edu/content.php?catoid=14&navoid=1089#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:

The Point Loma Nazarene University community holds the highest standards of honesty and integrity in all aspects of university life. Any violation of the university's commitment is a serious affront to the very nature of Point Loma's mission and purpose. Violations of academic honesty include cheating, plagiarism, falsification, aiding academic dishonesty, and malicious interference. The details of PLNU's meaning of each of these words can be found in the PLNU catalog at:
http://catalog.pointloma.edu/content.php?catoid=14&navoid=1089#Academic_Honesty

A student remains responsible for the academic honesty of work submitted in PLNU courses and the consequences of academic dishonesty beyond receipt of the final grade in the class and beyond the awarding of the diploma. Ignorance of these catalog policies will not be considered a valid excuse or defense. Students may not withdraw from a course as a response to a consequence.

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 (http://catalog.pointloma.edu/content.php?catoid=14&navoid=1089#Academic_Honesty).

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.

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.

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!

Schedule:

Week	Monday	Wednesday	Friday
1	9/1 **No Class**	9/3 Introduction, Sections 1.1 & 1.2	9/5 Sections 1.2& 1.3

2	9/8 Sections 1.3 & 1.4	9/10 Sections 1.4 & 1.5 HW #1 Due	9/12 Sections 1. 5& 2.1 Quiz #1
3	9/15 Sections 2.1 & 2.2	9/17 Sections 2.2 & 2.3 Hw #2 Due	9/19 Sections 2.3 & 2.4
4	9/22 Sections 2.4 &2.5	9/24 Sections 2.6 & 2.7 Hw #3 Due	9/26 Sections 2.7 & 2.8 Quiz #2
5	9/29 Section 2.8	10/1 Sections 3.1&3.2 Hw #4 Due	10/3 Sections 3.2 & 3.3
6	10/6 Section 3.3 & 3.4	10/8 Section 3.5 Hw #5 Due	10/10 Review for Exam #1 Quiz #3
7	10/13 **Exam #1**	10/15 Section 3.6 Hw #6 Due	10/17 Sections 4.1 & 4.2
8	10/20 Sections 4. 2& 4.3	10/22 Sections 4.3 & 4.4 HW #7 Due	10/24 **No class** **Fall Break**
9	10/27 Section 4.4	10/29 Section 4.5 HW #8	10/31 Sections 4.6& 4.7 Quiz #4
10	11/3 Section 4.8	11/5 Section 4.9 HW #9	11/7 Section 4.10
11	11/10 Section 5.1	11/12 Section 5.2 HW #10	11/14 Section 5.3 Quiz #5
12	11/17 Section 5.3 & 5.4	11/19 Section 5.4 HW #11	11/21 Review Quiz #6
13	11/24 **Exam #2**	11/26 **No class** **Thanksgiving**	11/28 **No Class** **Thanksgiving**
14	12/1 Section 6.1	12/3 Section 6.2 HW #12	12/5 Section 6.3 Quiz #7
15	12/8 Section 6.4	12/10 Section 9.1 Hw #13 Due	12/12 Review
Final Exams Week	12/15	12/17 **Cumulative Final Exam** 7:30- 10:00 am.	12/19