

Math 133 – Pre-Calculus

(3 Semester Hours)

Point Loma Nazarene University – Spring 2018

Time and Place: T/TH 9:30-10:45am RLC 108
Instructor: Kevin Stovall
Email: kstovall@pointloma.edu

Office Number: S211
Office Hours: T/TH 8:30-9:30 a.m. (possible to meet in RLC 108 before class)

Textbook: *Pre-calculus with Calculus Previews* by Zill and Dewar, (5th Edition)

Needed Supplies: Scientific calculator

Welcome to Pre-Calculus!

I look forward to spending the semester learning pre-calculus with you. You will be amazed at how easy some concepts are to understand, and equally amazed at how challenging some problems are to solve. Over the semester, you will experience a range of feelings, including: success and failure; challenge and boredom; accomplishment and frustration. Please know that your fellow classmates and I will be here to help you through it. Also, persistence and hard work means a lot more in this class than “intelligence.” Put in time and effort and I know you will succeed.

As an instructor, I will do everything in my power to give you all the resources and support to help you succeed. If I am not doing this, feel free to reach out to me. Again, I am here to see you succeed in this class. Please hold me accountable as I will hold you accountable.

Course Description:

This course serves as an introduction to the functions necessary for the study of calculus with an emphasis on numerical and graphical notions of continuity, limits and derivatives. The following function types are used as examples for the study of the concepts: polynomial, rational, exponential, logarithmic, and trigonometric functions.

Prerequisite(s): MTH 113 or equivalent.

Learning Outcomes for this Course:

1. Students will develop an ability to graph functions including polynomial and trigonometric functions.
2. Students will develop an ability to solve problems using polynomial, exponential and trigonometric functions.

Course Philosophy:

Mathematics requires active participation. Participation means: asking questions, making conjectures and checking them, providing solutions to problems, sharing ideas with classmates. During class time I will participate in the same way. My advantage is that I have seen the material several times.

Grading: Grades for the course will be based on:

Homework	300 points
Quizzes	100 points
Project Creation	100 points
Exams (2 at 150 points each)	300 points
Final Exam	<u>200 points</u>
Total:	1,000 points

Homework (30%): Homework will be assigned every week in class. A homework assignment is late if it is not received at the start of class on the due date. Late homework will be deducted 20% and may not be accepted after 1 week late. 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.

Quizzes (10%): Quizzes will include problems and questions from the homework, textbook readings, handouts, as well as material presented in class. Each quiz will let you know how well you are understanding the material we are covering and help to prepare you for the exams. If you miss a quiz you can schedule 1 make-up within a week of the missed quiz. I will also drop one of your lowest quiz score.

Project Creation (10%): Project Creation will be a series of collaborative projects designed by the students with the goal of providing a detailed outline of the material and concepts presented in this class using various technology that the students agree upon. As the project is being created, it will also serve as a tool that the students will be able to use as a resource in learning the material for the class. Each step of the project will be explained in class, detailed in Canvas, and completed outside of class.

Tests (15% each) and Final Exam (20%): 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.

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. 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.

**The Final Exam is COMPREHENSIVE
Tuesday, May 1st, 2018, 10:30am-1:00 p.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, electrical devices or things that are distracting 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) and it is not the best use of class time.

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.

University Mission: ~ Teach ~ Shape ~ 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.

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 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 http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#Class_Attendance in the Undergraduate 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:

If you have a diagnosed disability, please contact PLNU's Disability Resource Center (DRC) within the first two weeks of class to demonstrate need and to register for accommodation by phone at 619-849-2486 or by e-mail at DRC@pointloma.edu. See [Disability Resource Center](#) for additional information. For more details see the PLNU

catalog: http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#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:

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 http://catalog.pointloma.edu/content.php?catoid=24&navoid=1581#Academic_Honesty for definitions of kinds of academic dishonesty and for further policy information.

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.

Credit Hour:

In the interest of providing sufficient time to accomplish the stated course learning outcomes, this class meets the PLNU credit hour policy for a 3 unit class delivered over 15 weeks. Specific details about how the class meets the credit hour requirements can be provided upon request.

Sources of Help:

1. Me. If you have questions, ask me. See office hours.
2. Other classmates. Form study groups! Work together!
3. Drop in math tutoring. See me for schedule.

Class Schedule, subject to change

Week	Day	Tuesday	Thursday
1	Jan 9, 11	No Class (Monday Schedule)	Introduction to the Class Sections 1.1 and 1.2
2	Jan 16, 18	Sections 1.3 and 1.4	Sections 1.4 and 1.5
3	Jan 23, 25	Sections 2.1 and 2.2	Sections 2.2 and 2.3
4	Jan 30, Feb 1	Sections 2.4 and 2.5	Sections 2.5 and 2.6
5	Feb 6, 8	Sections 2.7 and 2.8	Sections 2.8 and 2.9
6	Feb 13, 15	Sections 3.1 and 3.2	Sections 3.3 and 3.4
7	Feb 20, 22	Sections 3.5 and 3.6	Exam #1 Review
8	Feb 27, Mar 1	Exam #1	Sections 4.1 and 4.2
-	Mar 6, 8	Spring Break	Spring Break
9	Mar 13, 15	Sections 4.3 and 4.4	Sections 4.4 and 4.5
10	Mar 20, 22	Sections 4.6 and 4.7	Sections 4.7 and 4.8
11	Mar 27, 29	Sections 5.1 and 5.2	Easter Recess
12	Apr 3, 5	Sections 5.3 and 5.4	Exam #2 Review
13	Apr 10, 12	Exam #2	Sections 6.1 and 6.2
14	Apr 17, 19	Sections 6.3 and 6.4	Sections 8.1 and 8.2
15	Apr 23, 26	Sections 10.1 and 10.2	Final Exam Review
Finals	May 1	Comprehensive Final Exam Tuesday May 1st, from 10:30am – 1:00pm	

Homework Assignments

All Homework is due on Tuesday on the listed date

Section	Problems	Due
1.1	2,4,9,12,27,28,37,42,50,62	Jan 18th
1.2	3,6,8,10,15,22,23,30,55,57(b)	
1.3	2,10,13,22,23,28,29,40,47,55	Jan 25th
1.4	5,6,11,12,19,24,29,43,51,63,69,70	
1.5	1,2,8,9,13,17,21,27	
2.1	3,5,14,17,27,28,39,40,47,56,59,61,63	Feb 1st
2.2	5,6,12,13,23-32, 37	
2.3	3,4,7,27,29,33,39,53,55,56	
2.4	11,13,15,25,28,34,35,46,50	Feb 8th
2.5	2,3,7,10,13,14,19,27,34,37,43	
2.6	5,7,9,11,12,31,34,47,48	
2.7	3,4,5,7,9,17,21,24,43,44,45,57	Feb 15th
2.8	5,7,11,12,21,26	
2.9	1,3,5,8	
3.1	23,27,29	Feb 22nd
3.2	2,3,12,13	
3.3	2,3,9,10,19,20,41,42	
3.4	4,5,11,17,31,32,48	
3.5	4,6	Mar 1st
3.6	3,7,8,27,29,37,38	
4.1	2,3,5,10,14,15,17,18,28,31,39,59,60,82	Mar 15th
4.2	2,3,12,13,27,28,37,41,42,29,50	
4.3	3,5,8,9,20,21,26,27,34,35,53	Mar 22nd
4.4	1,2,5,6,7,23,27,33,36,38,43	
4.5	23,24,45,62,75	
4.6	4,5,14,15,24,25,35,40	Mar 29th
4.7	3,5,6,15,18,21,26,33,36	
4.8	2,3,4,5,6,16,17,33,35,42,43	
5.1	2,3,4,11,12,23,24	Apr 5th
5.2	1,2,11,18,21	
5.3	3,4,18	
5.4	3,4,24	
6.1	2,3,4,7,14,15,23,24,35,40	Apr 19th
6.2	1,4,5,14,15,19,20,21,26,31,39,45,59	
6.3	2,3,7,13,22,23,27	Apr 26th
6.4	1,9,10,29,30	
8.1	1,2,3,4,15,18,46,47,51,56,57	
8.2	1,7,8,13,26,33,34,35,38,51,52	
10.1	3,4,5,6,7,19,20,23,26,31,32	May 1st
10.2	3,4,5,6,9,10,15,16,29,32,45,51	