POINT 1902 LOMA NAZARENE UNIVERSITY	**Department of Mathematical, Information and Computer Sciences** MTH1033 Precalculus 3 Units (M-W, 4:05-5:15pm, RLC 101)
Spring 2022 | January 10 – May 5	

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Office hours: M-W 8:30am-9:30am and By Appointment in Zoom

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 is an expression of faith. Being of Wesleyan heritage, we strive 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.

WELCOME MESSAGE

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. Please know that your fellow classmates and I will be here to help you through it. Also, persistence and hard work mean a lot more in this class than “intelligence.” Put in time and effort and you will succeed. Skip class and homework and you will struggle.

COURSE DESCRIPTION

MTH1033 Precalculus Syllabus

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.

COURSE LEARNING OUTCOMES

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.

REQUIRED TEXTS AND RECOMMENDED STUDY RESOURCES

1. Graphing Calculator (TI-84+ recommended)
2. Textbook - *Precalculus with Calculus Previews*, 5th Edition by Zill & Dewar (ISBN: 9781449649128)

COURSE CREDIT HOUR 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 3 unit class delivered over fifteen weeks. Specific details about how the class meets the credit hour requirement can be provided upon request. (Based on 37.5 hours of student engagement per credit hour.)

Distribution of Student Learning Hours

Category	Time Expectation in Hours
Attending Class and Taking Notes	35
Reading Assignments	15
Written Class Activities	15
Written Homework	30
Pre-Assignments	15
Exams and Review	12.5
Total Hours	122.5

ASSESSMENT AND GRADING

Graded Components

- **Homework**: Homework problems will be assigned regularly and posted on Canvas. A homework assignment is late if it is not submitted at the beginning

of class on the due date. Please check regularly to ensure that you are keeping up with the homework. Late homework will not be accepted without prior approval. Your lowest homework score will be dropped.

- **Classwork**: There are three types of classwork assignments. I encourage you to work with your classmates to complete these assignments. These assignments and discussion about them help you prepare for lecture, homework, quizzes and exams.
    - (1) In class assignments: We will regularly have activity worksheets that are to be worked on collectively during class. If you finish them during class time you may turn them in, but you won't always be able to finish them within the allotted time. You may continue to work on them during the week, and they are due by the next class period.
    - (2) Homework quizzes, drawn directly from the homework.
    - (3) Chapter Quizzes, given at the end of each chapter.
- **Examinations and the Final Examination**. Examinations and the Final Examination 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.
- **Late work will not be accepted** without prior consent or a well-documented emergency. Up to a maximum of one homework assignment will be accepted up to 3 days late provided that consent is received from the professor before it is due. Homework assignments that are submitted late without prior consent will be recorded with a score of zero. If more than half of the homework assignments are submitted on time, then the lowest homework score will be dropped from the calculations of the homework grade.
- 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.

Grading Distribution	**Percent**
Two Examinations	35
Final Exam	30
Homework	25

Classwork	10
Total	100

FINAL EXAM:

Date and Time: Friday, 10/17/21, 7:30-10:00am

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

Grades are based on the number of points accumulated throughout the course with the following exception. Approximate minimal percentages required to obtain a given grade are:

Standard Grade Scale Based on Percentages					
	A	**B**	**C**	**D**	**F**
+		87.5- 90	77.5-80	67.5-70	
	92.5 -100	82.5-87.5	72.5-77.5	62.5 -67.5	0-60
_	90-92.5	80-82.5	70-72.5	60-62.5	

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.

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.

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 COPYRIGHT POLICY

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.

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 PoliciesLinks to an external site. 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 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.

PLNU ATTENDANCE AND PARTICIPATION POLICY

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 Academic PoliciesLinks to an external site. for further information about 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 Links to an external site.

Precalculus - Schedule Spring 2022

Week	Monday	Wednesday
1 1/10- 1/14	Monday's class held on Tuesday 1/11 Introduction/ 2.1: Functions and Their graphs	2.3 & 2.4: Linear and Quadratic Functions
2 1/17- 1/21	No Class MLK	2.2: Transformations and Symmetry 2.5: Piecewise Functions **Due:** Homework 1: 2.1, 2.3, 2.4 Week 2 Quiz
3 1/24- 1/28	2.6: Combining Functions 2.7: Inverse Functions	2.8: Word Problems **Due:** Homework 2: 2.2, 2.4, 2.5 Week 3 Quiz

4 1/31- 2/4	3.1: Polynomial Functions 3.2: Division of Functions	3.3: Factors of Polynomials **Due:** Homework 3: 2.6, 2.7, 2.8 Week 4 Quiz
5 2/7- 2/11	3.4: Zeros of Polynomials 3.5: Approximating Zeros	3.6: Rational Functions **Due:** Homework 4: 3.1, 3.2, 3.3 Week 5 Quiz
6 2/14- 2/18	Review for Exam #1	**Exam #1** **Due:** Homework 5: 3.4, 3.5, 3.6
7 2/21- 2/25	6.1: Exponential Functions 6.2: Logarithmic Functions	No Class
8 2/28- 3/4	6.4: Application of Exponentials & Logs 6.3: Exponential and Log Equations	4.1: Angles and the Unit Circle 4.2: Sine and Cosine Functions **Due:** Homework 6: 6.1, 6.2, 6.3 Week 8 Quiz
Spring Break		
9 3/14- 3/18	4.3: Graphs of Sine and Cosine 4.4: Other Trig Functions	5.1: Right Triangle Trigonometry **Due:** Homework 7: 6.4, 4.1, 4.2 Week 9 Quiz
10 3/21- 3/25	4.8: Inverse Trig Functions 5.2: Applications of Trigonometry	5.3: The Law of Sines 5.4: The Law of Cosines **Due:** Homework 8: 4.3, 4.4, 5.1 Week 10 Quiz
11 3/28- 4/1	4.5: Verifying Trig Identities 4.6: Sum & Difference Formulas	4.7: Product Formulas **Due:** Homework 9: 4.8, 5.2, 5.3, 5.4 Week 11 Quiz
12 4/4- 4/8	4.9: Trig Equations	Review for Exam #2 **Due:** Homework 10: 4.5, 4.6, 4.7 Week 12 Quiz
13 4/11- 4/15	Exam #2 **Due:** Homework 11: 4.9	8.1: Polar Coordinates
14 4/18- 4/22	4/18 Easter Break- no class	8.2: Polar Equation Graphs
15 4/25- 4/29	10.1: Sequences 10.2: Series	Review for Final Exam **Due:** Homework 12: 8.1, 8.2 Week 15 Quiz
16 Finals Week		5/4 Final Exam room RS 295 4:30- 7:00

5/2- 5/6		Due: Homework 13: 10.1, 10.2