Math 32: PreCalculus II
Fall 2023, CRN 27590, Section 27
Multimedia Learning Center MLC 110
Tuesday and Thursday 4 PM to 6:15 PM

Instructor Information

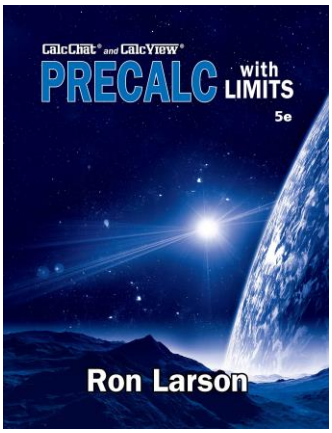
Instructor:	Andrew Jianyu Yu
Email:	yujian@fhda.edu
Office Location:	S76a
Office Hours:	Tuesday and Thursday 6:15PM to 8PM

Course Description

Preparation for calculus: extending the elementary functions of first quarter precalculus to include the theory of periodic functions; composition of trigonometric functions with other elementary functions; polar co-ordinates; further exploration of the complex plane; introduction to the algebra of vectors.

Prerequisite

MATH 31 or MATH 31B (with a grade of C or better); or a satisfactory score on college placement.



Required Textbook

Precalc with Limits 5th Edition by Ron Larson;
Publisher: Cengage Learning (January 1, 2021)
Language: English; Hardcover: 1120 pages
ISBN-10: 0357457854; ISBN-13: 978-0357457856
Item Weight: 5.55 pounds
Dimensions: 8.7 x 1.7 x 10.9 inches
Important Notes: It is not necessary to purchase a hard copy of this book because you will not be asked to solve textbook problems on paper. The PDF of an older edition is on Canvas (see Files, Textbook folder).

Recommended Calculator

TI-83 Plus TI-84 Plus TI-84 Plus CE TI-Nspire

Graphing calculator is **recommended** for the course. **Using TI-84 Plus or 84 Plus CE is highly recommended.** You are required to bring a physical calculator to the exam, and sharing calculator is considered as cheating incident. Using the calculator apps on your phone is strictly prohibited on the exam.

Do not purchase the TI-Nspire Graphing Calculator (around $150) because it is too advanced for this course. Instructions will not be provided for TI-Nspire.

Desmos Graphing Calculator

Using Demos graphing calculator is highly recommended for studying trigonometric functions. You can either use Desmos on your desktop, laptop, tablet, or smartphone. Visit https://www.desmos.com/calculator or download the app.

Technical Requirements

- **Your Email:** Please check your email regularly. If possible, connect your email with an app in your smartphone. You are welcome to ask me any questions related to lecture, homework, or personal emergency through email. **Please following the format of the subject line stated below.**

  "Math 32 4PM: _____"

  You write your inquiry after the colon. For example
  Math 32 4PM: Request Extension for Homework 2
  Your instructor is teaching 5 courses (200+ students) this quarter. The subject line above helps your instructor to quickly access your grade and status immediately.
- **WebAssign (Work System):** Homework, quizzes, and exams will be assigned and graded on WebAssign. If an assignment is required to be completed on paper, you are required to scan your work and upload it to Canvas. WebAssign is **not free**. You must pay for your own account before the free trial period ends. Otherwise, you will not be able to complete any assignments until you make a payment. The **first module** on Canvas contains a link to register your WebAssign account and another link to access to WebAssign. Alternatively, you can login

WebAssign on your web browser though the link https://www.webassign.net/.

- **Canvas (Main Learning Management System):** WebAssign has been integrated to Canvas. Each weekly **module** contains the lecture videos and the weekly assignment. The first module has 3 links – the first link for register your WebAssign account, the second link for accessing WebAssign from Canvas, and the third link for Cengage technical support. There are 2 ways to access an assignment. The first way is to click on the assignment on Canvas, it will directs you to WebAssign. The second way is to login WebAssign using the link above. **Scores on WebAssign will automatically roll over to the grade book on Canvas. At least one homework and one quiz will be assigned weekly. It is strongly recommended that you check your WebAssign account frequently because late assignments will count as no credits.**

WebAssign Class Key and WebAssign-Canvas Integration

Use the link in the first module to register your account. Please take the advantage of the free trial and do not pay anything yet. **All purchases are non-refundable.** There is no class key for this course because WebAssign has been integrated to Canvas. **Make sure your name on WebAssign matches your official name on Canvas.** Note, if you have a name that you preferred to be called but this name is not in the school system, do not use it on WebAssign. **Please capitalize the first letter of your first and last name. For example, type "Andrew" instead of "andrew". Your instructor is not an employee of WebAssign. If you experience any technical difficulty on WebAssign, please contact them to speak to a customer representative.**

Canvas

There are a few places that you have to visit frequently on Canvas.

- **Modules**
  Each weekly module shows the notes and homework of that week.
- **Files**
  Notes, books, and syllabus
- **Discussion**
  If we want to have a discussion regarding any topics, we will do this in the Discussion tab.
- **Announcement**
  Emergencies, date change, change of plans,

Attendance

Since this is an in-person course, attendance will be taken in every meeting. Students who missed 3 meetings will be dropped from the course.

Scanning Your Paperwork For Online Quizzes and Exams

Other than homework, you have to show your work for all online quiz and exam problems. Use one of the options below to upload your work to Canvas for credits. For either option below, number the problem and the page. For example, a grader can easily tell the problem number, the content of the problem, and all the steps you wrote to reach to the final answer. If an application problem has long problem statements, or a problem provides a very complicated graph (e.g. three-dimensional image), it is not necessary to copy the problem statements or the graph.

1. If you have a scanner, scan all the pages, save them as **one PDF document**, and upload the file to Canvas.
2. If you do not have a scanner, download the free app called **Genius Scan – PDF Scanner App** (five starts over 938k reviews). Take a picture of each page, use the app to merge all the pictures into **one PDF documents,** and upload the file to Canvas.

NOTE: Points will be deducted if you upload multiple images.

Homework & Discussion, 10% of the Course Grade

Problems will be assigned from each section taught in lecture. You are required to finish most of the homework on WebAssign. For written assignments, you have to scan your work, merge all the images into one PDF document, and submit to Canvas.

For in-class discussion: students will be solving problems in groups, instructor will stop by each group to answer or ask questions. Points will be awarded based on the answers and participation.

For other discussion: topics will be posted on Canvas's "Discussion", follow the directions and write your response. These free-response discussions have no right or wrong answer. To receive full credits, you must reply to one other student's discussion.

The due date of all the assignment follows the U.S. Pacific Standard Time (PST).

Quiz & Pop Quizzes, 15% of the Course Grade

In-person quizzes will be given on Tuesday or Thursday. Quiz topics will be announced in advanced.

You are expected to complete online quizzes on WebAssign/Canvas. Quiz is an individual assignment. You are required to do your own work. Group-work is strictly prohibited. *For online quizzes, show all your work in a separate piece of paper, take a picture of all the pages (or use a scanner to scan all the pages), merge all the pages into 1 PDF file, submit to Canvas.* For example, "Quiz 1" is an online quiz, and "Quiz 1P" is for submitting your paper work.

A random pop quiz may be given at the last 10 to 15 minutes of a lecture. Pop quiz is based on the materials covered within that lecture. You are allowed to use any notes to take the pop quiz. Be aware that pop quizzes are individual work. Since pop quizzes and time-sensitive, make-up assignment is not available.

Every homework and quiz score counts. Lowest score will not be dropped. Every student has one chance to receive one extension on online homework (except the last homework) and one extension on online quizzes (except the last online quiz) without penalties. This extension does not apply to midterms, final exam, and the last homework/quiz. More importantly, your one-time extension must be redeemed within 3 days after the due date. For example, if homework 1 is due on October 1st at 11:59pm, the deadline to request an extension is October 4th at 11:59pm.

The incident of falsifies information for financial aid is increasing in every school district. If you do not complete the first week's assignment or having no activities on Canvas, you will be dropped from the course.

Midterm, 40% of the Course Grade (4th and 8th week, in-person exams)

Every student is required to take the proctored exam in class. For in-person online exams, please bring your fully charged tablet or laptop to class. For in-person written exam, bring your notes and a physical calculator to class. You are allowed to bring 3 sheets (double-sided) or 6 pages (single-sided) of notes. The size of the paper is 8.5 inches by 11 inches. The notes can be typed or handwritten. Sharing calculator, tablet, or laptop is strictly prohibited and considered as cheating. All the exams are individual work. Students who cheat, plagiarize or help someone else cheat will be given a zero on the exam, and this zero is irreplaceable, meaning that it will count toward your course grade.

Final Exam, 35% of the Course Grade (In-person exam)

Thursday, December 14th, from 4:00 PM to 6:00 PM

For in-person online exams, please bring your fully charged tablet or laptop to class. For in-person written exam, bring your notes and a physical calculator to class. You are allowed to bring 5 sheets (double-sided) or 10 pages (single-sided) of notes. The size of the paper is 8.5 inches by 11 inches. The notes can be typed or handwritten. Sharing calculator, tablet, or laptop is strictly prohibited and considered as cheating. All the exams are individual work. Students who cheat, plagiarize or help someone else cheat will be given a zero on the exam, and this zero is irreplaceable, meaning that it will count toward your course grade.

For online quizzes, midterms, and final
You must upload all your written steps to Canvas; otherwise, your score does not count toward your course grade.

Late Submission = Zero Credit; Every Score Counts

Late submissions are not acceptable, and there is no exception. Do not ask for any extensions. Every score counts, and your lower score in all types of assignments mentioned above will **not** be dropped.

Check Points:

- Homework & Discussion 10%, Quiz & Pop Quiz 15%, Midterm 40%, Final 35%; Zero credit to all the late and missing work, no exception.
- For online quizzes, midterms, and final, you must show all your work on paper and submit your work to Canvas. The score does not count toward your course grade if your work is missing.
- You are expected to check the due dates on your WebAssign account at least once a day to plan accordingly. Also, you are expected to check our Canvas page to see announcements and week module regularly.
- Comparing to homework, you will have at most 3 attempts on quizzes and exams. Please solve the problems on a separate sheet of paper and double-check your work before submitting your answer to WebAssign. Additional attempts will not be granted for any reasons.

Tutoring at the Student Success Center (SSC)

The Student Success Center (SSC) has moved services into virtual rooms via Zoom for all forms of tutoring and workshops. You can also get free math tutoring services in-person.
Please visit the following website for details and schedules.
https://www.deanza.edu/studentsuccess/mstrc/

Grading Rubrics

Your course grade will be assigned in the following standard:

A: 100% to 94%	A-: 93% to 90%	
B+: 89% to 86%	B: 85% to 83%	B-: 82% to 80%
C+: 79% to 75%	C: 74% to 70%	
D: 69% to 60%	F: below 60%	

All the cut-offs are not negotiable. For examples, 89% is not an A-minus and 69% is not a C. Transferring to UCs, CSUs, top-ranking universities, or scholarships are not a reason to ask for a higher grade.

Extra Credit Assignment

There are no extra credit assignments in this course to improve your grade. Please do not ask for any.

Academic Integrity

Academic dishonesty will not be tolerated. Any student attempting to defraud the instructor on a quiz, exam, final exam, or any other assessment item designated as an individual assignment will receive a zero on that assignment. This score is irreplaceable, and that score affects your course grade. If a cheating incident is detected on your work, the rest of your works in the course will be closely monitored and examined. All the assistant seekers and assistant providers will be reported to the college. *For example, bringing a quiz or an exam problem to a tutor is considered as cheating. Posting a quiz or an exam problem to websites such as Chegg, Course hero, or a forum is considered as cheating.*

Topics To Be Covered in This Course:

Chapter 4: Trigonometry

4.1: Radian and Degree Measure
4.2: Trigonometric Functions: The Unit Circle
4.3: Right Triangle Trigonometry
4.4: Trigonometric Functions of Any Angle
4.5: Graphs of Sine and Cosine Functions
4.6: Graphs of Other Trigonometric Functions
4.7: Inverse Trigonometric Functions
4.8: Applications and Models

Chapter 5: Analytic Trigonometry

5.1: Using Fundamental Identities
5.2: Verifying Trigonometric Identities
5.3: Solving Trigonometric Equations
5.4: Sum and Difference Formulas
5.5: Multiple-Angle and Product-to-Sum Formulas

Chapter 6: Additional Topics in Trigonometry

6.1: Law of Sines
6.2: Law of Cosines
6.3: Vectors in the Plane
6.4: Vectors and Dot Products
6.5: The Complex Plane
6.6: Trigonometric Form of a Complex Number

Chapter 10: Topics in Analytic Geometry

10.6: Parametric Equations
10.7: Polar Coordinates
10.8: Graphs of Polar Equations

Academic Calendar:

September 25: First day of fall quarter. This date is also Yom Kippur. Students will not be dropped from a class for not attending that day in observance of the holiday. Please email your instructors if this applies to you.

October 7: Last day to add classes

October 8: Last day to drop classes without a W

November 10 (Friday): Veterans Day Holiday – no classes; offices closed

November 17: Last day to drop classes with a W

Please **read the important notes below** regarding the withdrawal policy. To withdraw from this class, go to portal where you register this class, change the status from "registered" with "withdraw". After you are done, please double-check your status.

Important Note: It is student's responsibility to drop or withdraw the class if that student decides not to finish the class. After the last day to withdraw is passed, student cannot withdraw from the class.

November 23-26: Thanksgiving holiday – no classes; offices closed

December 11-15: Final exams

For instructor only: The census data is October 9th. The last day to submit grades is December 20th.

The professor reserves the right to make changes to the syllabus, including project due dates and test dates (excluding the officially scheduled final examination), when unforeseen circumstances occur. These changes will be announced as early as possible so that students can adjust their schedules.

Student Learning Outcome(s):

• Formulate, construct, and evaluate trigonometric models to analyze periodic phenomena, identities, and geometric applications.

Office Hours:

M,W	04:00 PM	06:00 PM	In-Person,By Appointment	S76a
T,TH	06:15 PM	08:00 PM	In-Person	S76a