

Instructor:	Lin Zhang Email: zhanglinlin@fhda.edu Canvas: https://deanza.instructure.com/
Office Hours:	MW 1:05 – 1:30 PM & 3:45PM – 4:15PM MLC 103
Textbook:	Pre-Calculus (OpenStax) by Jay Abramson Free Download: https://openstax.org/details/books/precalculus-2e
Equipment:	Graphing Calculator (TI 83, TI 84,...) During lessons you can use a TI Emulator Apps · For iPhone: Graphing Calculator X84 · For Android: Graphing Calculator plus 84 83

1. Prerequisite:

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

2. Course Description

This course prepares students for calculus. Topics include 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.

3. Student Learning Outcomes

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

4. Course Objective:

Evaluate the trigonometric function of an angle given in degree and radian measure. Identify special triangles and their related angle and side measures. Prove trigonometric identities. Graph the six basic trigonometric functions and apply changes in period, phase and amplitude to generate new graphs. Manipulate and simplify trigonometric expressions. Recognize the relationship between trigonometric functions and their inverses graphically and algebraically. Solve trigonometric equations, triangles, and applications. Define the polar coordinate system and introduce polar graphs. Examine complex numbers in the complex plane. Solve arc length and sector area problems. Examine the logic of conditional and bi-conditional statements as they appear in mathematical statements. Perform operations with 2-dimensional vectors. Apply trigonometric functions to model real world applications.

5. Drop Policy:

Attendance is integral to your success in this course. I expect you to attend all class meetings. **It is always YOUR RESPONSIBILITY to drop** the class if you can't continue for any reason.

5. Support Services

Students with disabilities needing reasonable accommodations should inform me in the beginning of the quarter. To begin the reasonable accommodations process, I will need to fill out a request form from the Disabilities Support Services (DSS). For more information, please visit the DSS office at SCSB 141, call (408) 864-8753 /(408) 864-8748 TTY, or go to www.deanza.edu/dss.

6. Tutoring

The Math, Science, and Technology Resource Center (**S43**) provides free online and in-person tutoring **Monday – Thursday 9AM – 6PM** and **Friday 9AM – 12PM**. For more information, go to www.deanza.edu/studentssuccess/mstrc

You can also use “NetTutor” link on the navigation in Canvas or attend my office hour. Email me for appointments if you want to meet at alternative time.

7. Academic Integrity:

Copying another student's solutions, or using unauthorized materials (online search engine or solution manual) during tests are considered cheating. Violation of this policy will result in the student receiving ZERO credit for the entire assignment or test.

8. Grade:

All grades will be posted on Canvas as soon as they become available. It is your responsibilities to check Canvas at least once a week to monitor your grades for the class.

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|----------------------|-----|
| • In Class (drop 2) | 10% |
| • Homeworks (drop 1) | 15% |
| • 4 Quizzes | 10% |
| • 3 Exams | 48% |
| • Final Exam | 17% |

In Class Participation

Each lesson has in-class practice through the lessons. You will complete the assigned problems and turn them in. In-Class assignments are graded on completion and effort. In the events of absence, you will receive zero. Two lowest scores will be dropped for overall grade calculation.

Quizzes

Several weekly Quizzes are given near the end of class on selected Wednesday. All quizzes are open notes. If you use digital devices to take notes, please copy them or print them on paper.

Homework:

Homework assignments are assigned on **MyOpenMath** test bank. You need to submit your answers to MyOpenMath (embedded in **Canvas**). Even if I am not collecting work, you are supposed to work out the problems on your own paper.

Late Work Policy

Each student is given **6 late passes (7-day extension each)** this quarter. After a homework assignment is due, you should see a "late pass" button in the description of the assignment. If an assignment is due on 1/12, using one late pass will extend the due date to 1/17. After using all your late passes, you can complete an assignment in "**Practice**" mode, and there is a **20% penalty** when I record your grade later.

Midterms and Final

Three midterms and **one final exam** will be given. Every test counts. You CAN'T drop any, but you can use the average of the two higher mid-terms and the final exam to replace the lowest mid-term.

- No make up of mid-terms if you miss it. NO make up tests, if you miss a mid-term, you will get a zero, but you can replace it with the average of the final exam and the other two mid-terms at the end of the quarter.
- On the day of the mid-term exam, we will still have lesson for the first 45 minutes. Then actual test starts at 4:55PM and ends at 6:15PM. Students are given 1 hour and 20 minutes to complete the test. NO bathroom break during the test.
- No make up for the Final Exam. If you miss the final, you will get a zero, and you can't replace it by mid-term scores.

9. Important Dates:

Sunday, October 4 : last day to add or last day to drop with no record online.

Friday, November 13: last day to drop with a "W".

Wednesday, November 11 Veterans Day holiday – no school

Thursday/Friday, November 26-27 Thanksgiving holiday – no school

Week	Month	Monday	Wednesday	Notes
1	Sept	21 5.1 Angles	23 5.4 right triangle	
2	Sept	28 5.2 unit circle	30 Quiz 1 5.3 other trig	Sunday 10/4 Last day to add/drop without a "W"
3	Oct	5 6.1 graphs of sine and cosine	7 Quiz 2 6.2 graphs of other trig functions	
4	Oct	12 6.3 inverse trig	14 7.1 Trig Identities Test 1 (Ch 5, 6.1)	
5	Oct	19 7.1/7.2 Trig Identities	21 7.5 solve trig equations	
6	Oct	26 7.5 Solve trig equations	28 Quiz 3 7.6 Modeling	
7	Nov	2 8.1 Law of sine	4 Test 2 (6.2-6.3, 7.1-7.5)	
8	Nov	9 8.2 Law of cosine	11 No School Veterans Day	Friday 11/13 Last day to drop with a "W"
9	Nov	16 8.3/8.4 Polar	18 8.5 Polar of Complex Numbers	
10	Nov	23 Quiz 4 8.9 Vector	25 11.1 Sequence	Thanksgiving 11/26 – 11/27
11	Nov	30 11.2 Arithmetic Seq. Test 3 (7.6, 8.1 – 8.9)	2 11.3/11.4 Geometric Sequence & Series	
12	Dec	7 Final Exam 1:45 – 2:45 PM	9 No Class	

Student Learning Outcome(s):

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Office Hours:

1:00 PM - 1:30 PM

MCL 103

M,W

3:45 PM - 4:15 PM

MCL 103

M,W