Instructor: John Jimenez Email: jimenezjohn@fhda.edu Class Modality: Online

### **Required Text and Recommended Materials:**

- Textbook: Our (free) textbook will be Precalculus from Openstax: <u>https://openstax.org/details/books/precalculus</u>. Note that this book is available free in the online and PDF format. If you prefer a physical copy, that would be paid out of pocket and is available directly from the website or you can use the PDF file to print at a local printing facility (staples, office dept, a local printing shop).
- Calculator: Although not necessary for most of this course, it can sometimes be helpful to have access to some type of graphing calculator. This can be a physical graphing calculator or a free online graphing tool such as <u>https://www.desmos.com/</u>or <u>https://www.wolframalpha.com/</u>.
- Access to <u>https://deanza.instructure.com/</u>. Canvas is where all the course information will be available. Information regarding grades, lectures, resources, etc.

### **Goals for Students in the Course:**

- To build a solid foundation for future math courses.
- To build confidence in their academic abilities in the math class and beyond.
- Be able to collaborate and discuss mathematics with classmates.
- To gain intuition behind concepts in the course.

#### Grading:

3 Midterms	Check-ins	Project	Discussions	Final
40 %	35 %	5 %	5%	15 %

Grading scale	
90-99.9% A	70-77.9% C
88-89.9 % B+	68-69.9 % D+
80-87.9% B	60-67.9% D
78-79.9% C+	≤ 59.9 F

Exams 40 %: There are 3 midterm exams. The lowest midterm exam score will be dropped.

**Check-Ins 35 %:** Content check-ins are packets you turn in weekly. The packet will consist of two parts that you turn in together. One part will be a collection of exercises assigned during the week and the second part will be a quiz composed of exercises that are related to exercises assigned during the week.

**Projects 5 %:** There will be one project to enrich your understanding of topics studied in the course and beyond.

Discussions 5 %: There will be some informal discussion board topics to build a sense of community.

Final 15 %: The final for this course will be a two-hour cumulative exam.

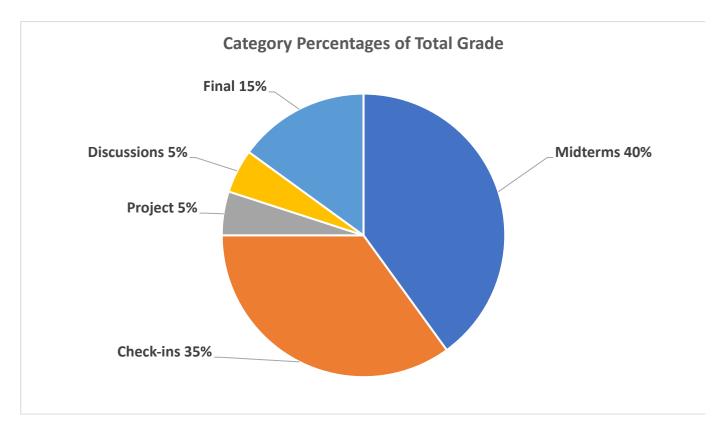


Figure 1: Grade breakdown for the course as a percentage.

**Assignment submission recommendation:** All assignments will have due dates posted but I will still accept your assignment if it is not completed by the due date. If for some reason you cannot turn in an assignment, turn it in as soon as possible. This is to avoid falling behind with the material which can be detrimental toward your experience in any STEM course.

Attendance: This is an online course, so the class has no schedule meeting time.

# You may be dropped from the course if:

- You miss 2 homework sets and or quizzes in a row.
- You do not interact with Canvas for a week.
- You miss 2 full weeks of synchronous meetings without contacting me prior to missing those meetings.

Note that if for any reason you feel like you may need to drop the course, it is your responsibility to do so.

# How to Succeed in this Course:

• The Student Success Center tutors and workshops area a great place to start! Watch the <u>SSC</u> <u>Welcome Video</u> to learn more.

**Tutoring:** Go to <u>http://deanza.edu/studentsuccess</u> and click to join a Zoom tutoring room during open hours.

**Workshops:** Attend a <u>Skills Workshop</u>, a <u>content-specific math/science workshop</u>, an <u>Accounting chapter</u> review workshop, or a <u>Listening and Speaking workshop</u>.

**Resources:** Join the <u>SSC Resources Canvas site</u> to see content and learning skills links.

**After-hours or weekend tutoring:** See the <u>Online Tutoring</u> page for information about NetTutor (via Canvas) or Smarthinking (via MyPortal).

It is known that students who participate in tutoring, group study, or workshops for three or more hours a week succeed at much higher rates than those who do not. The students who most need the help may reluctant, but if you take the first step in seeking resources you will be glad you did.

• I encourage students to ask me any questions about the course content if they wish! You can reach me from 9:30-10:20a M-Th via Zoom. This is another great place to get help on material related to the course.

**Disability Statement:** If you have a disability related need for academic accommodations or services in this course, you will need to provide me with a Test Accommodation Verification Form (TAV form) from Disability Support Services (DSS) or the Educational Diagnostic Center (EDC). Students are expected to give a two week notice if they are in need of accommodations. For those students with disabilities, you can obtain a TAV form from their DSS counselor (408 864-8753 DSS main number) or EDC advisor (408 864-8839 EDC main number). The application process can be found here: <a href="https://www.deanza.edu/dsps/dss/applynow.html">https://www.deanza.edu/dsps/dss/applynow.html</a>

Academic Integrity: If it is suspected that academic dishonesty is taking place on an assignment, the college will be notified and will result in a failing grade on the assignment or a failing grade in the class. For further information on academic integrity please see <a href="https://www.deanza.edu/policies/academic\_integrity.html">https://www.deanza.edu/policies/academic\_integrity.html</a>

# **Tentative Course Schedule:**

Week	Section
1	5.1 Angles
2	<ul><li>5.2 Unit circle: Sine and cosine functions</li><li>5.3 Other trig functions</li></ul>
3	<ul><li>5.4 Right triangle trigonometry</li><li>6.1 Graphs of sine and cosine functions</li></ul>
4	6.2 Graphs of other trig functions
	Exam 1
5	Project 1 assigned
	6.3 Inverse trig functions
	7.1 Solving trig equations with identities
6	7.2 Sum and difference identities
	7.3 Double-angle, half-angle, and reduction
	formulas
7	7.5 Solving trig equations
	7.6 Modeling with trig functions
	Exam 2
8	8.1 Non-right triangles: law of sines
	8.2 Non-right triangles: law of cosines
9	8.3 Polar coordinates
	8.4 Polar coordinates: Graphs
10	Project 1 due
	8.5 Polar form of complex numbers
11	Exam 3
	8.8 Vectors
	Some review
12	Final is on Thursday 12/15/2022 from 9:15 AM to
	11:15 AM

# Important Dates:

Date	
Sept 26	First day of Fall quarter
Nov 11	Veterans Day – no classes
Nov 18	Last day to drop classes with a W
Nov 24-27	Memorial Day Weekend - no classes, offices closed
Dec 12-16	Finals Week
	Final is on Thursday 12/15/2022 from
	9:15 AM to 11:15 AM

For a more comprehensive list of important dates see <u>http://www.deanza.edu/calendar/</u>.

**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. (5 units)

# Student Learning Outcome(s):

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

10:20 AM

### **Office Hours:**

Zoom M,T,W,TH 09:30 AM