

## Math 170-Trigonometry Syllabus (Fall 2020)

Class # 9781 T, TH 11:00a.m.-12:15p.m.

**Instructor:** Hien Nguyen

**Email:** Canvas Inbox (preferred method of contact) or hien.nguyen@gcccd.edu

### Office Hours and Response Time

- **Online** (ConferZoom video conferencing): Thursday 10:15 am-11:00 am
- **Questions outside of office hours?** I will respond to your message within 24 hours, M-F. If you do not get a response after 24 hours, please resend.

**Prerequisite:** “C” grade or higher or “Pass” in Math 097, 110 or eligibility as determined through the math placement process.

### **Course Materials:**

The following items are required for the course:

1. Textbook: FREE (Online)  
*Algebra and Trigonometry* by Jay  
Abramson, Open Stax

<https://openstax.org/details/books/algebra-and-trigonometry>

You can choose to buy the book from this website or JUST download it to your computer.

2. Graphing calculator like the TI-83 or TI-84 for Trigonometry.  
\* Homework assignments are from Knewton Alta through CANVAS.
3. 8 ½ x 11 loose leaf paper
4. Graph paper- 1/4 rule
5. Geometric Tools- Compass, Ruler, Protractor, 30-60-90 Triangle, 45-45-90 Triangle
6. 3-Ring Binder

### **Course Description:**

Math 170 requires 2 prerequisites with a grade of “C” or better: 1) Math 110 or the equivalent to Intermediate Algebra and 2) Math 97 or the equivalent to Geometry. It covers skills and concepts of Trigonometry that are developed as we explore several topics: various definitions of the trigonometric functions,

application problems involving triangles, trigonometric identities, inverse trigonometric functions, trigonometric equations, the Law of Sine, Law of Cosine and vectors., and an applied trigonometry project.

**Course Objectives:**

Students will be able to:

- 1) Identify special triangles and their related angle and side measures;
- 2) Evaluate the trigonometric function of an angle in degree and radian measure;
- 3) Manipulate and simplify a trigonometric expression;
- 4) Prove trigonometric identities;
- 5) Calculate vector sum, vector products, dot products, vector magnitudes and vector angles;
- 6) Analyze physical problems and create trigonometric relationships involving triangles, the coordinate system, the unit circle or vectors.
- 7) Solve trigonometric equations, triangles, and applications;
- 8) Graph the basic trigonometric functions and apply changes in period, phase and amplitude to generate new graphs;
- 9) Evaluate and graph inverse trigonometric functions.

**Student Learning Outcomes:**

Upon successful completion of this course, students will be able to:

- 1) Use analytical, numerical, and graphical methods to solve trigonometric problems.
- 2) Solve multi-disciplinary application problems and interpret the results in context.

**Make-up Test Policy:** A make-up test can be given in the event of a verifiable emergency. Make-up tests may be harder than regular scheduled tests.

**Absent/Tardy:** Regular, on time, attendance is expected and necessary for successful completion of this course. If you stop attending class and fail to take the tests for the remainder of the semester, YOU must withdraw yourself from this course. I will not do your paperwork for you and you will receive a letter grade of "F" unless you have officially withdrawn. You MAY be dropped if you miss more than 3 classes.

**Cuyamaca College Cheating/plagiarism Regulations:**

Cuyamaca College values honesty, academic integrity, and community. Our goal is to guide our students in maintaining academic excellence, in addition to fostering a sense of belonging to our campus whether online or attending the actual campus.

**Drop Dates:** 08/30/20 Last day to drop Full semester classes without a “W”

11/08/20 Last day to drop semester length classes with a “W”

**Homework:** homework assignments are from Knewton Alta through CANVAS.

**Test:** There will be three tests. The tests will be closed-book and closed-notes.

**Final Exam:** The final exam is comprehensive. It is also closed-book and closed-notes. The final will TBA and taking the final is mandatory for all students in this class.

**Grading Procedures:**

The course grade will be based on the following.

Test#1	15%
Test#2	15%
Test#3	15%
Hwk	30%
Final Exam	25%
Total	100%

<u>Percentage</u>	<u>Grade</u>
90% - 100%	A
80% - 89%	B
70% - 79%	C
60% - 69%	D
Below 60%	F

**Time required for this course:** This class covers many topics. You will need to spend 6-9 hours per week learning the content, doing homework assignments, and studying for tests.

**Disabled Students:** If you are a student with a disability and require accommodations, please contact Students Programs & Services (DSPS) A-13 [cuyamaca.dsp@gcccd.edu](mailto:cuyamaca.dsp@gcccd.edu) Phone: (619) 660-4239. I encourage you to contact DSPS as soon as possible to ensure that accommodations are implemented in a timely fashion.

***This syllabus may be altered during the course of the semester.***

### Math 170 Tentative Schedule

Week	Tuesday	Thursday
Wk 1 (8/18)	Syllabus	7.1
Wk 2 (8/25)	7.2	7.3
Wk 3 (9/01)	7.4	7.4 cont.
Wk 4 (9/08)	8.1	8.2
Wk 5 (9/15)	8.3	8.3 cont.
Wk 6 (9/22)	Review	Test#1 CH 7 & 8
Wk 7 (9/29)	9.1	9.1 cont.
Wk 8 (10/06)	9.2	9.2 cont.
Wk 9 (10/13)	9.3	9.3 cont.
Wk 10 (10/20)	9.4	9.5
Wk 11 (10/27)	Review	Test#2 CH 9
Wk 12 (11/03)	10.1	10.1 cont.
Wk 13 (11/10)	10.2	10.3
Wk 14 (11/17)	10.4	10.5
Wk 15 (11/24)	Review	Holiday
Wk 16 (12/01)	Test#3	Review for Final
Finals Week		<b>Final Exam</b> <b>TBA</b>

