

Cuyamaca College Spring 2018

MATH 170 (Section # 9372)

Trigonometry

Instructor: Scott Eckert

Email: scott.eckert@gcccd.edu

Class Times: TTh 11:00 am to 12:15 pm

Room: H-134

Office Hours: MW: 2:30-4pm; TTh 10-10:50

Office: H-132

(Other times available upon request)

Websites: www.cuyamaca.edu/scott.eckert

www.webassign.net

Course KEY = cuyamaca 7163 9839

COURSE DESCRIPTION:

MATHEMATICS 170

Analytic Trigonometry

Theoretical approach to the study of the trigonometric functions with emphasis on circular functions, trigonometric identities, trigonometric equations, graphical methods, vectors and applications, complex numbers, and solving triangles with applications. *Successful completion of MATH 170, 175 is equivalent to the successful completion of MATH 176.*

PREREQUISITE FOR MATH 170:

Prerequisite "C" grade or high or pass/No pass in Math 110 or equivalent (Math 103 does not meet the prerequisite)

STUDENT LEARNING OUTCOMES:

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

Math 170

- Graph the basic trigonometric functions and apply changes in period, phase and amplitude to generate new graphs.
- Prove trigonometric identities.
- Manipulate and simplify trigonometric expressions.
- Solve trigonometric equations.
- Calculate vector sum, vector products, dot products, vector magnitudes and vector angles.
- Analyze physical problems and create trigonometric relationships involving triangles, the coordinate system, the unit circle or vectors.
- Identify special triangles and their related angle and side measures.
- Evaluate the trigonometric function at an angle whose measure is given in degrees and radians.
- Evaluate and graph inverse trigonometric functions.

IMPORTANT DATES TO REMEMBER:

- **Jan 29, Mon** First day of regular semester classes
- **Feb 9, Fri** Last day to drop and qualify for a refund
- **Feb 16, 19th** **Holiday:** Presidents' Birthdays observed for Lincoln and Washington
- **March 26-31** **Holiday: Spring Break (or Easter Holiday)**
- **Apr 27, Fri** Last day to drop semester-length classes (with a "W")
- **May 28, Mon** **Holiday:** Memorial Day
- **May 29 – June 4** Final Exam Week: No regular class meetings (exam only)
- **May 31, Thur** **Final Exam 10:00 am to Noon (NOTE – Not normal class hours)**

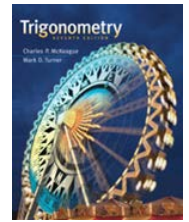
Any information above is **tentative** and may change at the discretion of the instructor at any time. This course adheres to the policies outlined in the Cuyamaca College catalogue. For further information, see Academic Policies stated in the catalogue.

REQUIRED TEXT AND MATERIALS:

- **Text (REQUIRED):** Trigonometry, 7th edition by Charles McKeague (**NOT** in book store) Buy a used 7th or 6th edition (the 6th edition will be cheaper but you will have some issues with the HW assignments and ask me in class how to fix the issue.)

DECISION - Buy a physical textbook or buy computer access to e-text.

You may purchase **ONLY** the computer access code to have only the digital textbook through the website called WebAssign. (see below)



- **Calculator (REQUIRED):** A TI-84(83) Plus graphing calculator. The Mathematics Department of Cuyamaca College highly recommends and supports the use of Texas Instruments graphing calculators.
- **Lecture Note packet (REQUIRED)** which you must buy from bookstore or print out
- **A Protractor (REQUIRED)** – a tool to measure angles.
- **WebAssign SETUP (in case you want it):**

To create an account you will need:

- + Internet connection - go to www.webassign.net
 - + An access code that comes with your textbook OR buy in online at WebAssign
 - + Course KEY = **cuyamaca 7163 9839**
 - + Your legal name and email address
- **Materials:** Notebook paper, graph paper and a binder, pencil, big eraser, highlighter, ruler, and color pencils/pens.



CLASS POLICIES/ EXPECTATIONS:

Your decision to enroll in this class constitutes an agreement to the following:

ATTENDANCE: You are expected to attend each class, arriving on time and remaining for the entire class.

Please grant me the courtesy of letting me know at the beginning of class if you will need to leave early.

- **You may be dropped from the class if you are absent more than 4 days (6 hours).** If this becomes a problem, please come and speak with me. I may decide to drop you unless you convince me of your motivation to stay, and *your grades support this motivation*. When you are dropped you may receive a "W" or an "F", depending on the date dropped.
- **Excessive tardiness will result in being dropped.** Arriving late or leaving early twice will be counted as one hour of absence. Tardiness effects the learning environment and is therefore intolerable. The tardy policy will begin on the second week of class for a full-semester session.
- **Unassigned break.** If you leave the class for more than 15 minutes this will constitute as a tardy. If an emergency arises please grant me the courtesy of letting me know (expecting cell phone calls).

**Do not assume that you will be dropped if you do not attend classes. To ensure that you are withdrawn, you must officially withdraw online, in person, or by telephone. Failing to drop a class in a timely manner may earn you a failing grade in the class.

**You are responsible for getting class notes from other classmates and getting any schedule changes or other class announcements from classmates on days missed from the class. Any changes and class announcements will be made known in class. It is not acceptable to return to class following an absence and claim that you did not know.

NO CELL PHONES: All cell phones must either be turned off or put on silent during class time. They are not allowed on desks during class at all and are not to be used as a calculator or a clock. **Having a cell phone out will result in the student being dismissed from class which will be marked as an absence (up to 1.5 hours).**

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ACCOMODATIONS: Academic accommodations are available for students with disabilities. Please identify yourself to me (after class) and to Disabled Students Programs & Services staff so that the appropriate accommodations can be ensured. If you suspect you have a learning disability or need services for any other type of disability, contact the Disabled Students Programs & Services (DSP&S) Office, A-113, at the Student Services One-Stop Center or call (619) 660-4239.

TUTORING: To support your efforts to succeed in this class, it is highly recommended that you utilize the free math tutoring services available in the STEM Center (the Tutoring Center). Students needing additional help to achieve the learning outcomes for this class are encouraged to enroll in Math 198, Supervised Tutoring. The H-building STEM Center Information Station will provide students with an add code to enroll in this free non-credit class. Instructors and student tutors are available to answer homework questions, give confidence, and support math students. Students also have access to graphing calculators, textbooks, instructional videos, and computer tutorial programs. Computers are also available for student use.
Hours of the STEM Center: M–Th 9:00 am – 6:00 pm and Friday 9:00 am to noon.

METHOD OF EVALUATION:

This class is a 3 unit course. Your semester grade will be based on the different categories listed below:

HOMEWORK & GROUP WORK & QUIZZES (Individual & Group)	20% of overall grade
EXAMS	60% of overall grade
FINAL	20% of overall grade

An A = 90% or higher, B = 80% - 89.9%, C = 70% - 79.9%, D = 60% - 69.9%, F = below 60%.

Note: You must earn at least a 60% on the final to earn a passing grade in this course **AND** earn enough points to have an overall grade of 70%.

HOMEWORK & CLASS WORK (20%)

- **Paper & Pencil work:** Homework problems will be assigned from each section and the cluster review sections of the text covered in class.
Paper & Pencil Homework – The paper and pencil homework will be assigned in class every day. Collection of work will be random. If I choose to collect an assignment, I will do so on the due date when class starts. Failure to arrive to class on time will result in a loss of homework points. Each assignment should be neat with the first page labeled by the section number and the problems in numerical order. Failure to meet these requirements or to submit work late will result in points deducted from those designated for the assignment. There may also be computer based assignments as a part of 20% to be explained later.
Late Work on Paper and Pencil: if you do come late to class be sure to submit homework papers **promptly upon arriving; you will have a small point deduction for being late. No late homework papers will be accepted after the beginning of class or after your initial entrance to class.

- **Class work:** Class work consists of both individual and group activities. Some (but not all) of your in-class activities will be graded.
For the in-class group work, each group member should complete the work and keep a copy for review. However, I may randomly select only one group member's work to grade for the entire group. Failure to

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attend class (excused absences included) will result in a zero on in-class or group work activities and you cannot make-up missed in-class or group work assignments.

**You are expected to keep up to date, study your notes and do the homework. The usual rule of thumb for college courses is a minimum: Two hours of study out of class for every hour in class. Since we meet 6 hours per week, you should spend at least 12 extra hours studying and doing homework for this class each week.

- **Quizzes:** Individual quizzes will be given weekly. Group quizzes will be given at random (generally be given in class either as verbal or written quizzes). Failure to attend class (excused absences included) will result in a zero. There are no make-up quizzes. All quizzes and homework quizzes are closed book. The homework quizzes are regularly given and cover questions from the homework. Other quizzes cover formulas and memorization facts. Additional points in the Homework/Quizzes category come from group activities and lab projects. No make-up on collected homework, quizzes, group activities or lab projects. Refer to the assignment sheet for daily assignments. The assignment sheet is subject to change. Changes are announced in class; you are responsible for all changes even if you are absent.

EXAMS (60%): There will be 4 exams and one final during the semester. Students who have a legitimate reason for being absent on an exam day, need to contact me ONE WEEK before the test date to schedule another time, otherwise there are no make-up exams. A no show without contacting me will result in getting a zero for that test. Cell phones, or other communication devices, are not allowed during exams. Put them in your backpack, pocket or purse. If I catch you with a cell phone during an exam, I will take your exam away and you will receive a zero on that exam. You may WORK for the opportunity to replace a test score by missing 6 or less hours of class and by obtaining at least a 75% on your homework and class work. If you accomplish this, I will automatically replace your lowest test score with your final exam (show work) score.

FINAL EXAM (20%): A comprehensive final exam will be given at the end of the course and is worth 20% of your overall grade. The final exam is mandatory and may not be dropped. If you do not take the final, you will receive a failing grade in the course.

**If you receive less than a 60% on the final, you may receive a grade of D or F.

The comprehensive final date is: **May 31st, 10 am to Noon

ACADEMIC DISHONETY: If you are caught cheating or plagiarizing, you will earn a 0 on that assignment/test. If it happens a second time, you will earn a '0' on that assignment and I will report it; this could result in sanctions which include removal from the class.

TIPS FOR SUCCESS

Ponder these success principles so you can achieve your best from this class.

1. Cultivate a positive attitude;
2. Make friends and do your homework together in groups.
3. Every time - Come on time and stay the whole time.
4. Read the new material BEFORE it is presented in class.
5. Take responsibility for YOUR own learning.
6. Ask questions – lots of questions – to yourself, to classmates, to tutors and to the instructor.