

INSTRUCTOR INFORMATION

Mark Turner

Office: 2326
Office Hours: MW 2:00-2:50
TTh 10:30-11:20
T 12:30-1:20

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COURSE INFORMATION

ADD POLICY

Adds will be taken as space permits. The last day to add is January 31. You may add online through myCuesta using an ADD code or in the Records office with a signed add slip. No adds will be accepted after the first week unless the student has been attending class on a regular basis. Priority will be given to students who have been attending daily.

PREREQUISITES

Completion of Math 127 (Intermediate Algebra) and Math 225 (Geometry) or equivalent courses with a grade of C or better, preferably within the last year. It is recommended that students take Math 242 (Precalculus Algebra) prior to this course.

ABOUT THE COURSE

This course presents trigonometry from a function approach using both right triangle and circular relationships. The relationships between the angles and sides of triangles and relationships between central angles and the coordinates of points on a circle are developed. The course is designed to prepare the student for further study in the mathematics required in the sciences and technical areas. Specific topics include degree and radian measure, identities, right and oblique triangle relationships and applications, trigonometric ratios, functions, and graphs, inverse trigonometric functions and graphs, vectors, trigonometric form of complex numbers, and polar coordinates and graphs.

STUDENT LEARNING OUTCOMES

By the end of this course, the student will be able to:

- Write (from memory) the following:*
 - the eight fundamental identities*
 - the double angle identities*
 - the half-angle identities*
 - the sum and difference of angles identities*
- Prove trigonometric identities algebraically*
- Sketch the graphs of trigonometric functions using the following:*
 - amplitude*
 - period*
 - phase shift*
 - vertical translation*
- Correctly apply inverse trigonometric functions in evaluating expressions (including their domains and ranges)*
- Solve trigonometric equations*
- Perform mathematical operations on vectors*
- Solve applications involving the following:*
 - right triangles*
 - law of sines*
 - law of cosines*
 - vectors*
 - arc length and sector area*
- Find products, quotients, powers, and roots of complex numbers in both rectangular and trigonometric form*
- Convert equations between rectangular and polar form*

COURSE MATERIALS

Required: The text for this course is *Trigonometry: Sixth Edition*, by McKeague/Turner. New textbooks are bundled with an Enhanced WebAssign (EWA) access code at no additional charge.

You will also need a graphing calculator for this course. I recommend the TI-84 Plus Graphing Calculator, as this is the model I will be using in class. Calculators with computer algebra systems (CAS) will NOT be permitted in class on quizzes or exams. No cell phone calculators are permitted either.

An active online account with Enhanced WebAssign is also required for this class. If you purchased a new textbook, your text was bundled with an access code and no additional fee is necessary. If you bought a used textbook, you will need to purchase an access code separately at http://webassign.net/info/ordering_info.html. The cost is \$35.

Optional: The *Precalculus Trigonometry TI-83/TI-84 Tutorial* is available on CD-ROM in the bookstore for additional calculator instruction, or you can purchase an online subscription at www.TItutorials.com. The Student Solutions Manual is also available in the bookstore as an optional resource.

ATTENDANCE

To do well you must attend class. It is up to you to drop the course (the last day to withdraw is April 11). I may drop any student who has been absent for three consecutive class sessions or a cumulative total of six class sessions unless prior arrangements have been made in advance. **If you must be absent from class, it is YOUR responsibility to check the class schedule on my website for any assignments, and to contact a fellow student for any important announcements that you may have missed!**

HOMEWORK

Daily homework assignments will usually involve a combination of EWA problems and problems from the problem sets in the book.

EWA Enhanced WebAssign assignments must be completed by 10:00 am the following class day. Use the resources available within EWA to check your answers, get help in solving the problems, or viewing an example. No late work is accepted, nor can these assignments be made up. If you are absent from class, it is YOUR responsibility to check the class schedule on my web site to see what the homework assignment is for that day. Your 2 lowest EWA homework scores will be dropped at the end of the semester.

Textbook Textbook assignments will be given daily, and each assignment is due at the beginning of the next class session. Homework should be completed neatly and in an organized manner, with section and problem numbers clearly indicated. Present your solutions to problems in the order they are assigned. Even problems should be done at the end of each set. Copy each problem (except word problems) and write the steps of your solution in a vertical column instead of across the page. I recommend the green engineering paper because it makes graphing easier and helps organize your work. Please use pencil instead of pen. Make use of office hours or the Math Lab on a regular basis to get help with problems that are giving you difficulty.

Textbook assignments will be randomly collected without prior notice. Assignments are all worth 10 points; 6 points if it is at least 75% complete, and one additional point for each correct even problem. Work **MUST** be shown! Homework that is sloppy, disorganized, or hard to read will not be given any credit. Your lowest text homework score will be dropped at the end of the semester.

ENHANCED WEBASSIGN

To use WebAssign with this class, you will need to self-enroll in the appropriate course and create a user account. If you purchased a new textbook, be sure to have your access code handy. For detailed instructions, please see

<http://academic.cuesta.edu/mturner/m229/webassign.pdf>

When you are requested to enter a class key, here is the information you need:

10:30 class (CRN #30511):	cuesta	8581	9946
12:30 class (CRN #30512)	cuesta	5869	5441

Follow the remaining instructions. If you purchased a used text, you will have an opportunity to purchase an access code online after you log in. For the complete WebAssign Student Guide, go to

http://www.webassign.net/manual/WebAssign_Student_Guide.pdf.

TEAM PROJECTS

Sometime during the semester students will be grouped into small teams. Each team will complete one of the group projects from the text (located at the end of each chapter). Assignment of projects will be discussed later. Your team will submit a single report. The report should be “publish ready”, meaning complete, neatly written or typed, clear, organized, supported by appropriate illustrations or diagrams, and mathematically and grammatically correct. Your team will need to spend time outside of class to complete the project.

QUIZZES

Quizzes will involve problems similar to those assigned as homework, or check for memorization of basic facts and identities. Missed quizzes cannot be made up. I will drop your lowest quiz score.

WARM-UP PROBLEMS

Most class days will begin promptly with a short warm-up problem that pertains to previous material or helps prepare you for the day’s lesson. Students may work together in pairs. Warm up problems are scored 1 point if correct, 0 points if incorrect. Three warm-up problems will be randomly selected for extra credit on the following exam. These points cannot be made up if you are late or absent to class.

EXAMS

There will be three midterm exams and a comprehensive final exam. There are NO make-up exams; missing an exam will result in a score of zero. The final exam will be given on
Monday, May 18 at 12:00-2:00 (10:30 class)
Wednesday, May 20 at 12:00-2:00 (12:30 class)
 with NO exceptions. Make sure to schedule any travel plans after this date. You will need a photo ID with you during the final exam, so please be sure to have one available by then. At the end of the semester I will replace your lowest midterm exam score with your percentage on the final exam (only if it is to your benefit).

GRADING

Your grade will be based upon the following point distribution:

Group Project	5%	85%+	A
EWA Homework	5%	75%– 85%	B
Text Homework	5%	65%– 75%	C
Quizzes	10%	55%– 65%	D
3 Midterm Exams	60%		
<u>Final Exam</u>	<u>15%</u>		
Total possible	100%		

If you do not take the final exam, you will receive a failing grade.

MYCUESTA

The primary means of communicating with students outside of class will be through myCuesta. This includes announcements such as a class cancellation, change of room, etc. **It is essential that you log in to myCuesta on a daily basis (evening or early morning is best) to check for any important announcements or news.** If you do not have access to the internet at home, there are numerous computers open for student use on campus.

There are also a number of excellent communication resources available through myCuesta, including a chat room and message board. I encourage you to take advantage of the message board to ask questions if you are confused about something, need help with a homework problem, want to carpool to class, or to work on your group problems and projects.

ADDITIONAL RESOURCES

Math Lab: The Math Lab in 2601 is available most days and some evenings. Look for a posted brochure with the current hours.

Tutorial: The tutorial center in the Library building provides free small group and individual tutoring. Both drop-in and arranged hours are available.

Library: The Library should have at least one copy of the text available on reserve. They also have Instructional DVDs that you can watch in the Library or check out overnight.

Internet: My website has a schedule that is updated daily providing information on material covered, homework assigned, and handouts given in class. You can download study guides, previous exams, class lectures, and other study materials directly from the website.

**STUDENT
CONDUCT**

Students are expected to conduct themselves in a manner that is appropriate for a college classroom. These expectations include:

Arriving to class on time, and once in class staying for the entire period.

Listening quietly while the instructor or another student is talking.

Being courteous to the instructor and your fellow students.

Actively participating when given an activity to perform in class.

*Cell phones are to be **turned off** before entering the classroom.*

Please read the Student Code of Conduct in the Class Schedule for other expectations regarding student conduct.

**DISABLED
STUDENTS**

If you have a disability and might need accommodations in this class, please contact Disabled Student Program & Services in Building 3300 as soon as possible to ensure that you receive the accommodations in a timely manner. You may also discuss your need for accommodations with me.

**ACADEMIC
HONESTY**

Please review the Academic Honesty policy in the Class Schedule. Students who violate these principles are subject to disciplinary procedures. Any students caught cheating on an exam will, as a minimum, receive a failing score on that exam that cannot be replaced. Other possible consequences include being dropped from the class, receiving a failing grade in the class, or even expulsion.

DISCLAIMER

Although every effort will be made to adhere to the policies outlined in this syllabus, the instructor reserves the right to revise any information without prior notice.