

Math 112

Trigonometry

Winter 2014

Instructor: Jessica Giglio

Office: GRV 224

Office Hours: Mon. 12-1pm, Tue. 1-2pm, Wed. 12-1pm, Thu. 1-3pm, and by appointment

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TIMES AND LOCATIONS

				WebAssign Key
CRN 10150	10:15-11:20am	MWF	GRV 110	cocc 0866 0594
CRN 12720	10:15am-12:00pm	TR	HCC 260	cocc 2412 5931

REQUIRED MATERIALS

Software: WebAssign will be used for homework and is available through the COCC Bookstore or online at www.webassign.net. Your class key is listed above.

Text options: *College Algebra and Trigonometry* by Stewart, et al.

Choice 1: E-book version with WebAssign: ISBN 9781285858500

Choice 2: Paperback version with WebAssign: ISBN 9781133532897

Calculator: A graphing calculator is required and should be brought to class every day. The TI-83 or TI-84 are recommended. If you have another calculator, that is fine, but you are responsible for knowing how to use it.

COURSE INFORMATION

Course description: MTH 112 is a course designed to examine in detail the applied, real-world, and theoretical mathematical implications of the trigonometric functions. The symbolic, numerical, and graphical representations of these functions and their applications form the core of the course. Emphasis will be on solving problems symbolically, numerically and graphically and understanding the connections among these methods in interpreting and analyzing results. MTH 112 has the competencies from MTH 111 (College Algebra) as prerequisites. The course is college-transferable.

Course outcomes: Students who complete MTH 112 will be able to:

- model and solve applied, real-world, and theoretical mathematical problems involving right-triangle and oblique-triangle trigonometry.
- model and solve problems using symbolic, graphic and numeric strategies and translate among written descriptions, symbolic, graphic and numeric representations of trigonometric functions.
- use a graphing calculator to create trigonometric graphs that represent mathematical models, determine appropriate viewing windows and accurately interpret and draw inferences regarding the meaning and limitations of the graphs.
- understand, apply, and interpret the meaning of trigonometric identities to solve trigonometric equations.
- model and solve problems involving vectors in two dimensions both algebraically and graphically and understand the relationship between the methods and solutions.

Instructional Methods: This course uses a variety of instructional methods including lecture, class discussions, and small group work.

Student Requirements: Throughout this course, you will be expected to:

- Read the assigned sections of the textbook.
- Attend and actively participate in class discussions and activities (bring paper every day!).
- Work cooperatively in groups.
- Complete homework and other assessments according to the policies listed on this syllabus.

Attendance: After the first week, attendance will not be taken. However, regular attendance is expected. If you need to miss class, you should check WebAssign for announcements and assignments and check the website for handouts. You are responsible for all material covered in class during your absence and should get notes from a fellow student as soon as possible.

Important Dates:

January 10	Last day to begin attendance in a new class
January 17, 5pm	Last day to drop a class for a full refund
January 20	Martin Luther King, Jr. Day (college is closed)
February 21	Last day to change from grade to audit or vice versa; last day to drop a course without receiving a W on your transcript
March 12, 6pm	Last day to withdraw from classes (instructor approval is required and you will receive a W on your transcript)

ASSESSMENTS AND GRADING

Homework: Daily homework is handled electronically through WebAssign. Homework for each week is due Sunday at midnight. You may use WebAssign to request a 1-week extension on any homework assignment. You are encouraged to ask questions about homework in or out of class, and you can get help through WebAssign as well. You will have five chances to improve your homework score as long as you finish by the due date. Problems submitted at least 24 hours early receive a 2% bonus, while those submitted late (with the extension) receive a 10% penalty.

Group Work: Short group assignments will be given once or twice per week and usually collected the next class. You may turn in group work one class day late for no penalty and until the next exam for 50% credit. You are welcome to submit group work individually as well.

Projects: Projects will be handed out throughout the term and due a week or two later. You may turn in projects one class day late for no penalty and until the next exam for 50% credit.

Quizzes: There will be a few in-classes quizzes during the term. Their dates will be announced ahead of time. If you miss a quiz, arrange to make it up during my office hours within a week of the original due date, or you will receive a 0.

Exams: We will have two in-class exams during the term as well as a comprehensive final exam. In-class exam dates will be announced well ahead of time. If you need to miss an exam, you must contact me *prior to the start of the exam* (email or voice message is fine for initial contact). We will then arrange a time for you to take the exam with the Testing Center *before the next class meeting*. If you do not follow through with these arrangements, you will receive a 0 on the exam.

Final Exam: Final exam dates are as follows. On an individual basis, for emergencies and other special circumstances, a student may take a final examination at a time other than that scheduled, providing the student has received **prior** approval by petition signed by the instructor and the department chair (the form is available on the COCC website).

			Date	Time
CRN 10150	10:15-11:20am	MWF	Wed. 3/19	10:15am-12:15pm
CRN 12720	10:15am-12:00pm	TR	Thu. 3/20	10:15am-12:15pm

Grading Breakdown:

WebAssign Homework	10%
Quizzes, Group Work, Projects	25%
In-Class Exams	40% (20% each)
Final Exam	25%

Grading Scale:

A, A-	90-100%
B, B+,B-	80-89%
C, C+	70-79%
D	60-69%
F	less than 60%

You can always find your current course grade in the WebAssign gradebook.

TENTATIVE COVERAGE SCHEDULE

A detailed and updated schedule is available at <http://www.cocc.edu/jgiglio/>.

- Week 1:** Syllabus; introduction of basic trigonometric concepts and functions
- Weeks 2-3:** Graphs of the trig functions
- Week 4:** Data fitting and more trig graphs
- Week 5:** Right triangle trig
- Week 6:** Right triangle trig applications; reciprocal trig functions
- Week 7:** Laws of Sines and Cosines; introduction to simplifying trig expressions
- Week 8:** Introduction to trig formulas; Exam 2
- Week 9:** More on trig formulas; introduction to solving trig equations
- Week 10:** More on trig equations; inverse trig functions

ADVICE FOR SUCCESS

- **Get help as soon as you need it.** Of course you are always welcome to ask questions in class, or to come by my office hours or set up another time to meet with me individually or with a group. You can also get free tutoring in the lower level of the library. You can find the current schedule at <http://www.cocc.edu/tutoring-and-testing/>.
- **Stay on top of things with WebAssign and the webpage.** You can use WebAssign to check your grades on individual assignments and look for announcements. Handouts will be available on the webpage (<http://www.cocc.edu/jgiglio/>) the day they are distributed.
- **Budget your time wisely.** Like with most college courses, you should expect to spend at least 2 hours on this course outside of class for every hour in class (so about 8 hours a week or more). Try to spread this time throughout the week rather than waiting until right before an assignment is due so that it's easier to seek help if you need it.
- **Practice, practice, practice.** The only way to truly learn math is by doing it for yourself, not just watching someone do it. If you need additional practice beyond the problems assigned, please let me know!

ADDITIONAL INFORMATION AND POLICIES

Cheating or Plagiarism: You are highly encouraged to work together and help each other. However, cheating or plagiarism on any assignment or test will result in a zero being recorded for that item and may result in an F for your final course grade.

Behavior: Your rights and responsibilities are detailed in the [Students Rights and Responsibilities](http://www.cocc.edu/Student-Life/Rights_and_Responsibilities/) (http://www.cocc.edu/Student-Life/Rights_and_Responsibilities/) handbook. Failure to abide by these guidelines will result in notification to Student Life and can result in dismissal from the class. As for classroom policies, we will have a discussion about them on the first day of class and decide together.

Americans with Disabilities Statement: Students with documented disabilities who may need accommodations, who have any emergency medical information the instructor should know of, or who need special arrangements in the event of evacuation, should make an appointment with the instructor as early as possible, no later than the first week of the term. Students may also wish to contact the COCC Disability Services Office in the Boyle Education Center, (541) 383-7583.

COCC Non-Discrimination Policy: Central Oregon Community College is an affirmative action, equal opportunity institution. It is the policy of the Central Oregon Community College Board of Directors that there will be no discrimination or harassment on the basis of age, disability, gender, marital status, national origin, race, religion, sexual orientation, or veteran status in any educational programs, activities or employment. Persons having questions about equal opportunity and non-discrimination, please contact Human Resources for referral to the appropriate personnel, 541-383-7236.

Student Insurance: Students are not covered by medical insurance while on campus or involved in college classes and activities. Students are responsible for their own medical and dental insurance coverage.

Getting Started with WebAssign

- You should be running a current browser with the latest Java version (download from <http://www.java.com/en/download/>).
- Go to <http://www.webassign.net>. Choose the 'I have a Class Key' option and type in your class key from the first page of this syllabus.
- If you already have an account: check "I already have a WebAssign account."
- If you do not have an account: check "I need to create a WebAssign account."
- You do not need to purchase anything at this time! You may choose the Free Trial Period option.
- The WebAssign Calendar shows due dates for each assignment.
- The My Assignments section shows assignments on the day they are given out. To request an extension, wait until the due date has passed. Then click on Past Assignments, and you will see an option to "Request Extension" by each assignment.
- You are encouraged to ask questions concerning the homework during class or by e-mail. You can also use the "Ask Your Teacher" button in WebAssign. Remember that you only have five tries to answer a question correctly, so don't use them all up before you seek help! I am able to see all of your previous attempts at each problem.
- You are highly encouraged to **work in groups, use the COCC tutors** and drop by my office anytime (ideally, call or email first if you're coming outside my office hours).