



MTH 112

Trigonometry

Fall 2020

Course and instructor information:

CRN: 32140

Class time: TR 1-2:50 PM, F 2-2:50 PM

Zoom link: <https://linnbenton.zoom.us/j/93160372550>

Instructor: Dr. Mike Hruschka

Email: hruschm@linnbenton.edu

Office Hours: T 11-12 AM, F 1-2 PM

Zoom link:

<https://linnbenton.zoom.us/j/170639244>

Course Description:

MTH 112 introduces trigonometric functions, trigonometric identities, inverse trigonometric functions, trigonometric equations, right triangle trigonometry, and polar coordinates. It also includes vectors and conic sections.

Prerequisites:

MTH 111 College Algebra or equivalent, each with a grade of "C" or better.

Student Learning Outcomes: Upon completion of the course, the student will be able to:

1. Calculate the exact (when possible) or approximate value of the 6 trigonometric functions using both radian and degree measure.
2. Solve for all of the side lengths and angles of a right or oblique triangle, using information given.
3. Graph trigonometric functions (emphasizing sine, cosine and tangent), and conic sections, transform their graphs, and state important features of their graphs.
4. Verify trigonometric identities and use them to solve trigonometric equations involving one or more trigonometric functions.
5. Perform calculations involving vectors and solve vector applications.

Required Course Materials:

- We will be using a [free online textbook](#) and online homework through MyOpenMath.com. MyOpenMath also contains links to video lectures.
- PC or Mac, microphone, and webcam. (Chrome Books do not work, iPads do not work well on tests.)
- Regular, reliable internet access for attending Zoom meetings, watching videos, and completing online homework assignments, projects, and tests.
- Graphing calculator or graphing software : A TI80 series calculator or Desmos will work, and there are many other possibilities. A scientific calculator will be needed for tests.

Enrolling in MyOpenMath:

0 If you have used MyOpenMath before, log in and skip to step 6

1 Go to www.myopenmath.com

2 Click on "Register as a New Student"

3 Enter a user name, I recommend using your student ID number

4 Choose and confirm a password, one you will not forget

5 Enter your first and last names, and your e-mail address

6 Enter the Course ID: 97328

7 Enter the Enrollment Key: W2021

Grading Policy:

Your grades may be viewed on [MyOpenMath.com](https://www.myopenmath.com) and will be approximately based on the following:

3 Tests	20%, 10%, 10%
Final Exam	25%
Homework (MyOpenMath)	20%
Attendance	15%

Grading Scale: A: 90 -100% B: 80 – 89% C: 70 - 79% D: 60 - 69% F: 0 - 59%

A grade of Incomplete may be assigned at the discretion of the instructor under special circumstances. The student must have completed the majority of the course and passing the course prior to the “special circumstance”.

Tests:

All tests (including the final exam) will be taken in MyOpenMath via a link in Moodle. We will be using Respondus proctoring software for the tests. **Respondus requires a reliable internet connection, web cam, and microphone.** There will be a practice quiz during week 2 so that you can test the software. Tests must be taken during the scheduled time period. If you miss a test you will get a score of zero. The tentative test dates are listed in the course schedule.

Homework:

Your homework assignments will be completed on MyOpenMath. Each assignment will be available for a given length of time and you must complete the assignment and enter your answers online by the deadline date and time. Each student has 4 “**late passes**” they can use to extend a homework deadline by 48 hours. These must be applied **before** the assignment is due. At the end of the quarter your two lowest scores from this category will be dropped.

There may also be an occasional homework assignment outside of MyOpenMath, including on the first day of class.

Attendance:

Attendance at class Zoom meetings is required. You may miss up to 5 hours of class without your grade being affected.

Resources:

MyOpenMath: Most of the class will take place in MyOpenMath and Zoom.

Class time: Zoom sessions will consist of interactive lectures and small group work. Class time is a great time to ask questions of your instructor and fellow students.

Office hours: If you have a question, please ask. Often Zoom is the best way to communicate, but I will also respond to email, and messages in MyOpenMath. I am also available by appointment and at the Learning Center.

Learning Center:

- The [Math Help Desk](#) is open for Zoom drop-in help M-F 9-8, Sa 11-4, and Su 11-3. This is a place to ask a question or 2, think about things for a while, and come back.

- If you want to sit down with a tutor for an hour (also over Zoom) go to the [tutoring webpage](#) to schedule an appointment. Students can get up to 3 hours per week of tutoring help at the tutoring center.

Tips for success:

- Download and read the blank class notes and relevant sections of the book before coming to class. Come to class and ask questions. Review your (or my) class notes after class, the same day if possible. Start the homework as soon as possible after we have covered it in class.
- Expect to spend at least 10 hours per week on this class in addition to the regular Zoom meetings; more if you are having difficulty.
- Find the resources that work best for you.

Academic Honesty:

I assume that you are ethical and honest. However, if there is an incident of academic dishonesty (cheating), you will receive a score of zero for that test/assignment and the incident will be reported to the college administration for possible further disciplinary action. If there is a second offense, you will receive a grade of F for the course and the incident will be reported to the college administration with a recommendation for disciplinary action.

Special Circumstances:

Students who have any emergency medical information the instructor should know of, or students with documented disabilities who may need accommodations, should **make an appointment with the instructor as early as possible, no later than the first week of the term.** If additional assistance is required, the student should contact the Center for Accessibility Resources at 541-917- 4789.

LBCC Comprehensive Statement of Nondiscrimination:

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws.

Statement of Inclusion:

The LBCC community is enriched by diversity. Each individual has worth and makes contributions to create that diversity at the college. Everyone has the right to think, learn, and work together in an environment of respect, tolerance, and goodwill. (related to Board Policy #1015)

The instructor reserves the right to make changes to the syllabus/calendar at any time.

MTH 112 - TRIGONOMETRY
 Spring 2021 (*Tentative Schedule*)

	Monday	Tuesday	Wednesday	Thursday	Friday
week 1 4 – 8 Jan		Intro, 7.1A		7.1A, 7.1B	7.1B
week 2 11 - 15 Jan		7.2A, 7.2B Practice test opens 5 pm		Practice test closes noon 7.3,7.4	7.3, 7.4
week 3 18 - 22 Jan	Holiday	10.1		10.1, 10.2	10.2
week 4 25 – 29 Jan		8.1A Test 1 opens 5 pm		Test 1 closes noon 8.1B	8.2
week 5 1 – 5 Feb		8.2		8.3	8.3
week 6 8 – 12 Feb		10.3a, 9.1 Test 2 opens 5 pm		Test 2 closes noon 9.1, 9.2	9.2
week 7 15 – 19 Feb	Holiday	9.3		(9.4), 9.5	9.5
week 8 22 – 26 Feb		10.3b Test 3 opens 5 pm		Test 3 closes noon 12.1	12.1
week 9 1 – 5 Mar		12.2		12.2,12.3	12.3
week 10 8 – 12 Mar		10.8a		10.8a	10.8b
Finals 15 – 17 Mar		Final Exam available 8am	Final Exam closes 6pm		