# MTH 112-Trigonometry Spring 2021 CRN 43635

#### **Instructor Information**

Instructor: Mary Campbell

Email: Mary.Campbell@LinnBenton.edu

**Class Meetings**: Our class meets Tuesday and Thursdays from 10:30-12:20 and Fridays from 10:30 to 11:20. Our classroom is located in Zoom at:

https://linnbenton.zoom.us/j/95304596433

**Office Hours:** Office hours are available Monday at 11:00 and Friday at 1:00. Office hours are located in Zoom at: <a href="https://linnbenton.zoom.us/j/684149306">https://linnbenton.zoom.us/j/684149306</a> if those times do not work for you, contact me to arrange another time, it's not a problem.

Remote Math Support: Open from 9am - 7pm Monday through Friday, 11am - 4pm Saturday and 11 – 3 Sunday. Located in Zoom at: <a href="https://linnbenton.zoom.us/j/94627678411">https://linnbenton.zoom.us/j/94627678411</a>
Meet up with your classmates: A great place to collaborate, on Discord:

https://discord.gg/geMqSqV

#### **Course Information**

Prerequisite: High School Geometry and MTH 111, or equivalent. Each with a grade of C or better.

Topics covered will include trigonometric functions, trigonometric identities, inverse trigonometric functions, trigonometric equations, right triangle trigonometry, complex numbers, and polar coordinates. It also includes parametric equations, vectors and conic sections.

### **Course Outcomes:**

- 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.

#### Materials:

Regular access to a computer with a webcam and the Internet A notebook and writing implement Calculator

We will be using an open source textbook and software

### How your Progress will be measured

**Tests**: There will be two tests and a comprehensive final in this course. Testing will be done online during class time with video monitoring. If you fail to take a test, you will receive a score of 0.

**Homework**: Success in a math class goes hand-in-hand with completing the homework assignments. When doing your homework, feel free to ask for help. The Math Help Desk personnel are available online. Form a study group with other members of the class. Talking with others about math is where learning begins!

Much of the homework will be completed and submitted electronically using MyOpenMath.

## **Enrolling in the Class Software: MyOpenMath**

- 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: 106451
- 7 Enter the Enrollment Key: MTH112

**Other Work/Activities**: These will be a combination of short, in class quizzes and assignments. They are to give you immediate practice and feedback on recent material. If you are not in class you will receive a grade of zero. These cannot be made up.

**Write-Ups:** Some topics are covered with hand written (and hand graded) solutions. You will hand in a careful, complete, written solution to these problems. The write-up will include: the problem statement, all steps necessary to solve it, appropriate explanation of the process, and the answer clearly stated. It should be written so that anyone in the MTH 112 class would be able to follow your solution. These will be graded based on correctness and on the communication of your solution.

Grading: Grades will be based on

2 tests (20% each) 40%
Cumulative Final 25%
Other Work/Activities 15%
Write-Ups 5%
MyOpenMath Homework 15%

Final Grade: A: 90 - 100% B: 80 - 89% C: 70 - 79% D: 60 - 69% F: 0 - 59% The 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, been in regular attendance and passing the course prior to the "special circumstance".

Acts of academic dishonesty are regarded by the college as very serious offenses. Penalties will be the maximum permitted by the college.

LBCC maintains a policy of nondiscrimination and equal opportunity in employment and admissions, without regard to race, color, sex, marital and/or parental status, religion, national origin, age, mental or physical disability, Vietnam era, or veteran status.

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

LBCC is committed to inclusiveness and equal access to higher education. If you have approved accommodations through the Center for Accessibility Resources (CFAR) and would like to use your accommodations in this class, please talk to your instructor as soon as possible to discuss your needs. If you believe you may need accommodation but are not yet registered with CFAR, please visit the CFAR website at <a href="www.linnbenton.edu/cfar">www.linnbenton.edu/cfar</a> for steps on how to apply for services or call 541-917-4789