Math 112 Trigonometry CRN 40105
MTWHF 10-11:50 Spring 2019 WOH 113
Linn-Benton Community College Albany Campus
John Barrett, barretj@linnbenton.edu WOH 103

Textbook: Lippman, David., *Precalculus, an investigation of functions*, 2nd edition, Open Course Library Project.

This text is available on the Moodle Math 112_JB website and online.

Please have a calculator and access to graphing technology.

Grades are based on the usual percentage break-down: 90/80/70/60.   There will be three quizzes (each worth 50 points) and three exams (each worth 100 points) throughout the term, in addition to the final exam (which is worth 200 points).   The lowest exam score (not the final exam) and the lowest quiz score will be dropped.   There will be in-class projects and homeworks throughout the term, each worth 10 points. The final exam will be on Wednesday 12 June 8-9:50 am in the classroom. One side of a 3.5-by-5 inch notecard may be used for notes during exams and quizzes. One side of an 8.5-by-11 inch paper may be used for notes on the final exam.   Total points earned will be divided by total points possible to obtain a percentage that will be assigned a letter grade by the instructor. No make-up exams or quizzes will be given.

Office hours are Wednesdays and Fridays before class 9:25-9:55 am in WOH 103.   Tutoring is also available in the Learning Center.

Acts of academic dishonesty are serious offenses and will be penalized to the maximum extent allowed by the college.

LBCC Comprehensive Statement of Nondiscrimination

LBCC prohibits unlawful discrimination based on race, color, religion, ethnicity, use of native language, national origin, sex, sexual orientation, gender, gender identity, marital status, disability, veteran status, age, or any other status protected under applicable federal, state, or local laws. For further information see Board Policy P1015 in our Board Policies and Administrative Rules. Title II, IX, & Section 504: Scott Rolen, CC-108, 541-917-4425; Lynne Cox, T-107B, 541-917-4806, LBCC, Albany, Oregon. To report: linnbenton-advocate.symplicity.com/public report.

The LBCC community is enriched by diversity and recognizes that each individual has worth and makes contributions for the good of the college as a whole.   Each person has a right to think, learn and work together in a supportive, tolerant and respectful environment.

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 the class, please talk to your instructor as soon as possible to discuss your needs. If you believe you may need accommodations but are not yet registered with CFAR, please visit the CFAR Website for steps on how to apply for services or call 541-917-4789.

The following schedule of topics is subject to change at the instructor's discretion.

	M	T	W	Th	F	Topic
1		Intro	Lec	Lec	Lec	Angle measures, circles and triangles
2	Lec	Lec	Lec	Lec	Q	Sine, cosine, tangent deifintions
3	Lec	Lec	Lec	Lec	T	Graphs
4	Lec	Lec	Lec	Lec	Lec	addition formulas
5	Lec	Lec	Lec	Lec	Q	Law of sines, Law of cosines
6	Lec	Lec	Lec	Lec	T	inverse trigonometric functions
7	Lec	Lec	Lec	Lec	Lec	Solving trigonometric equations
8	Lec	Lec	Lec	Lec	Q	conic sections
9	X	Lec	Lec	Lec	T	Vectors
10	Lec	Review	Worksheet	Review	Review	Wrap-up and review
11			Final			

Students who successfully complete Trigonometry will acquire a working knowledge of trigonometric functions and their graphs, identities, inverse trigonometric functions, trigonometric equations, right triangle trigonometry, polar coordinates, vectors, and conic sections.

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

■ Calculate the exact (when possible) and approximate value of the 6 trigonometric

functions using both radian and degree measure.

■ Solve for all of the side lengths and angles of a right or oblique triangle, using

information given.

■ Graph trigonometric functions (emphasizing sine, cosine and tangent), and conic

sections, transform their graphs, and state important features of their graphs.

■ Verify trigonometric identities and use them to solve trigonometric equations

involving one or more trigonometric functions.

■ Perform calculations involving vectors and solve vector applications.