Instructor: Vikki Maurer

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Student Hours: M11-12, W11-12, R1-2; Others by Appt.

ALEKS Class Code: QFFER-KXCW9

Free two-week access code: FEFF6-172F7-B4074-DF8F2

Course:

We will discuss 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.

Required for this class:

- 11-week ALEKS 360 access code. It sells in the bookstore for \$60. This code will give you access to the ebook and the adaptive course software. Through our ALEKS class you have the option to order a loose leaf version of the textbook for an additional \$25. However a paper version of the book is not required.
- Scientific Calculator. We use only scientific calculators for exams.
- Access to a graphing calculator, a graphing calculator app on your phone (for in-class use but not on exams) or Desmos (for computer or tablet use). There is no need to buy a graphing calculator.

Instructor Web-Page Class Notes and Daily Announcements:

Go to...http://linnbenton.edu/, Quick Links, Instructor Websites, Maurer Vikki

Requirements and Grades:

5% ALEKS Whole Pie Percentage

15% ALEKS Weekly Objectives and Exam Reviews

5% Projects

15% In-Class Group Problems and Attendance Checks

40% Midterm Exams (2 Written Exams)

20% Final Exam

Course Grades:

LBCC does not offer plus/minus grading. This class will have final course grades assigned according to the standard 90%, 80%, 70%, 60% grade cutoffs. You must earn at least a C grade in Math 112 in order to move on to higher math classes for which Math 112 is a prerequisite.

Attendance: The biggest reason why students fail to complete a math class is due to poor attendance. If you miss several of our classes you will find it very difficult to get caught up. Plan to be in class every day. Attendance checks and in-class work will be gathered for a grade and cannot be made up. If you are the student who misses classes each week then this is not the class for you.

Incomplete Grades:

An incomplete grade may be issued for a student who is making satisfactory progress (Grade of C or better) in the course, but who has failed to complete the final exam. Any student seeking an incomplete must discuss this option with the instructor and sign an agreement prior to the time when grades are issued.

eBook:

Through the ALEKS site you will have access to the eBook **College Algebra with Trigonometry** 1st Edition by Miller and Gerken. You can order a paper version of the text through ALEKS but if you have ANY trigonometry book then you can study topics from that book. Your \$60 ALEKS access code gives you access to the adaptive learning software using the Miller book when you need explanations but it is not necessary to have a copy of that exact trigonometry book. See me if you have questions about this.

Homework and ALEKS:

There are 141 topics to master in this class. You may find that you already have some topics mastered when you get into our ALEKS course. Each week there are topics assigned and the weekly deadlines are always Sunday at midnight. New topics will be added each Monday. We will discuss material in class during the week you will take time after class each day to get into ALEKS and work on learning new topics. If you master all the topics for a particular week then you will be able to work ahead or you can go back and master topics you may not have learned from a previous week. This ALEKS program is adaptive and customizes to each student so you each will have a unique experience. If you have weekend plans that do not include homework then it is up to you to complete the ALEKS topics before the weekend. You have the freedom to decide when during the week to complete the assigned topics. However if you wait until Sunday to start learning the weekly topics you will very likely run out of time. The best plan is to work hard early in the week so you have time to get help and then finish up any last topics on Friday.

In-Class Work and Projects:

As often as possible you will work in groups during class to reinforce topics. In-class work will be collected. Sometimes it will be graded for accuracy. Sometimes it will be collected as an attendance check. In-class work cannot be made up. There will also be at least two projects to complete at home.

Midterm Exams:

There are two midterm exams. You will take each exam in our classroom. Please use the restroom BEFORE you come to class to take the exam and turn your cell phone off during the exam. If you miss an exam for any reason, you will earn 0 points. There are no make-up exams or retakes of exams. However, you may replace your lowest midterm exam score with the percentage you earn on the final exam.

Final Exam:

Your final exam is cumulative and will be given in our usual classroom. There will be a two-hour time limit. The final exam is worth 150 points.

Missing Class and Missing ALEKS Deadlines:

If you are absent then you should check my website for the posted lecture notes. If you do not complete your ALEKS work by the due date then you will lose points no matter why you missed the deadline. There are ten weekly deadlines that you will see in your ALEKS gradebook. One week's grade will be dropped at the end of the term so your nine best weekly ALEKS scores will count in your final course grade.

Help:

- Ask questions during class.
- See me during student hours in my office or email me.
- ALEKS has VIDEOS in the ebook.
- Make an appointment to work with a FREE tutor in the Learning Center.
- Talk with an instructional assistant at the math desk in the Learning Center.
- Form a trigonometry study group.

Cheating: If you cheat on an exam, you will receive a zero grade on the exam, and I will file an incident report with the Dean of Students. A second episode of cheating will guarantee an F grade for the course and more severe disciplinary action from the school. Copying project work from another student is cheating also. In those cases, you will earn no credit for the assignment or project and I will file an incident report. If you are having so many problems that you feel the only way out is to cheat, then you need to come talk with me. I am here to help you succeed. There are ways to work things out for students who are willing to try.

Anyone With Special Needs? 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.

Nondiscrimination Statement: 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. To report: linnbenton-advocate.symplicity.com/public report.

Weekly Schedule

Weeks	Topics (See Weekly Topic list for detailed information.)
Week 1 April 1-5	Initial Knowledge Check Due Thursday, April 3 when class begins. 17 Topics: Section 5.1, 5.2
Week 2 April 8-12	18 Topics: Sections 5.3, 5.4
Week 3 April 15-19	17 Topics: Sections 5.5, 5.7
Week 4 April 22-26	46 Exam 1 Review Topics EXAM 1: Tuesday, April 23 in Class 8 Topics: Sections 6.1, 6.2, 6.3 (double angle identities)
Week 5 April 29-May 3	18 Topics: Sections 6.3 (half-angle identities), 6.5, 7.1
Week 6 May 6-10	14 Topics: Sections 7.2, 7.3, 8.1, 8.2 ***Polar Graph Take Home Project***
Week 7 May 13-17	40 Exam 2 Review Topics EXAM 2: Tuesday, May 14 In Class 9 Topics: Sections 8.4 Geometry of Vectors and Components
Week 8 May 20-24	15 Topics: Section 8.4, Begin 8.5 ***Rescue Euclid Take Home Project***
Week 9 May 27-31	Memorial Day NO SCHOOL Monday, May 27 15 Topics: Section 8.5, 2.2, 11.1
Week 10 June 3-7	10 Topics: Sections 11.2, 11.3
Finals Week June 10-12	Final Exam, Monday, June 10, 10:00am to 11:50am