

MATH 1613: TRIGONOMETRY

Instructor: Karen Strande
Office: MSCS 517
Office Hours: T, R 3:30-4:30pm or by appointment
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Online Classroom: <http://oc.okstate.edu>
Syllabus Attachment: <http://academicaffairs.okstate.edu/faculty-a-staff/46-syllabus-attachment>

Course Objectives: 1) to understand the definitions and principles of trigonometry and their applications to problem solving. 2) To complete the college mathematics requirement for further study of mathematics and courses in business, social science, or engineering.

Required Materials:

- *Analytic Trigonometry* (Tenth Edition) by Barnett, Ziegler, and Byleen. Wiley & Sons. 2009.
- A scientific calculator that is capable of evaluating the trigonometric functions (sine, cosine, and tangent) and their inverse functions, in both degrees and radians. A *graphing calculator* would be very helpful to complete some of the homework problems, but will not be required for examinations. *The Mathematics Department has graphing calculators available for checkout to students who are enrolled in mathematics courses.* Note that you will not be permitted to use any device that can establish a connection to a cellular or wireless network during in-class quizzes or exams. This means, for example, that you cannot use a cellphone calculator app or a tablet computer on exams.

Mathematics Learning Resource Center (MLRC): The MLRC is an invaluable resource to support your mathematical learning.

Location: 4th Floor of the Classroom Building (420)

Learning Aids/Services: Tutoring, Videotaped lectures, and Microcomputers with mathematics software

Examinations: There will be three (3) in-class examinations with a maximum possible score of 100 points each and a 200-point comprehensive final examination. Exam dates will be announced in class at least one week in advance. *Make-up examinations* will be given only for very **serious and unavoidable** conflicts, and *only if* your request to present a make-up examination is approved by your instructor. Almost always this will require approval **in advance**. If this condition is not satisfied, it is understood that the opportunity to present a make-up examination is voided. In the instance that a make-up examination is appropriate, it will be given the last day of Finals Week during the period scheduled for make-up exams. Bring your student ID to each examination.

The **final exam** will be given on **Tuesday, December 11 4:00-5:50 pm in Murray 035**. Please mark this date on your calendars because it cannot be changed.

Homework/Quizzes: (200 points maximum) Homework will be assigned and collected on the day of quizzes. The homework and the quiz will be collected together. If you know that you will be absent,

send your homework to class with another student or drop it by my office before class. There are **no make-up quizzes and late homework will not be accepted!**

In order to receive full credit, homework must be submitted in the following manner:

1. Your name (first and last) should be clearly written at the top of your paper and you should label the assignment (i.e., Homework 1).
2. The entire assignment should be **stapled** together.
3. Homework problems must be submitted in the order in which they were assigned.
4. Homework should be neat and legible.
5. **You must show ALL work to receive full credit!**

Note: Homework assignments will be posted on the Online Classroom, also referred to as D2L (Desire2Learn).

Class Attendance:

Class attendance is one of the strongest predictors of success in mathematics classes. Attendance will be taken every class period beginning 8/30 and ending on Tuesday, 12/4. If you miss no more than 3 classes during this time period, you will receive a 3% bonus. You must arrive on time and be present for the entire class period to be counted as present. Students with excused absences for official university activities (with documentation) will be counted as present.

Note: Signing the class attendance sheet for another student is not permitted; if it is determined that a student signed in for another student, this unethical conduct will be regarded as a violation of Academic Integrity and the appropriate University policies will be employed.

Course Evaluation: Course grades will be determined according to the following distribution.

Quizzes/Homework	200 points
Examination 1	100 points
Examination 2	100 points
Examination 3	100 points
Final Examination	200 points

TOTAL	700 points

A total score of 90% will ensure an 'A', a score of 80% at least a 'B', a score of at least a 70% will ensure a 'C', and a score of at least 60% will ensure a 'D'.

- Notes:**
1. Final grades will not be curved.
 2. You will be able to check your grades via the Online Classroom.

Final Note: Any changes in this syllabus will be communicated to you in class by the instructor.

TRIGONOMETRY 1613 FALL 2012

Week 1	8/21 Sec. 1.1, 1.2 Geometry review, syllabus	8/23 Algebra review, Sec. 1.3 Trig Ratios
Week 2	8/28 Sec. 1.3 Trig and right triangles	8/30 QUIZ 1 Sec. 1.4 Application
Week 3	9/4 2.1 Measuring angles, radians	9/6 Sec. 2.3 Unit Circle
Week 4	9/11 Sec. 2.5 Exact values	9/13 QUIZ 2 Sec. 7.1 Polar coordinates
Week 5	9/18 Review	9/20 EXAM 1
Week 6	9/25 Sec. 3.1 Graphing trig functions	9/27 Sec. 3.2 Graphing with shifts
Week 7	10/2 Sec. 3.3 More graphing	10/4 QUIZ 3 Sec. 4.1 Identities
Week 8	10/9 Sec. 4.2 Identities	10/11 Sec. 4.2 Identities
Week 9	10/16 Sec. 4.3 Sums/Difference formulas	10/18 QUIZ 4 Sec. 4.4 Double/ half angle formulas
Week 10	10/23 Review	10/25 EXAM 2
Week 11	10/30 Sec. 5.1 Trig Inverses	11/1 Sec. 5.3 Solving trig equations
Week 12	11/6 Sec. 5.3 Solving trig equations	11/8 QUIZ 5 6.1 Law of Sines 6.2 Law of Cosines
Week 13	11/13 6.2 Law of Cosines 6.3 Area of Triangles	11/15 6.4 Vectors
Week 14	11/20 Sec. 6.5 Vectors	11/22 Thanksgiving
Week 15	11/27 Review	11/29 EXAM 3
Week 16	12/4 Sec. 6.6 Vectors	12/6 REVIEW FOR FINAL
Week 17	12/11 EXAM at 4-5:50, Murray 035	