

MATH 1583

Applied Geometry and Trigonometry

Instructor: Karen Strande
Office: MSCS 436
Office Hours: T/Th 1:30-2:00 pm in office; 3:30-4:20pm Tuesdays at MLSC
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Online Classroom: <http://oc.okstate.edu>

Course Objectives: 1) to understand the definitions and principles of geometry and right triangle trigonometry and their applications to problem solving. 2) To complete the college mathematics requirement for further study of mathematics.

The course is divided into three units of study. The first two units are a review of Euclidean geometry with an emphasis on problem solving. The third unit is an introduction to trigonometry primarily dealing with the right triangle applications and vectors. The course will be assessed with both traditional methods of homework and tests and with journal writing and project work.

Required Materials:

- *Pearson Custom Mathematics: Applied Geometry and Trigonometry*
- 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 cell phone calculator app or a tablet computer on exams.

Ruler, graph paper

Examinations: There will be two (2) in-class examinations with a maximum possible score of 100 points each. Exam dates will be announced in class at least one week in advance. The final exam will be given on Thursday, May 7th from 2 –3:50 pm. and will be worth 150 points.

Make-Up Exams: Make-up exams will be given only in extreme circumstances, if documentation for the absence can be provided and is verifiable. Valid reasons (documentation required) for make-up exams include:

- University activities (e.g. field trips, research presentations, athletic teams, etc.)
- Military obligation, jury duty or other mandatory court appearance
- Serious illness or injury in student or immediate family (parent, sibling, spouse, son, daughter)

If you believe a make-up exam may be applicable, please notify the instructor either in person or by e-mail prior to the missed exam (if possible), informing the instructor of the reason for missing the exam. Notification *after* the exam will only be accepted in an emergency situation. If you know several days in advance that you will miss an exam (jury duty, athletics, etc.), it may be possible to take an *early* exam. You must provide **appropriate documentation** for the absence.

Homework: Homework will be assigned and collected with a quick homework quiz. There will be 12 such assignments collected and the two lowest grades will be dropped at the end of the course. To make good grades on homework, all problems must be attempted and work shown. The work should be neatly done. No late grades accepted.

Projects: Two projects (50 points each) will be assigned to assess your ability to apply the mathematics to a problem and then to explain your findings. These projects may be assigned to a group of students or to individuals as directed by the instructor.

Note: Homework assignments, grades, and handouts will be posted on the Online Classroom, also referred to as D2L (Desire2Learn). **Be sure to check it often.**

Class Attendance:

Class attendance is one of the strongest predictors of success in mathematics classes. Attendance will be taken every class period beginning Jan. 14th and ending Thursday, April 30th. There will be 50 points available for class attendance. You get **the first absences free**. For every absence after that, 3 points will be deducted from the 50 point total. There are **no “excused” absences**. You must be present for the entire class period to be counted as present.

Attendance, Courtesy, and Electronics Usage: Regular class attendance is expected. Common courtesy is expected. Here are a few things to remember:

- **Be on time and be attentive; remain in the room** the entire time (unless you are ill).
- Show courtesy to those around you by **not talking** to classmates while the instructor is talking.
- **Only one calculator** may be used on quizzes, exams, or other assignments. **No other electronic devices** (cell phones, laptops, tablets) are allowed. Use of more than one calculator, or use of another electronic device will be considered an act of academic dishonesty/misconduct.
- Please **do not use a cell phone or other electronic device during class time**.

Tutoring: There is free tutoring available in the Math Learning Success Center (MLSC), located on the fifth floor of the OSU Library. I will be at the MLSC on Tuesdays 3:30pm until 4:30 pm to assist with any tutoring issues.

Academic Dishonesty/Misconduct: Oklahoma State University is committed to the maintenance of the highest standards of integrity and ethical conduct of its members. This level of ethical behavior and integrity will be maintained in this course. Participating in a behavior that violates academic integrity (e.g., unauthorized collaboration, plagiarism, multiple submissions, cheating on examinations, fabricating information, helping another person cheat, unauthorized advance access to examinations, altering or destroying the work of others, and fraudulently altering academic records) will result in your being sanctioned. Violations may subject you to disciplinary action including the following: receiving a failing grade on an assignment, examination or course, receiving a notation of a violation of academic integrity on your transcript, and being suspended from the University. You have the right to appeal the charge.

Contact the Office of Academic Affairs, 101 Whitehurst, 405-744-5627. Go to academicintegrity.okstate.edu for a short video on OSU's academic integrity policy and additional information.

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

Homework/Classwork	200 points
Examination 1	100 points
Project 1	50 points
Examination 2	100 points
Project 2	50 points
Attendance	50 points
Final exam	150 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.

Office of Student Disability Services: (015 University Health Services) - According to the Americans with Disabilities Act, each student with a disability is responsible for notifying the University of his/her disability and requesting accommodations. If you think you have a qualified disability and need special accommodations, you should notify the instructor and request verification of eligibility for accommodations from the Office of Student Disability Services. Please advise the instructor of your disability as soon as possible, and contact Student Disability Services, to ensure timely implementation of appropriate accommodations. Faculty have an obligation to respond when they receive official notice of a disability but are under no obligation to provide retroactive accommodations. To receive services, you must submit appropriate documentation and complete an intake process during which the existence of a qualified disability is verified and reasonable accommodations are identified. Call 405-744-7116 or go to www.okstate.edu/ucs/stdis/.

Syllabus Attachment: You are individually responsible for meeting university deadlines and for following university procedures. The general university syllabus attachment, containing much information of this nature, can be found on the Academic Affairs' web site (<http://academicaffairs.okstate.edu>) and choose Faculty and Staff Resources, then the Syllabus attachment for Fall 2013) or click on this link [Syllabus attachment](#).

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