

Math 1583 – Applied Geometry and Trigonometry

Spring 2016

Section 001

T Th

2:00-3:15

306 CLB

Instructor: Cara Brun, Teaching Assistant

Office: 501 Math Sciences

Office Hours: Monday – 11:00 - 12:00 (501 MSCS)

Wednesday – 3:30 – 4:30 (501 MSCS)

Thursday – 10:00 – 11:00 – (MLSC Room 1 – Library)

Also by appointment

Telephone: (405) 744-5688. This is the number to the Math Department. The office can leave me a message but a better way to contact me is through email.

e-mail: cara.brun@okstate.edu. Please include your name on subject line.

Course Objectives

- To understand the definitions and principles of geometry and right triangle trigonometry and their applications to problem solving.
- 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.

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.
- protractor, compass, ruler, graph paper

Calculators:

You may check out a TI-83/TI-84 graphing calculator from the Mathematics Department (401 MS) for use during the semester while the supply lasts; there is NO charge. The Math Department will check out calculators beginning Monday, January 11. A student ID and/or CWID is required.

Course Evaluation

Course grades will be determined according to the following distribution.

Homework/Classwork	200 points
Project 1	50 points
Project 2	50 points
Examination 1	100 points
Examination 2	100 points
Attendance	50 points
Final Exam	<u>150 points</u>
TOTAL	700 points

- Grades will be distributed as follows: 90 – 100%, A; 80 – 89%, B; 70-79%, C; 60-69%, D; and 60% and below, F.
- Grades will be posted on D2L.

Homework assignments

Homework due dates will be announced when assignment is given. Late homework will not be accepted. There will be more than 200 homework points assigned to accommodate a missed homework assignment.

- All work in this class is to be completed using a **pencil** (no ink pens) on 8.5" x 11" paper or regular notebook paper.
- Print first and last name and homework assignment number at the top of every assignment.
- Problems must be submitted in order, the problem number must be written in the left-hand column.
- All work must be neat and legible. Work that is not legible will be considered incorrect.
- Homework with jagged edges will not be accepted.
- Pages must be stapled together (**not** dog-eared).
- **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.

Examinations

- There will be two 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, worth 150 points, will be given on Tuesday, May 3rd, 2:00-3:50 pm in our regular classroom.

Make-Up Exams: Make-up exams will be given only in extreme circumstances.

Documentation for the absence must be provided. Valid reasons 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.), inform the instructor immediately. You must provide **appropriate documentation** for the absence.

Classroom Expectations

Course Announcements, Grades, Attendance and Homework will be posted on D2L.

What to Bring to Class: Please come to class prepared to work. Bring your textbook, a notebook, a pencil, and your graphing calculator to class with you each day.

Cell Phones and Electronic Devices: Turn off your cell phones in class. **Cell phones may not be used at any time during class, unless cleared in advance by the instructor.** Cell phones may not be used as a calculator. No other electronic devices may be used in class, **including ear buds**, unless some device is required for a student's disability. Instructor must be informed if this is the case.

Attendance: Attendance is very important in any course. Not surprisingly, students who attend class regularly do better! Attendance will be taken at the beginning of each class. After the first two absences, four points will be deducted from your attendance grade for each absence. A tardy of more than ten minutes will result in an absence. Poor attendance will negatively impact your grade. Homework will not be accepted if you are not attending class except for unusual circumstances which must be communicated to instructor.

MLSC (Math Learning Success Center)

The MLSC is located on the 5th floor of the library and is an excellent source for tutoring help.

General Tutoring Hours:

Sunday: 1:00 pm - 9:00 pm

Monday-Thursday: 9:00 am - 9:00 pm

Friday: 9:00 am - 5:00 pm

For more information, visit the MLSC website at www.math.okstate.edu/mlsc, or call 405-744-5818 or 405-744-5688.

Additional University Information

Syllabus Attachment: OSU has compiled useful information that applies to all classes. A pdf of this document will be posted on D2L. This website includes add/drop/withdrawal dates, university holidays, accommodations for students with disabilities, academic resources, and much more. You are responsible for reading this information and having any questions answered.

Academic Integrity: The university has explicit rules governing academic integrity. Please consult the OSU Syllabus Attachment mentioned above. Working with another person or in study groups on problems can be helpful in learning the material. I

encourage you to work together if you find it helpful. However, **all written work submitted must be your own**. Academic dishonesty (cheating) will be dealt with as harshly as the university allows. Don't do it!

Special Accommodations for Students: If you have a qualified disability and need special accommodations, you should notify me as soon as possible and request verification of eligibility for accommodations from the Office of Student Disability Services.

Summary of Academic Policies:

<http://academicaffairs.okstate.edu/sites/default/files/Summary%20of%20Academic%20Policies-Aug%202015.pdf>

<p>Any changes to this syllabus will be posted on the D2L site and communicated to the students via email.</p>
