

Math 133 - Geometry

Winter 2011

Professor: Dr. Jason McCullough

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Office Hours: MF 9:00-11:00am, and by appt.

Primary Lectures MWF 2:10 - 3:00 pm, INTS 1134

Discussion Sections

You should be registered for the following discussion section.

Sec	TA	Day/Time	Room
002	Barbara Herzog (bherz AT math.ucr.edu)	Th 6:10 - 7:00pm	PRCE 2416

Required Materials

- “The Four Pillars of Geometry” by John Stillwell (available as a free e-book from UCR library)
- A compass and ruler/straightedge. (available from the university bookstore, among other places)

Homework – 20%

Homework assignments will be made roughly weekly and will be due on Fridays.

Attendance/Participation – 5%

To get full credit for this portion of your grade you must attend at least 8 of the 10 Thursday discussions and participate in the class activities. This may include group work, class discussions, short presentations of solutions to problems worked.

GeoGebra Project – 10%

By the end of the year you will be required to create a computer demo of one of the geometry theorems we cover (or a related construction) using GeoGebra - a free dynamic, mathematics program. During the final week of class you will be required to present your demo to the class. More information on the project will be given later.

Exams – 65%

There will be one midterm and one final exam. The midterm counts for 25% of your final grade, the final counts for 40% of your final grade. The final exam will be cumulative. You must present your student ID on exam days or your exam will not be accepted. The exam dates are:

Midterm - Friday, February 4 (during lecture)

Final Exam - Wednesday, March 16, 3pm-6pm

If you cannot come to an exam, you have to make arrangements within the first two weeks of the course. We will only accept a very few reasons for not attending one of the exams. Those reasons are limited to: religious reasons, interviews for scholarships, and participation in intercollegiate sports. For other legitimate absence (e.g. serious illness), you must provide documentation explaining the absence.

You will receive a grade for each of the midterms and the final exam. I will grade them on a standard scale (90-100 = A, 80-89 = B, 70-79 = C, 60-69 = D, 0-59 = F), with a possibility of curving scores up if I deem it necessary.

Note: Petitions for regrading of specific problems or homework scores may only be done within 1 week of when the papers are handed back or when the assignment is due. After that 1 week, all grades are final.

Academic Integrity

Cheating will be taken very seriously. Every attempt to cheat will give you an automatic 'F' for the course. You will not be allowed to drop the course, and your case will be forwarded to the student conduct committee.

Calculator Policy

As per math department policy, no calculators will be allowed on quizzes or exams. You may use them on homework, but it is recommended that you complete as much of it without a calculator as possible so that you are prepared for the exams.

Course Topics

This class covers a modern development of planar geometry from Euclid and Pythagoras to Hilbert and some Non-Euclidean geometries. We will cover the majority of the book by Stillman which is broken into the following topics:

1. Compass/Straightedge Constructions and Euclid's Postulates
2. Coordinates and Analytic Geometry
3. Geometric Transformations and Isometries
4. Projective/Non-Euclidean Geometry

Classroom Decorum

Out of respect for your classmates, I ask that you arrive to class on time everyday. If you are late, please enter quietly and quickly. Keep cell phones and beepers turned off. If your behavior is disruptive to the rest of the class, you will be asked to leave.

Important Dates

Last Day to Drop Course - Jan. 14, 2011

Last Day to Withdraw from Course with a 'W' - Feb. 11, 2011