

MATH 4233

College Geometry

Spring 2006

Instructor: Dr. Scott Gordon, 324 Boyd.

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Time and Location: M, W 3:30–4:45, 304 Boyd.

Office Hours:

M	11:00–1:00, 2:00–3:00*
W	11:00–1:00, 2:00–3:00*
F	11:00–1:00

(*2:00–3:00 in 205 Boyd)

If you would like to see me but cannot come during one of these times, please call first or make an appointment.

Textbook: *Roads to Geometry (Third Edition)* by Edward Wallace and Stephen West. We will cover Chapters 1–5.

Course Description: A study of Euclidean geometries as axiomatic systems. Finite geometries, neutral geometry, non-Euclidean geometries, analytical and transformational geometries will also be studied.

Homework: Problems assigned after each lesson will be divided into two categories: exercises and turn-in problems. Exercises will not be collected and graded and are designed to help you understand the important concepts and prepare for the tests. Turn-in problems will be collected (generally) one week after they are assigned. You may ask me for help with these problems but you may not discuss them with your classmates or seek assistance from anyone else. Full credit will be given only if your answers are correct, well-organized and well-justified, and turned in on time. There will be 150 points worth of turn-in problems assigned during the semester.

Tests: There will be five take-home tests, worth 60 points each. The test will be handed out on a Monday and due the following Wednesday. Your textbook and class notes are the only permissible sources of information while working on the test. You may not discuss the problems with your classmates or seek assistance from anyone else. Test handout dates: 1/30, 2/20, 3/13, 4/10, 5/1.

Grading: Your numerical grade will be your total points (on turn-in problems and tests) as a percentage of the total number of possible points (450). Your letter grade will be determined according the following grading scale: A: 88–100, B: 76–87, C: 64–75, D: 52–63, F: 0–51.

Withdrawal: March 2 is the last day to withdraw from the course with a grade of W.

First Homework Assignment: p.17 #5, 15, 16. These are all turn-in problems, due Wednesday 1/18.

Academic Dishonesty Policy: Any student who engages in any form of academic dishonesty will receive an F for the course. The incident will also be reported to the Office of Student Affairs so that they can determine if further disciplinary action is warranted. Academic dishonesty is defined as one or more of the following.

1. Discussing a test or turn-in problem with another student.
2. Copying another student's work on a test or turn-in problem.
3. Allowing another student to see your work on a test or turn-in problem.
4. Obtaining unauthorized information or assistance while working on a test or turn-in problem.

Learning Outcomes: The student will have an understanding of:

1. Axiomatic systems and their properties.
2. The finite geometries of Young and Fano.
3. The axiomatic foundation and development of plane geometry.
4. Properties of some non-Euclidean geometries.