

MATH 335
Advanced Euclidean Geometry
Fall 2009

Instructor: Dr. Phillip Poplin

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Office hours: $\begin{cases} \text{M,W,F} & 10:00 \text{ — } 10:50 \\ \text{T,R} & 9:30 \text{ — } 11:00 \end{cases}$ and other times by appointment.

Course Description and Objectives:

A study of Euclidean geometry from a more advanced viewpoint. The methods and techniques of synthetic axiomatic geometry will be stressed through a study of logic and formal proof, constructions, higher Euclidean geometry, finite geometries, and non-Euclidean geometries. *3 hours.*

Text:

Title: *Euclidean and Non-Euclidean Geometries:
Development and History.*

Author: Marvin Greenberg

Date: 4th edition, 2008

ISBN: 978-0-7167-9948-0

Publisher: W.H. Freeman.

Calculator:

No specific calculator is required.

Attendance:

You are expected to attend all classes. You are expected to arrive to class on time and be prepared for class.

Since class time is limited, only a limited number of examples and problems can be given and discussed in class. The text book contains many worked examples. Class attendance is not a substitute for reading the text.

Attendance Policy: The college attendance policy provides the following penalties. The final grade may be lowered by one letter grade if more than 10% of classes are missed. Absences in excess of 25% will result in an automatic F.

Turn off all cell phones. Your cell phone should be in your book bag and not on your desk.

Homework:

Homework is assigned daily. These problems will give you practice in the basic techniques of the course. Homework is your responsibility to do and ask questions when you need help. I suggest working in groups to help learn this material. Remember: it takes a lot of practice to learn any new material. You should attempt all of the problems assigned and ask questions about those you cannot solve, either in class or in the instructor's office.

I will also assign and collect homework periodically. Each assignment will be given a score based on completeness, accuracy, and presentation. These are individual assignments, and the Honor Code applies. Homework is due at the beginning of class on the designated day. No late work is accepted.

Makeup:

Any work such as quizzes, homework, or class work, can not be made up. It is my policy to give no makeup tests. An exception can be made in the case of a documented illness or an excuse by a school administrator. Note, however, that a makeup test is usually more difficult than the original test, no matter the reason for the absence. Arrangements for a make up test must be made **no later than the day of the test**.

Academic Integrity and Honor Code:

I support the Honor Code and I assume that you do also. Students are expected to be familiar with the Honor Code and follow it consistently. The Honor Code applies to all individual graded work. If you are in my class I assume the honor code applies to all of your work whether or not you have actually written an signed the code. Infractions of the Honor Code will be dealt with harshly.

Mathematical Culture Points:

Mathematical Cultural Points (MCPs) are awarded for write-ups that stem from participating in out-of-class mathematical activities. For a complete description, please see the course comments page. I will require 12 MCPs for full credit.

Grades:

There will be homework, quizzes, class work, labs, a project, three (3) tests, and a final exam. I will drop the lowest homework/quiz grade.

The apportionment of grades is

MCPs	3 %
HW, quizzes, labs, project	31 %
Tests	48 %
Final Exam	18 %

The final grade will be given as:

90-100	80-89	70-79	60-69	below 60
A	B	C	D	F

Note: If you have a documented disability and wish to discuss academic accommodations, please contact me as soon as possible.

Note: The last day to withdraw with a "W" is noon on October 14, 2009.