

Math 4403: Geometry

MWF 1:30–2:20, MSCS 514

Instructor: Jeff Mermin
office: 414 MSCS
email: mermin@math.okstate.edu

Web page <http://www.math.okstate.edu/people/mermin/4403/>

Office Hours TBA or by appointment.

Subject matter This course serves as a rigorous introduction to Euclidean and hyperbolic geometry.

Relationship to other courses Math 3013 (Linear Algebra) is a prerequisite for this class, and Math 3613 (introduction to modern algebra) is recommended. You should be comfortable with the idea, and some techniques, of mathematical proof at the level of Math 3613.

Textbook *Foundations of Geometry* (2nd edition) by Gerard A. Venema.

Grading Your course grade will be out of 600 points, assigned as follows:

- 150 Midterm, Friday, September 28
- 150 Midterm, Friday, November 2
- 150 Final, Friday, December 14, 2:00–3:50 PM
- 150 Homework, quizzes, and classwork

A total score of 540 or above will guarantee you an A; a total score of 480 will guarantee a B, and so on.

Homework, quizzes, and classwork Written homework will be due at the end of class most Fridays. It will typically be assigned about a week in advance, and will typically require you to write several proofs. One focus of class discussion, especially early in the year, will be how to write proofs with skill and confidence.

Late policy. Because the course builds on itself, it is important that you not fall behind. Thus, in general, late homework will not be accepted. I will, however, allow you 6 “grace days” in case of illness or other circumstances.

Collaboration. Mathematics is a collaborative venture; you are encouraged to work together with friends and/or classmates on the *written* homework. However, you must **write up your work yourself** and **acknowledge anyone who helped you**.

Quizzes and in-class work. Periodically I will assign questions to be solved in small groups during class. I prefer not to collect and grade these