

Office hours (getting help): I will be available in my office (206E NH; office phone 715-425-3119) MWF 11-11:50, T 1-1:50, R 2:00-2:50. I am around a lot during the day when I am not in class, and I am (almost) always happy to see you (it is a good idea to make an appointment if you are able to plan ahead). A more complete version of my schedule can be found at the schedule link from my homepage.

Web sites: You'll find the most recently updated theorems list, and day-to-day announcements on my langfordmath web site. You'll find your grades on D2L. If you find an error in the gradebook at any point, please let me know.

Course Objectives:

- Read and understand mathematical language in geometry
- Learn how to come up with and explain a proof
- Prove things about geometry using axioms, definitions and theorems
- Know some examples of geometries that fit various axioms and axiom systems
- Recognize when a proposed geometry proof is correct and when it has errors

Assignments:

As we go through the course, you will be (re-) proving many of the theorems of elementary geometry. We as a class will be building geometry from the ground up, where our "ground" is a set of axioms. Your main tasks will be:

- figuring out how to prove geometry theorems
- writing up your proofs (you will be turning in something almost each day)
- sharing your proofs to the class periodically (I will call for volunteers, but I expect everyone to present something on a regular basis)

I'll be collecting and grading your written proofs as homework (but see below).

Presentations: As described above, I will provide opportunities on most class days for you to volunteer to present a proof from the previous night's assignment. I will expect everyone to take advantage of this, and share their work on a regular basis. Part of the grading for the presentations is simply how often you present. Part of the grading is based on the quality of your presentations: is the proof correct? Is your explanation clear and easy to follow? How difficult was the proof that you attempted? Was the proof unusual in some way? Did you prove an important theorem, or just a minor corollary? All of these considerations will affect your score. Your total presentation score will be the average of your 4 highest presentation scores.

Tests: There will regular tests/quizzes (every 2-3 weeks) and a comprehensive final exam. These will comprise the majority of your grade.

Course Grade

Proof presentations, etc. 10%

Other homework 10%

Tests and quizzes 80%

Your grade will be based primarily on the weighted average (mean) of your scores. Letter grades will be at least as high* as those determined by your weighted average and these percents:

A: 93-100% A-: 90-92% B+: 87-89% B: 83-86% B-: 80-82%

C+: 77-79% C: 73-76% C-: 70-72% D+: 67-69% D: 60-66%

*I occasionally (rarely) raise the grade of a student or students who show superior understanding in a way that is not reflected in the weighted percentage. I never use such measures to lower a grade.

Teacher Content Standards: The College of Arts and Sciences has a webpage that links you to the teacher content standards by course number. " DPI CONTENT STANDARDS: The State of Wisconsin has established content standards that education programs are required to have in their courses. These standards are the basis of the Praxis II Content exams that all licensure candidates are required to pass prior to receiving a license to teach in Wisconsin." Linked by course number from this page: <https://www.uwrf.edu/MATH/WisconsinContentTeacherStandardsMathematicsCourses.cfm>.

The UWRF promotes safe, inclusive and effective learning environments that protect the rights and support the interests of both students and faculty. For additional information regarding our inclusivity expectations, academic accommodations, academic conduct expectations and processes, and other syllabi information, please consult <http://go.uwrf.edu/Syllabi>

