

Math 331 – Geometry – Course Policies

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And by appointment (Really!)
TEXT: *Experiencing Geometry, Euclidean and Non-Euclidean with History, Third Edition*
by David Henderson and Daina Taimina

Overview

The focus of this class is to help you build your geometric intuition and understanding by comparing the geometries of the Euclidean plane, the sphere, and the hyperbolic plane. The tentative plan is to discuss at least Chapters 1–8, 10, 18, 22, and 24 from the text. We will also spend some time looking at the axiomatic approach in Euclid's *Elements*. By the end of the semester, we will be able to explore some of the arguments that our universe is not, in fact, Euclidean. This is going to be a really fun semester.

The class will be structured with very few, if any, lectures. You will work on problems outside of class, and we will discuss your ideas during the class meetings. The questions tend to be open-ended, so you will develop your own definitions, and nothing will be taken for granted. I'm looking forward to learning alot from you this semester.

Evaluation

Your final grade will be determined by

Homework and Other Fun	70%
Book Review	10%
Presentation	20%

Homework and Other Fun

You will have specific problems to complete for each class that will form the basis of the class discussions. You should have your responses written by the beginning of class so that you are prepared to contribute during the class meeting. The class discussions will help you refine your thoughts, and you can include these ideas in your final write-up.

Each problem will be graded out of 10 points, with the following breakdown:

- Preliminary Write-up: 3 points

To encourage you to seriously consider the problems before class, you should turn in a preliminary version of your homework before class begins. You can either email this to me before class or give me a xerox copy of your notes at the beginning of class. Since you won't have this back before your final write-up is due, you should not turn in the original version.

- Final Write-up: 7 points

In order to give you some time to include thoughts from the class meetings, your final write-up for the problems discussed on Monday will be due at my office at 9:00 am on Wednesday, and your final write-up for the problems discussed on Wednesday will be due at 9:00 am on Friday.

Please feel free to discuss these problems with other students in the class, but each person must turn in a separate paper that represents her own work.

Here are a few guidelines for the presentation of your written work. If you do not follow these, I reserve the right to return your homework ungraded

- Your writing must be clear and legible.
- Your solutions should be well-written, using complete sentences to justify your results where necessary.
- Here is a good rule of thumb to follow when writing up your work:

Write your solutions so that you could hand them to another student in the class and she could understand your explanation.

- Do not turn in your first draft of the assignment. You should expect to *neatly* recopy and organize your work.
- If you write in pen, there should be no scratch-outs.
- Do not turn in paper torn from a spiral notebook with ragged edges.
- If you do discuss the problems with other students outside of class, you must indicate on your write-up who you worked with.

I strongly recommend that you turn in all assignments on time. For each 24 hour period that an assignment is late, you will lose 25%.

There will be several other assignments of a similar nature during the semester that will fall under the “Other Fun” category.

Book Review and Presentations

I will give you a handout that explains the Book Review in more detail. During the final week of the semester, you will each give a 30 minute presentation to the class on a topic from geometry that we have not discussed in the course. The topic for your presentation is due November 1.

More information on both of these assignments will be forthcoming during the semester.

The Honor Code

Remember that we are operating under the Honor Code for all of your academic work while you are at Wheaton, and I take this quite seriously. This carries freedoms and responsibilities for both you as students and me as the professor. The best approach is to avoid any situation where there is a temptation to violate the Honor Code. Or if you find yourself in such a position, you should remove yourself from it.

Remember that you should write out, and sign, the following statement on all course work:

“I have abided by the Wheaton College Honor Code in this work.”

Getting Help

Please come see me during my office hours! If you have a conflict and cannot make my office hours, please call or email me and we can set up an appointment for another time.