

## Math 401 – Senior Seminar – Course Policies

PROFESSOR: Tommy Ratliff, Science Center 106b, x3968  
EMAIL: [tratliff@wheatoncollege.edu](mailto:tratliff@wheatoncollege.edu)  
HOME PAGE: <http://acunix.wheatoncollege.edu/tratliff/>  
OFFICE HOURS: Posted on my webpage  
**And by appointment (Really!)**

### Overview

This course will be structured somewhat differently than most, if not all, of the math courses you have taken so far in your career. We will not follow a textbook or even have a predetermined set of content that we will cover. Instead, you will each work on an independent project on a topic of your own choosing and present your work to the class each week in informal chalkboard talks.

To get started on your project, you should pick a paper that explores a topic that is related to, but not covered in, a previous course you have taken. This will provide an opportunity to investigate an area from a previous semester in more depth. The paper will serve as a starting point for your explorations, but I expect you to move beyond this paper and use additional references as well. I can, of course, give you some help in finding an appropriate paper.

We will spend the first two weeks of the course discussing “Counting on Continued Fractions” by Arthur Benjamin, Francis Su, and Jennifer Quinn (*Mathematics Magazine*, Volume 73, No. 2, April 2000). This will give you some experience reading non-textbook material while you are searching for your own topic. The remainder of the semester will be structured as a seminar where you present your work to the class and ask questions of the other students about their work. This will both reinforce your own understanding and allow you to learn about the other students’ projects. The semester will culminate with a major paper and a half-hour presentation that will be open to the public.

There are two other main requirements for the semester. First, you will write a reflection paper on your mathematics experience at Wheaton; I’ll give more specific information about this later in the semester. Second, you will formally critique and give feedback on other students’ papers and presentations toward the end of the semester.

I think we’ll all learn a lot from each other. This is going to be a really fun semester.

### Evaluation

Your final grade will be determined by

Final Paper	30%
Final Presentation	30%
Presentations during class	15%
Class Participation	15%
Reflection Paper	10%

I’ll post the important deadlines on the webpage as the semester progresses.