

Math 301 – Real Analysis – Course Policies

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OFFICE HOURS: Posted on website
And by appointment (Really!)
TEXT: *Understanding Analysis* by Stephen Abbott

In this course we will delve into the wonders of the real line and explore some of the surprising ways that our intuition can lead us astray when considering continuous and differentiable functions. For example, we will see a function that is continuous *everywhere* but differentiable *nowhere*. We will focus not only on the amazing, rich content of analysis but also on understanding the need for rigorous, exact mathematical exposition.

I am very excited about this semester – I think it's going to be a lot of fun.

Evaluation

Your final grade will be determined by

Two Exams	25%
Final Takehome Exam	15%
Projects & Presentations	15%
Homework	45%

The Honor Code

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 a student 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.”

Exams

On each of the two exams, there will be an inclass part and a more substantial takehome part. The Final Exam will be comprehensive and will be entirely takehome. See the syllabus on the course web page for the dates of the exams.

I will have a substantial number of office hours while you are working on the takehome portion of an exam, but you may not communicate with *anyone* else during this time about the exam or the class! Any unauthorized communication will be viewed as a violation of the Honor Code.

Projects and Presentations

I will give details as the semester progresses. You should expect that there will be at least one paper assigned during the semester and a presentation at the end of the semester.

Homework

A major emphasis in this course is that you learn how to write rigorous, precise, and concise mathematical proofs. This can be a challenging endeavor, but the process will not only aid your mathematical development but can also improve your clarity of thought in other disciplines and areas as well. With this emphasis, your homework should be precise, comprehensible, completely justified, and written in complete sentences.

Each homework assignment will have two categories of problems:

- **Highlight problems:** These will consist of three or four of the more difficult problems that I will grade carefully.
- **Basic problems:** These will be the more “routine” problems that are still very important in understanding the course material. You can learn a great deal by reading the thoughts of other students. Each Friday that homework is due, I will pair you with another student, and you will swap the Basic problem sets. You should then read the other student’s work over the weekend and make comments, and then meet on Monday to discuss your comments. Although I do not intend to grade the Basic problems, I reserve the right to include them in your course grade if I feel that you are not making a serious effort.

I will provide solutions to all homework assignments.

I encourage you to discuss the homework assignments with other students, but each person must turn in a separate write-up that represents his/her own work. In addition, you must cite any other student that you work with!

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

- Your writing must be clear and legible.
- If you write in pen, there should be no scratch-outs.
- Do not turn in paper torn from a spiral notebook with ragged edges.
- Clearly label each problem.

Each Highlight problem will be graded on a scale of 0–7 with the following guidelines:

- 7: Exceptional. All areas perfect.
- 5: Essentially complete. Needs minor improvements.
- 3: Needs substantial improvements
- 1: Needs improvement in all areas

The Basic problems are due at the beginning of class at 9:30 on Friday mornings.

The Highlight problems are due in my office by 2:00 on Fridays. Be aware that

Late homework is not accepted!! No exceptions!!

Class Attendance

Although class attendance is not a specified percentage of your grade, I will keep a class roll to help me determine borderline grades at the end of the semester. If you do miss class, you are responsible for the material that was covered.

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.