

## MATH 300 WRITING FOR MATHEMATICS

Course Meeting Time: 2:00 - 2:50 Mondays or Wednesdays (you are free to go to either)

Course Meeting Location: Taft 300

Course Instructor: Alex Cameron

Office: SEO 633

Office Hours: 2pm - 3pm Tuesdays and Fridays

Email: [acamer4@uic.edu](mailto:acamer4@uic.edu)

Course Webpage: <http://homepages.math.uic.edu/~acamer4/math300.html>

### 1. COURSE SUMMARY

The purpose of this course is to learn the appropriate formats and styles used in writing mathematics including proofs, exposition, and research papers (which include both proofs and exposition). This necessarily includes learning how to use  $\text{\LaTeX}$ , a markup language used to produce fancy math pdfs. All assignments must be turned in using  $\text{\LaTeX}$ . Class time itself will largely be spent discussing various examples of mathematical writing and troubleshooting whatever issues come up for you in the assignments.

### 2. GRADES

I'll assign grades with the traditional cutoffs (90% and above for an A, etc). The grade breakdown for the course is as follows:

- 40% Homework Assignments
- 40% Final Paper
- 20% Class Participation

### 3. HOMEWORK

I will give homework assignments almost every week (with some weeks reserved for working on the final paper). Each assignment should be done in  $\text{\LaTeX}$  and should only be around one page in length. Assignments will be posted on the course website on Mondays. You must turn in assignments by emailing me both the pdf and the tex file no later than 5:00 pm on the following Wednesday unless I specify otherwise.

Some assignments will ask you to prove something. Some will ask you to describe a mathematical idea. You can use any resource you wish in finishing an assignment, but you must always use your own words and cite any materials that you took ideas from. However, I will never give you something to prove that I feel is too hard so please try solving the assignments on your own before going to the internet or asking classmates.

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Late homework will be accepted with 10% being deducted for each day that it is late.

I will be grading homework based on how well you present your thoughts and how well you stick to the correct format. This includes things like grammar and spelling as well as correct mathematical ideas.

### 4. FINAL PAPER

A few weeks into the semester I will give you a list of topics to choose from for the final paper. No original research is required for the paper, but it must be written in the style of a research paper with an introduction, exposition about the ideas of the topic, theorems with proofs and whatever associated lemmas you feel are needed, connections to other areas of math, and citations.

The requirements for the paper will be laid out more clearly when the assignment is handed out. I will probably ask for it to be about 10 - 15 pages long, and it'll be due at the end of the semester. I hope that it'll be fun.

### 5. CLASS PARTICIPATION

Basically this is a free 20% for you if you show up to class and are willing to discuss papers. I don't care if you need to miss a class here or there so long as you still turn in your assignments, but if you need to miss a bunch then please let me know why.

### 6. ADDITIONAL INFORMATION

Almost all of the tutors in the MLC can help you with proof writing. The MLC is in SEO 430 and is open from 8am to 6pm every weekday.

The English department has a writing center. More info at <http://www.uic.edu/depts/engl/writing/>