

Math 595, Mathematical Writing
MWF 3:00 pm - 3:50 pm
August 22, 2007—October 12, 2007
341 Altgeld
Prof. A.J. Hildebrand

Course overview: Anyone who engages in research level mathematical writing has to deal with a number of issues, ranging from the purely technical (e.g., how to do something in \LaTeX), to proper English usage and good exposition, and to the question of how to get a paper published. The quality of the writing in a paper can make a difference in whether the paper gets accepted for publication, and in the impact it has once it does get published. A well-written paper is likely to be read by more people, and leave a better impression with its readers, than a poorly written one.

This course is aimed primarily at advanced graduate students who are at, or close to, the stage of writing up a thesis and/or preparing a paper for submission to a journal. Its goal is to help such students in this process by teaching them good writing skills and techniques.

Topics to be covered include advanced \TeX/\LaTeX ; mathematical typesetting; English usage (spelling, grammar, punctuation); mathematical exposition; and an overview of the process of getting a paper published.

Prerequisites: There are no formal prerequisites, but the course will make most sense for students at, or very close to, the point in their graduate studies where they have to do some research level writing, whether it be a PhD thesis or a paper. Students should have some basic familiarity with \LaTeX , or be willing to learn the basics of \LaTeX on their own.

Course format: Some of the course time will be taken up by lectures on specific topics, but the bulk of the course will be in a “discussion” format, where real-world examples of mathematical writing will be analyzed and critiqued. Students will be asked to revise or rewrite poorly written material, as homework assignments or projects, possibly working in groups. Grading will be based mainly on such homework assignments/projects, but may also take into account attendance.

Text: There is no *required* text for this course, and I don’t plan to follow any particular text. There exist a number of books dealing with mathematical writing, typesetting, and \TeX which I will put on reserve in the Mathematics Library. My top two recommendations (which you might want to purchase) are N.J. Higman, “Handbook of writing for the mathematical sciences”, and G. Grätzer, “Math into \LaTeX ”.

More information: A.J. Hildebrand, office 241 Illini Hall, phone 244-7721, email hildebr@math.uiuc.edu.