

## MAA 6229–0001 Analysis II, Spring 2012

Days & Times: MW 1:30–2:45 in MAP 108  
Professor: Jason Swanson, email: [jason\(at\)swansonsite\(dot\)com](mailto:jason(at)swansonsite(dot)com)  
Office Hours: M 12:00–1:00 in the EXCEL Lab (CC'2 223)  
W 9:30–10:30 in MAP 202E, or by appointment  
Course webpage: <http://math.swansonsite.com/12s6229>  
Textbooks: *Principles of Mathematical Analysis, Third Edition*, by Walter Rudin  
*Applied Analysis*, by John Hunter and Bruno Nachtergaele

*Course description:* Topics include measure and integration, Banach spaces,  $L^p$  spaces, Hilbert spaces, bounded linear operators on a Hilbert space, tempered distributions, and the Fourier transform.

*Homework:* Weekly homework assignments will be given. Each assignment will be graded as follows. After I collect the completed homework, I will choose one or more of the assigned problems to grade carefully. This/these problem(s) will be worth 5 points each. Each of the other problems will be given either 1 or 0 points, depending on whether the problem was completed or not completed, respectively. Homework will count for 50% of the overall grade in the course.

Handwritten homework assignments must be written on lined paper, double-spaced, and single-sided. Typed assignments must be typeset in  $\text{\LaTeX}$ . In either case, assignments must be written professionally, using paragraphs, complete sentences, correct grammar and punctuation, and so on. Isolated mathematical symbols and excessive use of logical shorthand is not acceptable. Handwritten assignments must be placed in my mailbox or under my office door on the day the assignment is due. If you are unable to do this because of a locked door or two, then your assignment will be considered late. Typeset assignments must be received in my email inbox in PDF format on the day the assignment is due. Assignments which are late or which do not conform to the requirements laid out in this syllabus may not receive full credit. (In fact, they may not receive any credit.)

*Exams:* There will be an in-class midterm exam, which is tentatively scheduled for Wednesday, February 29. The final exam is currently scheduled for Monday, April 30, from 1:00 pm to 3:50 pm, in MAP 108. Each exam will count for 25% of the overall grade in the course.

For each exam, bring a blue book and your own scratch paper. Do not include scratch work in your blue book. The writing in the blue book should be double-spaced, with writing only on one side of the page. Use pencil and erase mistakes when possible. (Avoid scratching out mistakes.) Write legibly and cleanly, using paragraphs, correct grammar, etc. To accommodate these requirements, you may want to bring more than one blue book. Exams which do not conform to these requirements may not receive full credit.

*Attendance:* If you must miss a class, it is your responsibility to find out all information from the class you missed, including any announcements that were made.