University of Washington Math 424A Fall 2014 General Information

Instructor:

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Office hours: Monday and Wednesday 3:30-4:30, and by appointment.

About the course and prerequisites: The purpose of this sequence is to provide senior undergraduate and first-year graduate students with a rigorous introduction to the basic elements of analysis (limits, differentiation, and integration). We will emphasize careful definitions and rigorous proofs.

Although we will start from the beginning — I plan to cover only the first four chapters of the Rudin text this quarter — you should have had some exposure to rigorous mathematics and proofs. You should also have some familiarity with functions of several variables.

Text: *Principles of Mathematical Analysis*, 3rd edition, by Walter Rudin. This book is available at the University Bookstore.

Homework: Homework will be assigned more or less weekly and will require you to write careful proofs. It is expected to be demanding. Most of your homework will consist of problems from your text, but I will also be writing additional problems. These additional problems will count more in determining your homework grade. Although you are encouraged to share ideas on homework problems with your classmates, I expect you to actually write your homework on your own. If you use sources other than the assigned text and your lecture notes to do the homework, you must reference them; otherwise you are committing academic fraud. I am well aware that solutions to all of the problems in Rudin are easily found on the Internet. You are not permitted to use these to do the homework. In addition, you may not make use of any sort of discussion boards involving people outside the class for homework assistance. In principle, late homework will not be accepted.

Exams: There will be a midterm and a final exam. The midterm will be given in class and is tentatively scheduled for Wednesday, October 29. The final exam will be on Wednesday, December 10 from 2:30–4:20.

Absences from the midterm will be dealt with on a case by case basis. Only under unavoidable emergencies (e.g., illness, death in family) will you be allowed to miss an exam without penalty. Such emergencies should be documented if at

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all possible. Note, however, that if you take an exam you cannot claim illness as an excuse for doing poorly. In certain other situations (e.g., athletic meets, family obligations), you may arrange to take an exam early. This must, however, be set up well in advance and does not apply to the final. I will follow the procedures outlined in the "Examination Guidelines" (look under Academic Calendar and Final Exam Schedule) in dealing with final exam absences.

Grading:

Graded Homework: 25% Midterms: 30% Final: 45%

The grade of I (incomplete) will be given only under the conditions in the University of Washington General Catalog (under "Grading Systems").