

Math 631 — Theory of Functions of a Real Variable — Fall 2006 — Syllabus

1 Professor and contact information

Professor: David Ross

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Office Hours: See website

The telephone is *not* a good way to reach me, best is always email.

I should be around most of the day MWF, and occasionally TTh. However, if you just drop by during office hours, there is every possibility that there will be a bunch of Math 241 students waiting to talk to me. If you drop by at other times, I might be hiding somewhere. I don't mean to hide from you! Please do not hesitate to try to arrange meetings outside of stated office hours.

Text: Real Analysis (3rd Edition) by H. L. Royden

Coverage: Chapters 1-5 and 11, then as much of 6 and 12 as we can fit comfortably. I will also cover some other topics which (a) are not in the text, (b) every analysis student should know, and (c) will make some of the topics go faster.

Other Books: I will freely use material from other textbooks, such as those by Rudin, Natanson, Bartle, and others. The proofs in Royden are not always the nicest!

Attendance: Mandatory, though I will not take roll. You are responsible for everything we do in class, even on days you do not attend.

2 Grades

Homework: The grade will be almost entirely determined from homework sets. I will not ask you to turn in every problem I assign; on the other hand, for some of the problems I will want you to write solutions out very thoroughly, as if you were writing a textbook.

Participation: This will be an essential part of the class. Everyone will have to present at least one theorem proof in class, and I will probably ask for official note-takers when I veer from the text.

Final exam: I will give this mainly as a check on the homework and participation. It will be open book and open notes.

3 Policies

Make-up work Make-up exams will only be given in very unusual circumstances, with one week prior notification (or, in the event of an emergency, *very* strong documentation of that emergency).

Late Papers I reserve the option to not grade or otherwise count these.

Cheating The distinction between working together (“collaboration”) and copying from one another (“cheating”) is a subtle one. Cheating on the final examination will not be tolerated in this class. It is the student’s responsibility to ensure that (s)he does not copy from another student, or let another student copy from him or her. Because homework comprises a large fraction of the semester grade, collaboration there is discouraged as well. If two students genuinely work together on a problem, their written solution should be sufficiently different to make it clear that each understands the solution. One student should never give an answer to another, though hints as to a solution might be OK.