

MAA 5228/4226 - MODERN ANALYSIS 1
SYLLABUS

INSTRUCTOR: Paul Robinson

CLASS TIME: MWF period 4 (10:40-11:30)

CLASS ROOM: LIT 219

OFFICE HOURS: To be determined

TEXT: Walter Rudin, *Principles of Mathematical Analysis* (third edition)

The is the first half of a two-semester sequence that provides a common foundation in analysis for students in the mathematics graduate program. In addition to covering specific topics in analysis, the course is intended to sharpen critical thinking and writing skills generally.

The specific topics to be covered in this first semester are to be found in the first five chapters of 'Rudin'; an official listing of the relevant topics is posted at

<https://math.ufl.edu/first-year-exam-syllabi/maa-5228-modern-analysis-1/>

These topics will be addressed in essentially the same order as that in which Rudin presents them, but we shall often present further topics or different views of the same topics. Each chapter can be expected to take up approximately three weeks of class time, but this is only an estimate: circumstances might suggest a deviation, in which case the timing will be adjusted accordingly. It is advisable to read ahead in 'Rudin' as preparation for lectures. Be warned: the reading of 'Rudin' should be done with pencil and paper.

Homework problems will be regularly assigned and discussed in class. Some of these problems will be officially posted to Canvas, collected and graded; the grading criteria will be discussed in class at the start of semester. There will also be a midterm (approximately half way through the semester) and a final: each of these will serve as practice for the Analysis First-Year Examination.