

MHF 3202 - SETS AND LOGIC SYLLABUS

INSTRUCTOR: Paul Robinson
CLASS TIME: MWF period 6 (12:50-13:40)
CLASS ROOM: Turlington 1105 (and ONLINE)
OFFICE HOURS: Monday 9:30-10:30; Friday 14:00-14:45
TEXT: Richard Hammack, *Book of Proof* (third edition)

The material of this course is drawn from '*Book of Proof*', which the author has been so generous as to make freely available; for convenience, I have posted a copy in the 'Files' section of the Canvas pages for the course. We shall work through much of the text in text order; this will facilitate reading ahead, which is expected and necessary.

Perhaps of greater importance in this course than the acquisition of mathematical 'facts' is the development of an approach to mathematics. A primary focus will be on rigour (with a secondary focus on rigor): we shall synthesize and analyze carefully constructed arguments, from explicit hypotheses and working with precise definitions.

The Canvas pages for this course will host all of the course material. There will be no daily schedule posted at the start of semester: as noted above, we shall be working more-or-less straight through the text from start to finish; 'what comes next' will always be clear. Lectures will be conducted in-class and via 'Zoom' simultaneously. For each lecture, I prepare notes; these notes will form the basis of the class discussion and will be posted (to Canvas) after each lecture. Office hours will also be conducted via Zoom, but e-mail questions are also welcome, of course. If it seems that a topic raised in office hours or in e-mail will be generally beneficial, a commentary will be posted (to Canvas).

Grades will be based on performance in official homework assignments. These assignments will be given every one or two weeks, and the lowest homework score will be dropped. The grading scale will be more-or-less standard: A (90%), B(80%), C(70%), D(60%), with 4% increments for 'plus' grades and 3% decrements for 'minus' grades; for example, the B+ threshold is 84% and the A- threshold is 87%.