

Syllabus for Introduction to Mathematical Reasoning

Math 300 C - Spring 2022

Instructor: Dr. Matthew M. Conroy

Email: conroy@math.washington.edu (please always specify Math 300 in the subject line)

Web page: www.math.washington.edu/~conroy but all necessary information for the course is on Canvas.

Office hours: My office hour times will be listed on Canvas. My office hours will all be on Zoom; a zoom link will be provided on Canvas.

Purpose of the course: This course will introduce you to mathematical proof techniques and a variety of related general-purpose mathematical topics. By the end of this course, you will have read, analyzed and written many proofs, in several styles. You will have the foundation needed to understand the structure of proofs you will see and create in other mathematics courses.

Text: *An Introduction to Mathematical Reasoning*, by M. Conroy and J. Taggart. This is freely available as a pdf on the class website.

Weekly structure: Video lectures will be released once per week. You should set aside time specifically to watch these lectures and do the accompanying reading. The lectures will discuss the topics coming up the following week.

On Mondays, Wednesdays, Thursdays and Fridays, there will be something to do:

- **Monday:** Zoom during class time (starting the second week of class); discussion of videos and homework assignments
- **Wednesday:** In-person during class time; working on homework assignments and discussion of course topics
- **Thursday:** Zoom (time to be determined); working on homework: homework turned in via Gradescope Thursday evenings
- **Friday:** In-person during class time; working on past exam problems or considering open ended problems

Homework: Homework assignments will be listed on the Canvas class website. Generally, there will be an assignment due each Thursday evening that you will turn in via Gradescope (link on Canvas). The primary purpose of homework is to give you a chance to practice writing proofs and to get feedback on your efforts so that you can improve.

You are encouraged to work with other students to complete the homework assignments. However, the work you turn in must be your own. **Do not copy another student's work, and do not allow your work to be copied.**

Late homework will not be accepted. However, you are allowed to miss *one* homework assignment, for any reason, without penalty to your grade. This is implemented by dropping each student's lowest homework score when calculating each student's homework average. It is always to your advantage to turn homework in rather than not, so even if you only half-finish an assignment, you should turn it in.

Exams: All exams will be in our regular meeting classroom.

Midterm 1	Wednesday, April 20
Midterm 2	Wednesday, May 18
Final exam	Thursday, June 9 at 8:30 AM

Exams are cumulative: you may be expected to use any techniques and ideas discussed up to that point in the course.

Make-up exams will not be given, so don't miss exams. If you *do* miss an exam due to some unavoidable, unforeseen event (e.g. sudden illness, traffic accident, etc.) you should contact me *as soon as possible* to have the best chance of arranging some kind of adjustment.

Grading: Your grade will be made up of the following:

office visit, week 1 or 2	1 %
homework	20 %
midterm exams	23 % each
final exam	33 %

Course grades **are** curved in that your course grade will reflect your performance relative to the rest of the class rather than relative to some fixed percentage scheme (e.g., 90-80-70-60 etc.).

If you feel that an error in grading has occurred, you have **one week** after the exam or homework is returned to bring it to Dr. Conroy's attention. You should stop by Dr. Conroy's office hours to discuss it.

Washington state law requires that UW develop a policy for accommodation of student absences or significant hardship due to reasons of faith or conscience, or for organized religious activities. The UW's policy, including more information about how to request an accommodation, is available at

<https://registrar.washington.edu/staffandfaculty/religious-accommodations-policy/>

Accommodations must be requested within the first two weeks of this course using the Religious Accommodations Request form at

<https://registrar.washington.edu/students/religious-accommodations-request/>.