

# MATH 150A: INTERMEDIATE ANALYSIS

WINTER 2020

## Course Information:

- **Instructor:** Dr. Zhenghe Zhang, zhenghe.zhang@ucr.edu
- **Office:** Skye Hall Room 256
- **Class meeting:** 06:30pm–07:50pm, WF, HMNSS Room 1501
- **Office hours:** WTh1-2pm, or by appointment
- **Text:** *Advanced Calculus* by Avner Friedman,  
A pdf version may be found at iLearn under *Course Materials*  
(the pdf is for your reference only. Please do not distribute.)

## TA Recitations:

- Jonathan Alcaraz (jonathan.alcaraz@email.ucr.edu), Section 3
- Ryan Ta (ryan.ta@email.ucr.edu), Sections 2, 4, and 5

## Course Description:

Math 150A is a course giving a rigorous introduction to *Mathematical Analysis* with prerequisites Math 9C, 10B, and 144. Basically, it's a proof-based course that treats part of the content we learned in calculus rigorously. The topics of this course will be mostly from the first two chapters of Avner's Book: Chapter 1. Sequences and Limits; Chapter 2. Continuous Functions.

## Quizzes, Exams, and Grades:

There will be weekly quizzes, a mid-term exam and a final exam, all in class. The quizzes will account for 20%, the midterm (**Feb 7, Friday, in class**) will account for 35%, and final (**Friday, March 20 at 3pm**) for 45% for the final letter grades. Quizzes will be taken each week on TA discussion sessions. The lowest two quiz scores will be dropped. Quiz 1 will be given on Jan 16.

## Final Exam Policy:

No final may be given early to accommodate student travel plans. If you make travel plans that turn out to conflict with the scheduled exam, then it is your responsibility to either reschedule your travel plans or take a zero in the final.

**Homework:**

Homework will be assigned on iLearn. You are encouraged to work together on assigned problems. It's important for students to go through the assigned problems in detail. The TA will discuss the solutions in the discussion sessions. Most of the problems in quizzes will be directly from the homework assignments. Many of the exam problems are closely related to them as well. **Specifically, problems on quiz number  $n$  may be very closely related to homework assignment number  $n$ .**

**Participation & Attendance:**

It's important for students to attend every class and arrive on time. It is your responsibility to keep informed of all the announcements and materials covered during class. While iLearn is an important resource, not all announcements will be posted there.

**Disability Support:**

If you have a documented disability that will affect your work in this class, please contact me within the first week to discuss accommodations. Students with disabilities will also need to contact *Student Disability Resource Center*.

**Tentative Class Schedule**

Week 1: Introduction and preparation of the course; Chap 1, Section 5

Week 2: Chap 1, Sections 5 (cont.) and 6

Week 3: Chap 1, Sections 6 (cont.) and 7

Week 4: Chap 1, Sections 7 (cont.) and 8

Week 5: Chap 1, Section 8 (cont.); Midterm Exam

Week 6: Chap 2, Section 1

Week 7: Chap 2, Sections 1 (cont.) and 2

Week 8: Chap 2, Sections 2 (cont.) and 3

Week 9: Chap 2, Sections 4 and 5

Week 10: Chap 2, Section 5 (cont.) and Review for final

**Disclaimer:**

The instructor reserves the right to make changes to this syllabus without prior notice. However, once changes are made you will be notified of those changes.