

1 General Information

Instructor: Aixin Tan, 259 SH, aixin-tan@uiowa.edu
Lectures: MWF 1:30 - 2:20 p.m. Delivered Online
Office hours: TBD

Department: Statistics and Actuarial Science, 241 SH
DEO: Kung-Sik Chan, 241 SH, 335-0712
Web page: <https://icon.uiowa.edu>

Announcements, lecture notes, homework assignments, etc. will be posted in ICON.
You should check ICON page and your email regularly.

Textbooks:

- W. Rudin (1976), Principals of Mathematical Analysis, 3rd Edition, McGraw-Hill Education.
- A. N. Kolmogorov & S. V. Fomin (1970), Introductory Real Analysis, New York: Dover.

2 Course goals and objectives

The goal of this course is to provide students with a foundation of real analysis and advanced calculus skills and fundamentals that have proven useful in mathematical statistics. I plan to cover most of the material in Chapters 2 through 7 in Rudin's book and some corresponding sections of Kolmogorov and Fomin.

3 Reading

Reading assignments for each day will be placed on the web a few days in advance. You should read the assigned material before coming to class.

4 Homework assignments

Homework assignments are an essential component of the course. Assignments will generally consist of 5-10 problems assigned each Friday.

You may discuss general issues and approaches for your homework with your fellow students, but the submitted work must be your own. If you use any references, including solutions to similar problems prepared by other students, you must cite and credit your sources. You are encouraged to write up your solutions in LATEX.

Late homework and missed exams cannot be made up, except as required by University policies (illness, mandatory religious obligations, and other unavoidable — University obligations University Operations Manual, 50.021).

5 Exams

There will be two 50-min midterm exams. The **tentative** exam times are

Midterm 1 the week of Feb 22

Midterm 2 the week of April 5

Final to be determined by the University during the semester

6 Grading

The course components will be weighted as follows:

Homework 30 %

Midterm 1 20 %

Midterm 2 20 %

Final 30 %