

Mathematics 118, Spring 2017
Fraydoun Rezakhanlou
Fourier Analysis, Wavelets, and Signal Processing

Lectures: TuTh 2:00PM-3:30P 9 Evans
Office Hours: TuTh 12:30A-2:00P 803 Evans

Prerequisites: *Math 53 and 54*

Text: A. Boggess and F. J. Narcowich: FIRST COURSE IN WAVELETS W/FOURIER ANALAYSIS, Second edition, Wiley.

This class will be an introduction to the mathematical theory of Fourier Analysis and Wavelets. The main topics are:

1. Fourier Transform and Fourier Series
2. Haar Basis
3. Multiresolution Analysis
4. Daubechies Wavelets

Grading:

Homework 10 points, Midterm 35 points, Final exam 55 points.

Make sure you can make the Midterm and Final exam; check the schedule now to see that it is acceptable to you. It is not possible to have make-up exams.

Midterm: Thursday, March 2, in Class 2-3:30pm.

Final Exam: Monday, May 8, 11:30am-2:30pm.