

MATH 7337 SYLLABUS

FALL 2008

Course Number: Math 7337 A

Course Name: Harmonic Analysis

Lecture Time: MWF 1:05-1:55 p.m.

Lecture Room: Skiles 254

Instructor: Dr. Christopher Heil
Office: Skiles 109
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Email Address: heil@math.gatech.edu
Office Hours: MWF 2:30-3:30 and by appointment.

Course Web Page: <http://www.math.gatech.edu/~heil>

Prerequisite: Math 6337 (Real Analysis I)

Recommended Prerequisites: Math 6580 (Introduction to Hilbert Spaces)
Math 4317, 4318 (Undergraduate Real Analysis)

Text: Web notes

Material: Chapter 1: The Fourier Transforms on $L^1(\mathbf{R})$
Chapter 2: The Fourier Transforms on $L^2(\mathbf{R})$
Chapter 3: Distributions
Chapter 4: Measures
Chapter 5: Time-Frequency Analysis
Chapter 6: Discrete Time-Frequency Analysis

Academic Dishonesty. All students are expected to comply with the Georgia Tech Honor Code. Any evidence of cheating or other violations of the Georgia Tech Honor Code will be submitted directly to the Dean of Students. The institute honor code is available at <http://www.deanofstudents.gatech.edu/integrity/>

Grading. We will have 5 homework assignments due approximately every other week and worth 50 points each, and a (take-home) final exam, also worth 50 points.

Homeworks should be written on the front side of the page only, and must be stapled. Late homeworks will not be accepted.