MATH 110.443 FALL 2005: FOURIER ANALYSIS
SYLLABUS

Meeting time: MTW 12-12:50, Maryland 114
First meeting: Monday, September 12
Instructor: Florin Spinu. e-mail: fspinu@math.jhu.edu
Office hours (walk-in): MT 2:00 - 3:00 pm, Krieger 312 or by appointment.

Textbook
Elias M. Stein and Rami Shakarchi, Fourier Analysis: An Introduction, Princeton
University Press (2003), chapters 1-5.

Course goals: basic facts about Fourier series and the Fourier transform, with an
emphasis on specific examples and applications in differential equations and number
theory. Keywords: wave & heat equations, Fourier series, Poisson kernel, Fourier
transform & inversion, Parseval identity & Plancherel formula, Poisson summation
formula, theta functions.

Homework. Assigned daily and collected on Monday the next week, at the be-
inning of the lecture. No late homework accepted. Study groups are encouraged
but the homework has to be written down independently.

Exams
Two midterm exams: Oct 25, Nov 22 (Tuesday, in class).
Final exam: TBA.

Exam policy. Exams are closed book, closed notes. There will be no make-up
exams. If an exam is missed with a valid excuse, the grade for that exam will be
a weighted average of the grades obtained on subsequent exams. The grade for an
unexcused exam will be a zero. The Academic Advising Office provides letters for
excused absences. If you have a conflict with an exam or need special arrangements,
you must notify the instructor in writing at least two weeks in advance.

Attendance: lecture (section) attendance is mandatory.

Grading Policy: Homework: 25%, Midterm Exams: 2 × 20%, Final 35%.

Ethics Statement. The strength of the university depends on academic and per-
sonal integrity. In this course, you must be honest and truthful. Ethical violations
include cheating on exams, plagiarism, reuse of assignments, improper use of the
Internet and electronic devices, unauthorized collaboration, alteration of graded
assignments, forgery and falsification, lying, facilitating academic dishonesty, and
unfair competition.

Report any violations you witness to the instructor. You may consult the asso-
ciate dean of students and/or the chairman of the Ethics Board beforehand. See
the guide on "Academic Ethics for Undergraduates" and the Ethics Board website
(http://ethics.jhu.edu) for more information.