Instructor: Tomasz Przebinda, Room 522, PHSC; home page: http://crystal.ou.edu/; e-mail: tprzebinda@ou.edu; tel: 325-0830

Office hours: Thursday 2:30 - 3:30, Friday 1:00-1:55.

Text: We shall be concerned with the material contained in chapters 2, 3, 5 and 7 of a book "Fourier Analysis, an introduction" by Elias M. Stein and Rami Shakarchi (Princeton University Press)

Course outline: This is a "pre-wavelet" course intended to prepare students for the following course on wavelets. Since the theory of wavelets is based on the classical theory of Fourier Transform, we shall study this transform and related notions. Here are some key words: Fourier series, Fourier Transform, Finite Fourier Transform, Fast Fourier Transform, Hilbert space.

Exams: There will be two midterm exams during the class period (45 minutes), on Wednesday Oct. 4th and on Wednesday Nov. 29th. The final exam on Thursday Dec. 14th, 8:00 AM - 10:00 AM (in the same room). University regulations require that you take the final exam at this time. Do not arrange travel plans that prevent you from attending the final exam.

Under extraordinary circumstances, if you cannot take a test at the scheduled time, you should contact me in advance of the test time.

Homework: There will be weekly assignments, posted on my homepage: crystal.ou.edu, to be handed in on Monday at the beginning of the class. Please hand in your homework on time (Mondays 9:30); late assignments cannot be accepted.

Final grade: final exam 50% + midterms 20% + 20% + homework 10%
Students with Disabilities: Any student having a disability that may interfere with the demonstration of his or her abilities should contact me as soon as possible to arrange accommodations necessary to ensure full participation in the course.

Grade of Incomplete: The grade of “I” is a special-purpose grade given when a specific task needs to be completed to finish the course work. This is typically a term paper or other special assignment, so rarely makes sense in a mathematics course. An “I” cannot be given to avoid a low grade in cases where the course work is not strong.