Leon Takhtajan

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MAT 341: Applied Real Analysis Fall 2017 Course Information

Course Information

Schedule & Homework

Synopsis

This course is an introduction to Fourier series and to their use in solving partial differential equations (PDEs). We will discuss in detail the three fundamental types of PDEs: the heat equation, the wave equation and Laplace's equation. These equations are important in many applications from various fields (mathematics, physics, engineering, economics, etc.) and illustrate important properties of PDEs in general.

Click here to download a copy of the course syllabus. Please visit the course website on Blackboard to see your grades and the solutions to midterms & exams.

Lectures

Tuesdays & Thursdays 10-11:20pm in in Library E4320

Instructor

Leon Takhtajan Office hours: Tu 4:00pm-5:30pm, W 2:00pm-3:30pm in 5-111, and by appointment.

Teaching Assistant

Jiashing Teh Office: Math Tower S-240A Office hours: M 1:00pm-2:00pm, F 12:00pm-1:00pm in MLC, and Tu 1:30pm-2:30pm in S240A.

Minh Nguyen

Office: Math Tower S-265 Office hours: M 5:00pm-7:00pm in MLC, and M 10:30am-11:30am in S265.

Textbook

David Powers, *Boundary Value Problems and Partial Differential Equations*, 6th ed., Elsevier (Academic Press), 2010.

Grading Policy

Grades will be computed using the following scheme:

- Homework 20%
- Midterm 1 20%
- Midterm 2 20%
- Final 40%

Students are expected to attend class regularly and to keep up with the material presented in the lecture and the assigned reading.

Exams

There will be two midterms and a final exam, scheduled as follows:

- Midterm 1 Thursday, October 5, 10:00-11:20am, in Library E4320.
- Midterm 2 Thursday, November 2, 10:00-11:20am, in Library E4320.
- Final Exam Friday, December 15, 11:15am-1:45pm, in Library E4320.

Last updated August 2017