

COURSE SYLLABUS

YEAR COURSE OFFERED: 2017

SEMESTER COURSE OFFERED: Spring

DEPARTMENT: Mathematics

COURSE NUMBER: Math 3363

NAME OF COURSE: Introduction to PDEs

NAME OF INSTRUCTOR: Prof. Suncica Canic

The information contained in this class syllabus is subject to change without notice. Students are expected to be aware of any additional course policies presented by the instructor during the course.

Learning Objectives

Linear partial differential equations including the heat equation, wave equation, advection equation. Method of separation of variables. Fourier series. Spectral methods.

Major Assignments/Exams

Quizzes: 1/3 of the final grade.
Two mid-tem exams: 1/3 of the final grade.
Final exam (comprehensive): 1/3 of the final grade.

Required Reading

Richard Haberman: "Applied Partial Differential Equations (with Fourier Series and Boundary Value Problems)", Fifth Edition, 2013.

Recommended Reading

Richar Haberman: "Applied Partial Differential Equations (with Fourier Series and Boundary Value Problems)", Fifth Edition, 2013.

List of discussion/lecture topics

Heat equation. Method of separation of variables. Fourier series. Wave equation. Sturm-Liouville eigenvalue Problems.