22M:216 Partial Differential Equations

Instructor: Lihe Wang
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Office Hours: 11:20-12:20 MW or by appointments.
Class Hours: 9:30-10:20 MWF 214 MLH

Goals and Objectives of the Course:

This course is an introduction to the theory of Partial Differential Equations. Basic topics to be covered will include the Laplace operator, the heat and the wave equations, as well as nonlinear first order equations (Burgers equation and Hamilton-Jacobi equations). Variational method will be developed for nonlinear equations.

Textbook: Evans, Lawrence C.*Partial Differential Equations.* Graduate Studies in Mathematics, 19. American Mathematical Society, Providence, RI, 1998. ISBN: 0-8218-0772-2.

Homeworks: Homeworks will be assigned weekly and collected one week from the assignment date.

Examination: A take-home final will be given two weeks before the end of the semester and collected at the end of the semester.

Grading Policy: The students' grader for this semester is Mr. Byun. If you have problems with your hw scores, you should first consult with him. Only were you not satisfied by his resolution, you would come to see me for further discussion. Late homework will be accepted with 1/10 discount per day.

Your grade will be based on Homework (70%) Final presentation (30%).