Meeting time:  MWF 9:05–9:55, remotely via zoom

Office hours:  MW 10:00–11:00, after class.
Or else by appointment: send me an e-mail at  axb62@psu.edu

Web page:  http://www.personal.psu.edu/axb62/


Course description: The course will focus on the modern theory of linear PDEs, relying on general techniques from functional analysis to study weak solutions. It will mainly cover Part II, Chapters 5-6-7 of Evans’ book. Namely:

1. Hölder spaces. Definition and basic properties.


6. Hyperbolic systems of first order equations. Definitions, symmetric hyperbolic systems, systems with constant coefficients.

7. Semigroups of linear operators. Definition, generator of a semigroup, applications to linear evolution equations.
Grading policy

Grades for the course will be based on homework (70%), a midterm quiz (10%) and a final exam (20%).

Homework will be assigned on a weekly basis. It will be collected each Friday. You will need to scan your work, and upload it on CANVAS.

The lowest score among the homework assignments will be dropped. The midterm quiz will take place on Wednesday March 17, during the usual class time. The final exam will take place sometime during the week May 3–7, 2021.

Academic Integrity Policy

All Penn State Policies regarding ethics and honorable behavior apply to this course.

Academic integrity is the pursuit of scholarly activity in an open, honest and responsible manner. Academic integrity is a basic guiding principle for all academic activity at The Pennsylvania State University, and all members of the University community are expected to act in accordance with this principle. Consistent with this expectation, the University’s Code of Conduct states that all students should act with personal integrity, respect other students’ dignity, rights and property, and help create and maintain an environment in which all can succeed through the fruits of their efforts. Academic integrity includes a commitment not to engage in or tolerate acts of falsification, misrepresentation or deception. Such acts of dishonesty violate the fundamental ethical principles of the University community and compromise the worth of work completed by others.