M W F3 (9:35-10:25am), Little 223

Office Hour: MHF 12:45-2pm.

Credits: 3; Real Analysis and PDE-1 for graduate students
This course is a continuation of the PDE-1 course based on L. C. Evans' book Partial Differential Equations. The topics to be covered in this course are: Chapter 6: Second order Elliptic Equations, Chapter 7: Linear Evolution Equations, Chapter 8: The Calculus of Variations.

Partial Differential Equations, L.C.Evans, Graduate Studies in Mathematics, Vol.19, AMS

Homework will be assigned after each lecture. I will collect the homework from time to time.

Chapter 6: Second order Elliptic Equations,
Chapter 7: Linear Evolution Equations
Chapter 8: The Calculus of Variations.

If time permits I will add more discussion of fully nonlinear elliptic equations starting from really simple examples. The main purpose of this part is to present some of Luis Caffarelli and Shing-tung Yau’s ideas.

Exam one (mid-term) February 21 (25%)
Exam two (mid-term) March 28 (25%)
Homework –15%
Final exam : TBA (35%)

A: 85+ or above; B+: 75-84; B: 70-74; C+: 65-69; C: 60-64; D: 50-59; E: 0-49.

ABSOLUTELY NO MAKEUPS WITHOUT MEDICAL DOCUMENTATION. Requirements for class attendance and make-up exams, assignments, and other work in this course are consistent with university policies that can be found at:

https://catalog.ufl.edu/ugrad/current/regulations/info/attendance.aspx

Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, www.dso.ufl.edu/drc/) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

https://catalog.ufl.edu/ugrad/current/regulations/info/grades.aspx

Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary
results of these assessments are available to students at https://evaluations.ufl.edu/results/.