Course 2 (Spring 2020) MAP6357 Partial Differential Equations 2 /23426

Time and Location
M W F3 (9:35-10:25am), Little 205

Office Hour: MHF 10am-11:00am.

Description and Goals
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.

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

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

Course schedule:
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.

Final Grades
Exam one (mid-term) February 17 (25%)

Exam two (mid-term) April 13 (25%)
Homework – 15%

Final exam: April 28 7:30am-9:30am (35%)

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

Attendance and Late Policy
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 that need accommodation
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.

Information on current UF grading policies for assigning grade points:

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

Information on course evaluation
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/.