

MAP6357 Partial Differential Equations 1 /Section 366A Class # 17291 Fall 2019

INSTRUCTOR Lei Zhang, leizhang@ufl.edu

OFFICE Little Hall 466, 294-2344.

OFFICE HOURS MWH 1-2pm.

CLASS TIME MWF 8:30-9:20am, Little Hall 217

PREREQUISITES Real Analysis.

Major Reference Book *Partial Differential Equations, L.C.Evans, Graduate Studies in Mathematics, Vol.19, AMS*

COURSE DESCRIPTION This is an introductory course on Partial differential equations (PDEs) for beginning graduate students. Different important and typical PDEs and standard approaches will be introduced. Students interested in pure and applied mathematical research with PDEs involved can benefit from this course.

COURSE ARRANGEMENT: Chapter 2: Four Important Linear PDE, Sections 2.1-2.4.

Chapter 3: Nonlinear First-Order PDE, Sections 3.1-3.3.

Chapter 4: Other Ways to Represent Solutions. Sections 4.1, 4.3.

Chapter 5: Sobolev Spaces. Sections 5.1-5.9.

GRADING Mid-term exam Oct 14: 30%

Final oral exam: 30%

Homework 40%

A=90-100, B+=86-89, B=80-85, C+=76-79, C=70-75, D+=66-69, D=60-65, E=0-59.

SCHOLASTIC DISHONESTY Copying work done by others, either in class or out of class, is an act of scholastic dishonesty and will be prosecuted to the full extent allowed by University policy. Collaboration on assignments, either in class or out of class, is forbidden unless permission to do so is granted by your instructor.

ACCOMMODATION FOR STUDENTS WITH DISABILITIES Students requesting classroom accommodation must first register with the Dean of Students Office. The Dean of Students Office will provide documentation to the student who must then provide this documentation to the Instructor when requesting accommodation.

POLICY ON ATTENDANCE Attendance is required. Students should inform the professor in advance if he/she has to miss a lecture.

POLICY ON MAKE UP EXAMS Make-up exams will only be given in cases authorized under University of Florida Regulations. If you miss an exam you must contact me *immediately* otherwise the grade will be 0.