*Text*: Partial Differential Equations and ..., 5<sup>th</sup> ed., by Richard Haberman

*Class Hours*: noon MWF, in ECCR 105 (for 4350-001 and 5350-001) 1 PM MWF, in ECCR 151 (for 4350-002 and 5350-002) [10 AM MWF, in FLMG 102 (for 4350-003 and 5350-003)]

Instructor: Harvey Segur, 420 ECOT [Zachary Kilpatrick, 247 ECOT]
Office hours: M 2 – 3 PM, W 9:30 – 11 AM, Th 12 – 1:30 PM or by appointment
Phone: 492-0592 email: segur@colorado.edu

## Learning Assistants:

Ian Char, Ji Hoon Kim, Matt Maierhofer, Marika Schubert, Marc Thomson

The LAs will run voluntary help sessions:

Mon. 3-4 PM in ???, Tues. 3-5 PM in ???, Wed 3-5 PM in ???

The objective of these sessions is to help you: (i) to understand the course material; and (ii) to improve your understanding on the homework sets.

Grades will be based on a total of 400 points in the course:

(i) homework sets (100 points total);

(ii) 2 midterm exams (100 points each);

(iii) a course project (100 points);

(iv) there will be **no final exam**.

(i) Homework sets: The homework due on a Friday will cover material through the previous Monday (so **not** the material covered on Wednesday). A total of 10 homework sets will be collected over the semester. Each set will be worth 10 points, except:

\* the 0<sup>th</sup> homework set will be given out in the first week, followed by answers, but not graded;

\* no homework will be collected on October 7 or November 18, because of an exam the evening before;

\* the homework sets due on October 14 and November 30 will each be worth 15 points, because each will include problems that were not collected on the previous Friday; \* your lowest **10-point** homework score will be dropped at the end of the semester.

**Ground rules** for the homework sets are as follows. You may use any reference book from the library. (If you use a reference book, please state this on your homework set. You will not be penalized for using a reference (other than another student's homework.)) You are encouraged to discuss the homework problems with the instructor, the LAs and/or with other students in the class. You are encouraged to work on the problems together, **until** you get to the point that you understand how to solve the problem. Each student is required to write up and to submit his/her own homework set. You are **not**  permitted to copy another student's homework, even if you worked on the problems together.

(ii) Exams: Two mid-term exams will be given, both *outside* of regular class time: starting at **5:30 PM** on Thursday, **October 6** in BESC 180 and

on Thursday, November 17 in BESC 180.

(If you have a class that meets on Thursday evenings, please notify Professor Segur as soon as possible, so that we can accommodate your schedule.)

Oral reviews will be offered during two days before each exam. These are voluntary, ungraded sessions with 5 students and a facilitator. The purpose is to have students discuss the important concepts that lead to the questions on the subsequent exam.
Help sessions will be replaced by orals during the two weeks of midterm exams.

(iii) **Projects**: Applications of partial differential equations (and of Fourier series) show up in many scientific disciplines. The range of the projects is intended to be broad enough that each student can work on an application that interests that student.

Some time after the first exam but still in October, you will be given a list of possible projects, chosen to exhibit some of the range of applications of partial differential equations. Students in 4350 will work in groups of 3, while students in 5350 will work by themselves. Before the Thanksgiving break, you will be required to identify your working group, and your project. Starting on November 28, class sessions will be devoted to helping groups with their projects, with no new material covered and no more homework.

On Monday, December 5, every group will be required to turn in a written report on its project. In addition, each group will make an oral presentation of its project. These presentations will be scheduled in class and also during the times (and locations) of the help sessions during the last week of classes.

## Students with disabilities (official CU policy):

If you qualify for accommodations because of a disability, please submit to Professor Segur a letter from Disability Services in a timely manner (for exam accommodations provide your letter at least one week prior to the exam) so that your needs can be addressed. Disability Services determines accommodations based on documented disabilities. Contact Disability Services at 303-492-8671 or by e-mail at dsinfo@colorado.edu.

If you have a temporary medical condition or injury, see Temporary Medical Conditions: Injuries, Surgeries, and Illnesses guidelines under Quick Links at Disability Services website and discuss your needs with Professor Segur.