Math 5440-6850: Introduction to Partial Differential Equations
Instructor: Prof. Yekaterina Epshteyn
Lectures: MWF 10:45am - 11:35am, LCB 222

Office Hours (tentative, it may be some changes)
M 1:35pm-2:20pm, F 1:35pm-2:20pm, or by appointment
Office: LCB 337
E-mail: epshteyn@math.utah.edu

Textbook and References
References:
An Introduction to Partial Differential Equations, by Yehuda Pinchover and Jacob Rubinstein, Cambridge;
Partial Differential Equations. Analytical and Numerical Methods, by Mark Gockenbach, SIAM.

The course
Students will learn about classical partial differential equations, including the Laplace, heat, and wave equations. They will employ several analytical methods, including Fourier analysis, Green's functions, and the method of characteristics.

Prerequisites
"C" or better in MATH 2280 or MATH 3140 or MATH 3150. MATH 3210 (Foundations of Analysis I) is recommended but not necessary for this class. Math 3210 is strongly recommended for graduate version of the class 6850.

Homework
Homework will be assigned (approximately once in two weeks or so) and collected. No late homework will be accepted.

ADA Statement
The Americans with Disabilities Act. The University of Utah seeks to provide equal access to its programs, services, and activities for people with disabilities. If you will need accommodations in this class, reasonable prior notice needs to be given to the Center for Disability Services, 162 Olpin Union Building, 801-581-5020. CDS will work with you and the instructor to make arrangements for accommodations. All written information in this course can be made available in an alternative format with prior notification to the Center for Disability Services.

University Safety Statement
The University of Utah values the safety of all campus community members. To report suspicious activity or to request a courtesy escort, call campus police at 801-585-COPS (801-585-2677). You will receive important emergency alerts and safety messages regarding campus safety via text message. For more information regarding safety and to view available training resources, including helpful videos, visit safeu.utah.edu.

**Grading:** Homework 70%, one Midterm Written Exam (October 25 2019, during regular class time) 15% and one Final Written Exam (December 9 2019, 10:30am-12:30pm during final's week) 15%

No make up exams will be given, exam dates are fixed, please plan your schedule around these dates.

---

Homework due dates will be announced and posted

**For graduate students:**
You can take this course at the graduate level (Math 6850). The lectures are the same for everyone, but there may be extra problems for graduate students. If you are not a graduate student at the U yet, then instructor consent is required for registration for Math 6850.

*Note: Assignments and updates will be posted on class website. Students are responsible for checking it regularly.*