Mathematics 5325 Course Syllabus
Partial Differential Equations
Spring 2016

Instructor:  Dr. Xiaoming He
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Office Hours: 10:30am-12:30pm and 2:10pm-3:00pm MWF or by appointment.

Prerequisite:  Mathematics 3304 (Elementary Differential Equations) with a grade of “C” or better

Class: Monday, Wednesday, Friday 9:00am-9:50am, Rolla Building G5.


List of Topics to Be Covered:
Chapter 1.   Where PDEs Come From
Chapter 2.   Waves and Diffusions
Chapter 4.   Boundary Problems
Chapter 5.   Fourier Series
Chapter 6.   Harmonic Functions
Chapter 8.   Computation of Solutions

Homework: A thorough understanding of the homework is a vital component of this course. You should make it a practice to do your homework promptly and you are expected to turn in homework regularly. Ten homework assignments will be collected, graded, and returned during the course. And they will be used to determine your 200-point homework grade. The homework assignments and the due dates will be posted on blackboard. I will allow you at least one intervening class period to ask questions about homework problems. Since class time is precious, however, do not expect to have more than one or two such questions answered per class period. If questions remain, please see me outside class time. Solutions to graded homework problems will be posted on blackboard.

Exams: There will be a midterm exam and a comprehensive final exam, which will cover all the lecture examples and homework problems.

Grading: On all your papers (homework, midterm exam, and final exam), you are expected to show your work clearly and completely. You will be graded on your work as well as your answers. There will be 500 total points – 100 for the midterm exam, 200 for the final exam, and 200 in homework. If you score 430 or more of all possible points, you are guaranteed to earn an A; 360 or more guarantees a B; 300 or more guarantees a C; and 250 or more guarantees a D if applicable.

Question/Concern Resolution: If you ever have a question or concern about the way this course has been organized or is being conducted, please come to see me first. However, if this does not resolve the problem, then you should speak with the Mathematics and Statistics Department Chair, Dr. Stephen Clark, in room 202 of the Rolla Building.

Disability Support Services: If you have a documented disability and anticipate needing accommodations in this course, please meet with me early in the semester. Before I can arrange for your accommodations, you will need to provide written documentation from the Disabilities Services staff in
204 Norwood Hall (dss@mst.edu, 341-4211) verifying your disability and specifying the accommodations you will require.

**Academic Honesty:** Academic honesty is vital to the intellectual life of the University. Students have a special obligation to be aware of and adhere to the standards of conduct as described on page 27 of the 2012-2014 Missouri S&T Student Academic Regulations handbook:

http://registrar.mst.edu/academicregs

In particular, this page offers descriptions of what constitutes cheating, plagiarism, and sabotage.