Approximate Topics/Chapters:

- The Heat Equation (Ch 1)
- Separation of Variables (Ch 2)
- Fourier Series (Ch 3)
- The Wave Equation (Ch 4)
- Sturm-Liouville Eigenvalue Problems (Ch 5)
- Higher-Dimensional PDEs (Ch 7)
- Nonhomogeneous Problems (Ch 8)
- Green’s Functions (Ch 9)
- Fourier Transforms (Ch 10)

Goals: The students will gain a fundamental understanding of: some classic PDEs (such as the wave and heat equation), techniques for solving PDEs, and expanding functions in orthogonal expansions such as Fourier series.

E-mail Policy: I will do my best to respond to e-mail with in a 24 hour period of having received your message, unless I encounter extenuating circumstances.
Course Grade:

One Midterm Exam: 20%
Final Exam: 35%
Homework: 45%

Midterm: Friday, February 24, in class.

Final Exam: Thursday, April 27, 10:30AM-12:30PM. Comprehensive.

Homework: Homework will be assigned on a regular basis. Homework will be collected at the beginning of class once per week or once per every two weeks, depending on the rate material is covered. Late homework will not be accepted. A random selection of problems will be graded.