

**AME 526: Partial Differential Equations  
Fall 2010**

**Prof. P.K. Newton**

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**Office hours:** TBA

**Time:** MW 12:30-1:50, OHE 100D

The course will cover elementary mathematical techniques for solving linear partial differential equations that arise in engineering and scientific applications. There are 7 parts to the course:

1. Introductory concepts
2. Fourier series
3. Introduction to Green's functions
4. Introduction to characteristics
5. Linear waves
6. Laplace's equation
7. Eigenvalue problems

**Book:** *Advanced Engineering Mathematics*, P. O'Neil

**Grading:** Homework 20%; Midterm 40%; Final 40%