Tentative Syllabus:

1. The method of separation of variables: Heat flow in one and several dimensions.
2. Fourier Series and vibrations: strings, membranes, electromagnetic waves.
4. Introduction to the numerical solution of PDEs by Finite Difference methods.
5. Green’s functions: sources for the Heat, Laplace and Wave equations.
6. Introduction to Fourier and Laplace transform methods for PDEs.