

APPLIED MATHEMATICS 413 "INTRODUCTION TO PARTIAL DIFFERENTIAL EQUATIONS"

Calendar Description: H(3-1T)

Orthogonal sets of functions, Fourier series, solution of potential equation, heat equation and wave equation. Numerical solution of partial differential equations.

Prerequisite: One of Mathematics 353, Applied Mathematics 309, Mathematics 331; or consent of the Division. Familiarity with a computer programming language is strongly advised.

Syllabus

<u>Chapters</u>	<u>Number of Hours</u>
First Order Equations	3
Fourier Series and Integrals	6
The Heat Equation	7
The Potential Equation	6
The Wave Equation	7
Problems in Several Dimensions	7
TOTAL	36
