**Nebraska Wesleyan University**

# PHYS 229 Mathematical Methods for Physics and Engineering

## Catalog

2011-2012

## Course Description

Topics may include: Laplace transform and applications; series solution of differential equations, Bessel's equation, Legendre's equation, and special functions; matrices, eigenvalues and eigenfunctions; vector analysis and applications; boundary value programs and spectral representations; Fourier series and Fourier integrals; and solution of partial differential equations of mathematical physics.

Three lectures per week.

*Prerequisite(s): MATH 224 Differential Equations or permission of the instructor.*

## Course Hours

3 hours

## Departments

1. Physics