

Nebraska Wesleyan University

Catalog 2011-2012

PHYS 209 Electromagnetic Theory

3 hours

Majors, Minors & Degrees:

Majors

Physics (B.S.)

Departments/Programs:

Physics

A development of Maxwell's equations from basic principles with the object of achieving a macroscopic description of the electric and magnetic properties of matter, including a relativistic description of electromagnetic fields and their interaction with charged particles. Vector calculus is developed and used as needed.

Three lectures per week.

Prerequisite(s): PHYS-102 or PHYS-112, MATH-106, and computer programming skills or permission of the instructor.

Corequisite(s): MATH-204 or MATH-224 or permission of the instructor.