Course:

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 Principles of Physics II or PHYS 112 General Physics II, MATH 106 Calculus II, and computer programming skills or permission of the instructor.

Corequisite(s): MATH 204 Calculus III or MATH 224 Differential Equations or permission of the instructor.