

Course:

PHYS 241 Classical Mechanics I

3 hours

Majors, Minors & Degrees:

Majors

Physics (B.S.)

Departments/Programs:

Physics

A theoretical treatment of classical mechanics of particles and systems of particles with emphasis on the conservation laws of energy, momentum, and angular momentum. Particular topics in Newtonian, celestial, and continuum mechanics are studied. Vector calculus is developed and used as needed.

Three lectures per week.

Prerequisite(s): PHYS 101 Principles of Physics I or PHYS 111 General Physics I, 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.