Nebraska Wesleyan University

PHYS 201 Classical Mechanics

Catalog

2013-2014

Course Description

An in-depth theoretical treatment of classical mechanics of particles and systems of particles with emphasis on the conservation laws of energy, momentum, angular momentum, and oscillations. Particular topics include Newtonian, Lagrangian, and Hamiltonian formalisms, non-inertial reference frames.

Four lecture/recitation periods 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.

Course Hours

4 hours

Departments

1. Physics, Astronomy, and Computer Science