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## Physics (PHYSICS)

### **PHYSICS 002A**                      **Mechanics and Thermodynamics**                      (4)

*Class Hours:* 54 Lecture | 54 Laboratory

*Prerequisite(s):* MATH 063 or MATH 064

*Transfers to:* UC/CSU

*C-ID:* PHYS 105

Mechanics and Thermodynamics

PHYSICS 002A is the algebra-based study of vectors, particle kinematics and dynamics, work energy, simple harmonic motion rotational kinematics and dynamics, the kinetic theory of gases, the first and second laws of thermodynamics and gravitation.

### **PHYSICS 002B**                      **Electricity, Magnetism, Optics**                      (4)

*Class Hours:* 54 Lecture | 54 Laboratory

*Prerequisite(s):* PHYSICS 002A

*Transfers to:* UC/CSU

*C-ID:* PHYS 110 & 100S

Electricity, Magnetism, Optics and Modern Physics

PHYSICS 002B is the algebra-based study of electricity, magnetism, electromagnetism, electric circuits, wave phenomena, geometrical and physical optics, special relativity and a survey of atomic, nuclear and particle physics.

### **PHYSICS 004A**                      **Classical Mechanics**                      (4)

*Class Hours:* 54 Lecture | 54 Laboratory

*Corequisite(s):* MATH 001B

*Transfers to:* UC/CSU

Classical Mechanics

PHYSICS 004A is intended for students majoring in physical sciences and engineering, is part of a three-semester course whose contents may be offered in other sequences or combinations. Core topics include an introduction to kinematics, work and energy, momentum, gravitation and simple harmonic motion.

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