

PHYS - Physics Courses

PHYS B2A General Physics-Mechanics and Heat

4 units

Prerequisites: BC placement into math level 04 or successful completion of MATH B70 or equivalent with a grade of C or better.

Corequisites: MATH B1A (may be taken concurrently)

Description: The properties of matter, mechanics and heat. Emphasizes understanding laws, principles, and theories. Required for most science, premedical, most other pre- professional and technical majors.

Hours: 54 lecture, 54 lab

C-ID: PHYS 105

Transferable: CSU, UC, and private colleges; IGETC 5.A; IGETC 5.C; CSU GE B.1; CSU GE B.3; BC GE B.1

PHYS B2B General Physics-Sound, Light, Electricity, Magnetism, Modern Physics

4 units

Prerequisites: BC placement into math level 06 or successful completion of Math B1B or equivalent and PHYS B2A or equivalent with a grade of C or better.

Description: The second in a 2-course algebra/trigonometry-based general physics sequence required of many science, pre-medical, and other pre-professional and technical majors. Includes electricity and magnetism, geometrical and physical optics, quantum physics, atomic physics, nuclear physics, and relativity. Emphasizes principles, laws, and problem solving.

Hours: 54 lecture, 54 lab

C-ID: PHYS 110

Transferable: CSU, UC, and private colleges

PHYS B4A Mechanics and Wave Motion

4 units

Prerequisites: Successful completion of MATH B6A or equivalent with a grade of C or better.

Description: The first in a sequence of three semester courses required of physics, engineering, and other majors requiring a thorough physics background. Includes vectors, kinematics, dynamics, momentum, energy, rotation, gravitation, oscillations, fluids, and wave motion.

Hours: 54 lecture, 54 lab

C-ID: PHYS 205

Transferable: CSU, UC, and private colleges; IGETC 5.A; IGETC 5.C; CSU GE B.1; CSU GE B.3; BC GE B.1

PHYS B4B Heat, Electricity, Magnetism

4 units

Prerequisites: PHYS B4A and MATH B6B with grades of 'C' or better.

Recommended: Successful completion of MATH B6C with a grade of 'C' or better.

Description: Second of a three-course calculus-based physics sequence required of physics, engineering, and other majors requiring a thorough physics background. Includes thermodynamics, electricity, magnetism, AC circuits, electromagnetic oscillations, and electromagnetic radiation. Emphasizes principles, laws and problem-solving.

Hours: 54 lecture, 54 lab

C-ID: PHYS 210

Transferable: CSU, UC, and private colleges

PHYS B4c Optics and Modern Physics

4 units

Prerequisites: Successful completion of PHYS B4B or equivalent and MATH B6B or equivalent with grades of C or better.

Description: Third of a three-course calculus-based physics sequence required of physics, engineering, and other majors requiring a thorough physics background. Includes geometric and physical optics, relativity, quantum physics, quantum mechanics, atomic and molecular physics, and nuclear physics. Emphasizes principles, laws, and problem solving.

Hours: 54 lecture, 54 lab

C-ID: PHYS 215

Transferable: CSU, UC, and private colleges