

PHYSICS (PHY)

PHY 1120 – Physics I

Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00

Introduces applied mechanical physics, which includes: Vector forces, moments, constant acceleration trajectories, friction, concepts of simple machines, rotary motion, work, power, energy, torque, simple harmonic motion, waves & sound, solid & fluid properties, heat & thermodynamics and kinetic theory of gases. Algebra-based.

Offered: Fall

Transfer: TAG, TM

Prerequisites: MTH 0937

Corequisites: MTH-1210 or MTH 1370.

PHY 1130 – Physics II

Credit Hours: 4.00 Total Contact Hours: 5.00 Lecture Hours: 3.00 Lab Hours: 2.00

Introduces applied mechanical physics, which includes: Electric field potential and forces, current and magnetic field integration over continuous charge/current distribution, quantum physics, atomic physics, nuclear physics, induction and inductance, resistance-capacitance and basic circuit analysis, EMF and electric power, electromagnetic waves, Kirchoff's Law, RLC circuits, Faraday's Law, conductivity, geometric optics, diffractions, interference, polarization.

Offered: Spring

Transfer: TAG, TM

Prerequisites: MTH-0904, MTH 0953 with a grade of 'C' or better

Corequisites: MTH-1210 or MTH 1370.

PHY 1220 – Physics I - Calculus Based

Credit Hours: 5.00 Total Contact Hours: 6.00 Lecture Hours: 4.00 Lab Hours: 2.00

Introduces calculus-based classical physics: Newton's laws, fluids, thermodynamics, waves; for students in physical sciences, mathematics, and engineering.

Offered: Fall

Corequisites: MTH 1711.

PHY 1230 – Physics II - Calculus Based

Credit Hours: 5.00 Total Contact Hours: 6.00 Lecture Hours: 4.00 Lab Hours: 2.00

Introduces classical physics as calculus based: Newton's laws, fluids, thermodynamics, waves; for students in physical sciences, mathematics, and engineering.

Offered: Spring

Prerequisites: PHY 1220 (with a 'D' or better).