

PHYSICS ELECTIVES

Course Descriptions

PHY 105 General Physics I

Vectors, elementary mechanics of point particles and rigid bodies, and gravitation will be the topics that are explored in this course. The course is comprised of four hours of lecture and two hours of lab each week.

Prerequisite(s): none Corequisite(s): PYL 105 and MTH 120

PHY 106 General Physics II

Simple harmonic motion and waves, elementary optics, electromagnetism, and DC circuits are topics of emphasis in this course. The course is comprised of four hours of lecture and two hours of lab each week. Prerequisite(s): PHY 105 Corequisite(s): PYL 106

PHY 170 Special Topics

PHY 201 Computer Electronics

This course addresses the binary representation of numbers including various types (integer, unsigned and floats) with an emphasis on the finiteness of that representation (range, overflow, etc.) Basic logic gates and their use in the realization of any truth tables (combinatorial logic). Simplification procedures, such as Karnaugh maps. Flip-flops, registers and memory (sequential logic). Specific components such as adders, comparators, multiplexors, counters, buses, etc. Introduction to design and architecture. Prerequisite(s): Departmental Permission

PHY 205 Essentials of Physics for Health Sciences

This course is a brief introduction to fundamental physics concepts necessary for understanding physical processes in human body systems. Topics include forces, motion, energy, waves, electrical circuits, and fluids as they pertain to the human body. The course consists of two hours of lecture and two hours of lab each week.

PHY 270 Special Topics