PHYSICS (PH)

PH 2210 Physics I (3)
Introduction to classical physics. Topics include: kinematics, dynamics. Emphasis on application of theory and problem-solving. Falls.
Corequisite(s): PH 2430 Physics I Lab.

PH 2220 Physics II (3)
Introduction to classical physics. Topics include: fluids, thermodynamics, waves, electricity, magnetism. Emphasis on application of theory and problem-solving. Springs.
Corequisite(s): PH 2440 Physics II Lab.

PH 2410 University Physics I (3)
A traditional calculus-based introductory survey of general physics. Intended primarily for majors in the physical sciences and mathematics. Emphasis on the mathematical development of the subject and on the acquisition of problem-solving skills. Topics include: mechanics, rotational motion, gravitation, fluids, and simple harmonic motion. Falls.
Prerequisite(s): MA 2550 (may be concurrent) or MA 2490 (may be concurrent).
Corequisite(s): PH 2430 Physics I Lab

PH 2420 University Physics II (3)
Second semester of calculus-based general physics survey. Topics include: wave motion, acoustics, thermodynamics, electricity, and magnetism. Springs.
Prerequisite(s): PH 2410.
Corequisite(s): PH 2440 Physics II Lab.

PH 2430 Physics Laboratory I (1)
Laboratory techniques and experience are designed to enable students to do experiments at an introductory level. Concepts presented in PH 2210 and PH 2410 are used and illustrated. Additional course fee required.

PH 2440 Physics Laboratory II (1)
Laboratory techniques and experience are designed to enable students to do experiments at an introductory level. Concepts presented in PH 2220 and PH 2420 are used and illustrated. Additional course fee required.

PH 3520 Modern Physics (4)
Survey of modern physics including: historical development of theories of the nature of matter and radiation, relativity, atomic and nuclear structure, quantum mechanics and particles. Emphasis on the application of theory and problem-solving. Falls.
Prerequisite(s): PH 2420 and MA 2560.

PH 3900 Special Topics in Physics (1-4)
Students can pursue subjects of interest in Physics, augmenting the material covered in the introductory courses. Credit varies with amount of material covered. The course must be set up with the instructor before registration.
Prerequisite(s): (PH 2130 and PH 2140) or (PH 2410 and PH 2420).

PH 4910 Independent Study (1-4)
Ordinarily for natural science majors. Studies undertaken are defined by the students concerned, subject to approval by appropriate staff members. Work may involve reading, conferences, historical, experimental or theoretical projects, field investigations, statistical surveys or combinations of the foregoing. Consent required of the instructor who will supervise the independent study and the Department Chair.