PHYSICS (PHYS)

PHYS 201 - INTRODUCTION TO NON-CALCULUS BASED PHYSICS I
Empirical analysis of experimental data; kinematics and dynamics of a particle; energy, linear momentum, and gravitation. Lecture and Lab course.
Credits: 1,3
Attributes: Lab Course, Natural Science
Prerequisites: MATH 122 or MATH 231 (may be taken concurrently)
Course Notes: Must take PHYS 201 lab concurrently.

PHYS 202 - INTRO TO NON-CALCULUS PHYSICS II
Static and dynamic electricity; electric and magnetic fields; electromagnetic radiation. Lectures and laboratory. Lecture and Lab course.
Credits: 1,3
Attributes: Lab Course, Natural Science
Prerequisites: MATH 122 or MATH 231 and PHYS 201

PHYS 233 - CALCULUS-BASED PHYSICS I DISCUSSION
Calculus-based derivations and applications for the physics I topics of mechanics and thermodynamics.
Credits: 1
Attributes: Natural Science
Prerequisites: MATH 231 (may be taken concurrently)

PHYS 234 - CALCULUS-BASED PHYSICS II DISCUSSION
Calculus derivations and applications of physics principles related to electromagnetism and light.
Credits: 1
Attributes: Natural Science
Prerequisites: MATH 232 (may be taken concurrently) and PHYS 233
Course Notes: Must also register for PHYS 202 lecture.

PHYS 327 - PHYSICS OF THE HUMAN BODY I
Physical aspects of the structure and function of the human body, including the physics of heat loss, forces, pressure, and fluid dynamics, as applied to various body systems, with a focus on muscles, lungs, and the cardiovascular system.
Credits: 3
Attributes: Natural Science
Prerequisites: (PHYS 201) and (BIOL 201) or (BIOL 123 and BIOL 124)
Course Notes: Cross-listed with BIOL 327

PHYS 392 - RESEARCH IN PHYSICS
Independent science laboratory research experience under the guidance of a faculty researcher; 1 to 4 semester hours total may be applied toward the BS degree. Students may register in consecutive semesters.
Credits: 1-4
Attributes: Natural Science
Course Notes: Consent of instructor. $100 per semester hour. Students must arrange for independent laboratory research, experience with a science faculty member, prior to registration.

PHYS 395 - INDEPENDENT STUDY
Independent library research culminating in a formal review paper on a topic approved by the instructor.
Credits: 1-2
Attributes: Natural Science
Prerequisites: PHYS 201 (may be taken concurrently)
Course Notes: Consent of instructor. Students must arrange for a library independent study, with an instructor prior to registration; may register for only 1 SH per semester, up to two semesters.