PHYSICS (PHYS)

PHYS 100 - INTRODUCTION TO ASTRONOMY
An introduction to the study of the night sky for amateur pursuit or as preparation for further study in astrophysics. Topics to be covered include scale and origins of the universe, motions of the heavens, the solar system, the life of stars, galaxies and large scale structure of the universe.
Credits: 3
Attributes: Natural Science
Prerequisites: MATH 096
Course Notes: No credit for science majors., MATH 096 or higher math placement pre-requisite.

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.
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.
Credits: 1,3
Attributes: Lab Course, Natural Science
Prerequisites: MATH 122 or MATH 231 and PHYS 201

PHYS 210 - PHYSICS OF THE HUMAN BODY
Physical aspects of the structure and function of the human body, including the physics of heat loss, forces, pressure, fluid dynamics, acoustics, electricity, and optics as applied to various body systems. The physics of surgical implants will also be discussed.
Credits: 3
Attributes: Natural Science
Prerequisites: MATH 122 and PHYS 201 or PHYS 202

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 237 - 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 390 - SPECIAL TOPICS
Credits: 1-3

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: 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.