**PHYSICS (PHY)**

**PHY 101. Introduction To Physical Science. 4 Credits.**
This course will provide the non-science major with a basic background in physics and chemistry that affects everyone's life. Fundamental concepts of force, motion, energy, and chemistry are covered. Laboratory work complements the classroom presentation. Prerequisites: ENG 098, FYE 101, MAT 092, RDG 098, or placement.

**PHY 105. College Physics I. 4 Credits.**
This course is designed to give students an appreciation of the progress that has been made in understanding the basic nature of the universe. Topics considered include vectors, statics, force and motion, kinematics in one and two dimensions, dynamics, work and energy, impulse and momentum, and conservation of energy. Lab work is correlated with class discussions. Prerequisites: ENG 098, FYE 101, MAT 162 (or corequisite), RDG 098, or placement.

**PHY 106. College Physics II. 4 Credits.**
This course is a continuation of PHY 105. Topics to be covered include rotation, elasticity, fluid mechanics, temperature and heat transfer, electricity and electric circuits, waves and acoustic phenomena. Lab work is correlated with class discussions. Prerequisite: PHY 105. Spring.

**PHY 120. Physics for Engineering and Science I. 4 Credits.**
A calculus based course in the concepts and principles of mechanics, and fluids. This course is intended to serve students who plan to major in science or engineering at the four year college level. Laboratory work is correlated to the class presentation. Prerequisite: ENG 101, MAT 211 (or co-requisites).

**PHY 121. Physics for Engineering and Science II. 4 Credits.**
This course is designed to provide the student with a clear and logical presentation of the basic concepts and principles of physics, to strengthen an understanding of the concepts and principles through a broad range of interesting real-world applications, and to develop strong problem solving skills through an effectively organized approach. Topics considered include the principles of simple harmonic motion, wave motion, sound, geometric optics, wave nature of light, charge, coulomb force, electric field and flux, Gauss' law, electric potential, voltage, resistance, current, DC circuits, Kirchoff's Laws, capacitance, RC time constant, magnetic field and flux, Faraday's Law, Lens' Law, Ampere's Law, Electromagnetic induction, electromagnetic waves, and Maxwell's equations. This course is intended to serve students who plan to major in science or engineering at the four year college level. Laboratory work is correlated to the classroom presentations. Prerequisite: MAT 212 (or corequisite), PHY 120. Spring.