

# PHYSICS (PHYS)

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## **PHYS 1010 – Elementary Physics** **3 credit hours**

Lecture Hours: 3; Lab Hours: 0 Introductory physics focuses on fundamental problem-solving strategies, motion in one and two dimensions, mechanical and gravitational energies, and the conservation of energy and momentum. Students without high school physics may use this course to prepare for PHYS 1100.

**Pre-requisite(s):** MATH 1150

**Schedule type:** Lecture, Web

## **PHYS 1070 – Elementary Physics Lab** **1 credit hour**

Lecture Hours: 0; Lab Hours: 1 This accompanying laboratory involves experiments that emphasize scientific method, data collection, and basic calculations as applied to basic physics.

**Co-requisite(s):** PHYS 1010

**Schedule type:** Laboratory, Web

## **PHYS 1100 – General Physics I** **3 credit hours**

Lecture Hours: 3; Lab Hours: 0 This course introduces the science student to Vectors, Kinematics, Work, Newton's Laws, Gas Laws, Impulse and Momentum, thermodynamics, and fluid mechanics.

**Pre-requisite(s):** PHYS 1010

**Co-requisite(s):** MATH 1400

**Schedule type:** Independent Study, Lecture, Web

## **PHYS 1110 – General Physics I Laboratory** **1 credit hour**

Lecture Hours: 0; Lab Hours: 0 This accompanying laboratory applies the principles of Newton's Laws, Impulse and Momentum, Gas laws, Fluid and thermodynamics.

**Pre-requisite(s):** PHYS 1010

**Co-requisite(s):** PHYS 1100

**Schedule type:** Independent Study, Laboratory, Web

## **PHYS 1200 – General Physics II** **3 credit hours**

Lecture Hours: 3; Lab Hours: 0 This course introduces the science student to the theories of Simple Harmonic motion, Light and Sound Waves, Electricity, and Magnetism.

**Pre-requisite(s):** PHYS 1100

**Schedule type:** Independent Study, Lecture, Web

## **PHYS 1210 – General Physics II Laboratory** **1 credit hour**

Lecture Hours: 0; Lab Hours: 1 This accompanying laboratory applies the principles of Simple Harmonic Motion, Light Diffraction, Electricity, and Magnetism.

**Co-requisite(s):** PHYS 1200

**Schedule type:** Independent Study, Laboratory

## **PHYS 1500 – Physics of Music** **3 credit hours**

Lecture Hours: 3; Lab Hours: 0 This course introduces History and development of the science of sound and music, physical concepts necessary for the study of wave motion, mechanics of the construction of sound and musical tones, and basic physical principles involved in the production of sound in instruments and the human voice, including studies of the production of language. A good understanding of the composition of sounds and musical tones is obtained without detailed mathematics through experiments carried out in the home or other locations using the student's instrument of study.

**Schedule type:** Independent Study, Lecture