

# PHYSICS (PHY)

## PHY 1075 | Special Topics

Provides students with a vehicle to pursue in depth exploration of special topics of interest.

*Note: Special topics courses range from 0-12 credits and vary in learning type. Please see your program chair for more information about your options.*

## PHY 1105 | Conceptual Physics with Lab: GT-SC1

Lecture Credit: 3 Lab Credit: 1

Focuses on mechanics, heat, properties of matter, electricity and magnetism, light and modern physics. Incorporates laboratory experience. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1

**Prerequisite:** College Readiness in English and Quantitative Literacy Math

## PHY 1111 | Physics Algebra-Based I with Lab: GT-SC1

Lecture Credit: 4 Lab Credit: 1

Explores the physical world through reasoning, mathematics and experimentation. Examines kinematics, force, circular motion, energy, momentum, torque, rotational dynamics, simple harmonic motion, temperature, heat and thermodynamics. The concepts and theories presented are explored through demonstrations and hands-on experiments. It is a general physics course that is recommended for all of the health sciences and all other interested students. Students entering engineering or one of the advanced sciences should register for PHY 2111. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1

**Prerequisite:** MAT 1340 with a grade of C or better

## PHY 1112 | Physics Algebra-Based II with Lab: GT-SC1

Lecture Credit: 4 Lab Credit: 1

Expands upon PHY 1111 and explores sound waves, electric fields, electric circuits, magnetic fields, light, optics, and modern physics. Explores the concepts and theories presented in class through demonstrations and hands-on experiments. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1

**Prerequisite:** PHY 1111 with a grade of C or better

## PHY 2111 | Physics Calculus Based I with Lab: GT-SC1

Lecture Credit: 4 Lab Credit: 1

Explores the physical world through reasoning, mathematics and experimentation. Covers kinematics, force, gravity, energy, momentum, torque, rotational dynamics, and fluids, and may include thermodynamics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This first semester calculus-based physics course is recommended for students entering engineering or one of the advanced sciences. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1

**Prerequisite:** MAT 2410 with a grade of C or better

## PHY 2112 | Physics Calculus-Based II with Lab: GT-SC1

Lecture Credit: 4 Lab Credit: 1

Expands upon PHY 2111 and examines waves, electric fields, electric circuits, magnetic fields, light and optics, and modern physics. The concepts and theories presented in class are explored through demonstrations and hands-on experiments. This course is one of the Statewide Guaranteed Transfer courses. GT-SC1

**Prerequisite:** PHY 2111 with a grade of C or better

## PHY 2113 | Physics III: Calculus Based Modern Physics

Lecture Credit: 3

Expands upon PHY 2112 and explores twentieth century advances in physics. Topics may include special and general relativity, quantum theory, atomic physics, solid state physics, nuclear physics, semiconductor physics and cosmology.

**Prerequisite:** PHY 2112 with a grade of C or better