

# Physics

## PHYS 102

### Physics of Everyday Experience [M/S] • 5.0 Credits

Designed for non-science majors, this course is a practical introduction to physics and science in everyday life. Lecture demonstrations are used to illustrate physics that we experience in everyday life such as motion, sports, energy and power, gravity and planetary motion, fluids, pressure, aerodynamics, waves, sounds and music, musical instruments, temperature and heat, engines, electricity, lightning, house hold electric circuits, magnets, electric generators, light and colors, images, laser, nuclear energy, radioactivity, and medical imaging technology. This is a lecture only class with no associated lab. \$25 science fee. **Prerequisite: A grade of 2.0 or better in MATH 40, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

## PHYS& 110

### Physics for Non-Science Majors W/ Lab [M/S] • 5.0 Credits

Formerly PHY 100, PHYS& 100, PHYS& 101, PHYS& 110  
Introduces the principles and concepts of physics using elementary algebraic procedures. Selected topics from classical and modern physics. Primarily for the non-science major. \$25 science fee. **Prerequisite: A grade of 2.0 or better in MATH 50, 60, or 62, or a grade of 0.7 or better in a higher math class, or appropriate placement.**

## PHYS& 114

### General Physics I W/ Lab [M/S] • 5.0 Credits

Formerly PHY 105, PHYS& 114, PHYS& 121, PHYS& 124, PHYS& 131, PHYS& 134  
This course is designed for those students that are not majoring in a four-year engineering or physical science degree. Topics include measurement and units, vectors, motion in one and two dimensions, Newton's laws, work and energy, momentum and collisions, circular motion, gravity, and rotational motion. \$25 science fee. **Prerequisite: Completion of one of the following math courses with a grade of 2.0 or better: MATH 113, MATH& 142, MATH& 152, or MATH& 153.**

## PHYS& 115

### General Physics II W/ Lab [M/S] • 5.0 Credits

Formerly PHY 106, PHYS& 115, PHYS& 122, PHYS& 125, PHYS& 132, PHYS& 135  
Solids and fluids, thermal physics, laws of thermodynamics, electric forces and fields, electrical energy, DC circuits, magnetic forces and fields, electromagnetic induction, and AC circuits. \$25 science fee. **Prerequisite: Completion of PHYS& 114 with a 2.0 or better.**

## PHYS& 116

### General Physics III W/ Lab [M/S] • 5.0 Credits

Formerly PHY 107, PHYS& 116, PHYS& 123, PHYS& 126, PHYS& 133, PHYS& 136  
Oscillations and waves, electromagnetic waves, geometric optics, physical optics, optical instrument, quantum physics, atomic physics, and nuclear physics. \$25 science fee. **Prerequisite: Completion of PHYS& 115 with a 2.0 or better.**

## PHYS 199

### Special Studies • 1.0–5.0 Credits

A class used to explore new coursework. \$25 science fee.

## PHYS& 221

### Engineering Physics I W/ Lab [M/S] • 5.0 Credits

Formerly PHY 201, PHYS& 221, PHYS& 231, PHYS& 241  
The first quarter of a three-quarter sequence in calculus-based physics for science and engineering students. The course covers topics in mechanics, including kinematics of motion, force, work, energy, momentum, and

kinematics and kinetics of rotation. \$25 science fee. **Prerequisite: A grade of 2.0 or better in MATH& 151, or a grade of 0.7 or better in a higher math class.**

## PHYS& 222

### Engineering Physics II W/ Lab [M/S] • 5.0 Credits

Formerly PHY 202, PHYS& 222, PHYS& 232, PHYS& 242  
The second quarter of a three-quarter sequence in calculus-based physics for science and engineering students dealing with the topics of Gravity, Fluids, and Electromagnetism. \$25 science fee. **Prerequisite: Completion of MATH& 152 with a 2.0 or better, or a higher math class with a 0.7 or better, and PHYS& 221 with a 2.0 or better.**

## PHYS& 223

### Engineering Physics III W/ Lab [M/S] • 5.0 Credits

Formerly PHY 203, PHYS& 223, PHYS& 233, PHYS& 243  
The third quarter of a three-quarter sequence in calculus-based physics for science and engineering students dealing with the topics of Oscillations and Waves, Thermodynamics, Electromagnetic Waves, Light, and Optics. \$25 science fee. **Prerequisite: Completion of PHYS& 222 with a 2.0 or better.**

## PHYS 299

### Special Studies • 1.0–15.0 Credits

A class used to explore new coursework. \$25 science fee.