

## COURSES

### PDF PHYSICS

#### **PHYS180L      Physics for Scientists and Engineers Lab I      1 Credit**

Prerequisites: MATH181 ; Corequisites: PHYS180  
Explores vectors, rectilinear motion, particle dynamics, work and energy, momentum, rotational mechanics, oscillations, gravitation, fluids, wave properties and sound. Students must co-enroll in both lecture and lab to receive credit.

#### **PHYS181L      Physics for Science and Engineers Lab II      1 Credit**

Prerequisites: MATH182 & PHYS180 ; Corequisites: PHYS181  
Explores electric fields, potential, current, dielectrics, circuits, magnetic fields, electromagnetic oscillations, thermodynamics and kinetic theory of gases. Students must co-enroll in both lecture and lab to receive credit.

#### **PHYS182L      Physics for Scientists and Engineers Lab III      1 Credit**

Prerequisites: MATH182 & PHYS181; Corequisites: PHYS182  
Explores light, optical systems, relativity, wave aspects of particles, quantum mechanics, statistical mechanics, semiconductors, radioactivity, nuclear physics and particles. Students must co-enroll in both lecture and lab to receive credit.

#### **PHYS100      Introductory Physics      3 Credits**

Prerequisites: MATH120, MATH126 or higher  
Introduces students to a broad range of concepts in physics from basic classical mechanics to modern physics. Students will conduct at least four experiments with many demonstrations performed throughout the course.

#### **PHYS151      General Physics I      4 Credits**

Prerequisites: MATH126 & MATH127, MATH128 or equivalent  
Provides a course in physics for students in arts and science, medicine and dentistry, and agriculture. Emphasis is on mechanics, heat, and sound.

#### **PHYS152      General Physics II      4 Credits**

Prerequisites: PHYS151  
Emphasizes light, electricity, magnetism and nuclear physics.

#### **PHYS180      Physics for Scientists and Engineers I      3 Credits**

Prerequisite: MATH 181. Corequisite: PHYS 180L.  
Explores vectors, rectilinear motion, particle dynamics, work and energy, momentum, rotational mechanics, oscillations, gravitation, fluids, wave properties and sound. Students must co-enroll in both lecture and lab to receive credit.

#### **PHYS181      Physics for Scientists and Engineers II      3 Credits**

Prerequisites: MATH 182 AND PHYS 180. Corequisite: PHYS 181L.  
Explores electric fields, potential, current, dielectrics, circuits, magnetic fields, electromagnetic oscillations, thermodynamics and kinetic theory of gases. Students must co-enroll in both lecture and lab to receive credit.

#### **PHYS182      Physics for Scientists and Engineers III      3 Credits**

Prerequisite: PHYS 181. Corequisite: PHYS 182L.  
Explores light, optical systems,

relativity, wave aspects of particles, quantum mechanics, statistical mechanics, semiconductors, radioactivity, nuclear physics and particles. Students must co-enroll in both lecture and lab to receive credit.

#### **PHYS293      Directed Study      1 Credit**

Prerequisites: PHYS151 or PHYS180  
Provides individual study conducted under the direction of a faculty member. May be repeated for up to six credits.