# **PHYSICS (PH)**

### PH-121 Astronomy

#### 4 credits, Fall/Winter/Spring

A lab course including the history of astronomy, the Earth and moon, all planets in our solar system, along with asteroids, meteors and comets. Prerequisites: MTH-065 or MTH-098 with a C or better or placement in MTH-095

Prerequisites: WRD-090 or placement in WRD-098 Corequisites: PH-121L

# PH-122 General Astronomy

4 credits, Fall/Winter/Spring A lab course including the properties of our sun, other stars and stellar evolution. Prerequisites: PH-121 or GS-107 Corequisites: PH-122L

#### PH-123 General Astronomy

4 credits, Spring A lab course including star clusters, the properties of our own galaxy, the other galaxies and cosmology. Prerequisites: PH-122 Corequisites: PH-123L

## PH-150 Preparatory Physics

3 credits, Spring

This course is intended for students who have not completed high-school physics, but are intending to take either PH-201 or PH-211. Students will develop reasoning skills, and learn problem-solving strategies, measurement units, graph interpretation, and basic physics definitions needed for their General Physics courses.

Prerequisite or Corequisite: MTH-112Z or placement in MTH-251Z

## PH-201 General Physics

5 credits, Fall

A lab course covering vectors, motion, kinematics, forces and Newton's laws, gravity, the conservation laws for momentum and energy, rotational motion, and oscillations.

Prerequisites: WRD-090 with a C or better or placement in WRD-098 Prerequisites: MTH-112Z or placement in MTH-251Z Recommended Prerequisites: A year of high-school physics or PH-150 Corequisites: PH-201L and PH-201S

#### PH-202 General Physics

5 credits, Winter A lab course covering electricity, magnetism, DC and AC circuits, and electromagnetic radiation. Prerequisites: PH-201 Corequisites: PH-202L and PH-202S

PH-203 General Physics 5 credits, Spring A lab course covering thermodynamics, fluids, waves, geometrical optics, wave optics, and modern physics. Prerequisites: PH-202 Corequisites: PH-203L and PH-203S

## PH-211 General Physics With Calculus

#### 5 credits, Fall

A lab course covering vectors, motion, kinematics, forces and Newton's laws, gravity, conservation laws for momentum and energy, rotational motion, and oscillations.

Prerequisite or Corequisite: MTH-252Z

Prerequisite or Corequisite: WRD-090 with a C or better or placement in WRD-098

Recommended Prerequisites: MTH-254. A year of high-school physics or PH-150 Corequisites: PH-211L and PH-211S

PH-212 General Physics With Calculus
5 credits, Winter
A lab course covering electricity, magnetism, DC and AC circuits, and electromagnetic radiation.
Prerequisites: MTH-252Z and PH-211
Recommended Prerequisites: MTH-254
Corequisites: PH-212L and PH-212S

PH-213 General Physics With Calculus

5 credits, Spring

A lab course covering thermodynamics, fluids, waves, geometrical optics, wave optics, and modern physics. Prerequisites: PH-212

Corequisites: PH-213L and PH-213S