# **PHYSICAL SCIENCE (PHS)**

#### PHS 10

## INTRODUCTION TO THE PHYSICAL SCIENCES 3 UNITS

**Grade Only** 

Recommended Preparation: Elementary algebra proficiency, as determined through the Southwestern College Multiple Measures Process; RDG 158 or equivalent or through the Southwestern College multiple measures placement processes.

Lecture 3 hours Offered: FALL, SPRING

Introduces basic physics and chemistry with emphasis on the understanding and significance of accepted fundamental principles. Explores contemporary issues such as energy production versus environmental problems as well as the methods, limitations, and societal implications of scientific advancement. [D; CSU; UC]

#### **PHS 101L**

### INTRODUCTION TO PHYSICAL SCIENCE LABORATORY 1 UNIT

Pass/No Pass or Grade is Allowed

Corequisite: PHS 101 (may be taken previously).

Laboratory 3 hours

Offered: ALL

Introduces basic physics and chemistry with an emphasis on the understanding and significance of accepted fundamental principles. Provides laboratory exercises to solidify concepts learned in the Introduction to Physical Sciences lecture course. [D; CSU; UC]

### **PHS 110**

# INTRODUCTION TO OCEANOGRAPHY 3 UNITS

Grade Only

Recommended Preparation: RDG 158 or equivalent or through the Southwestern College multiple measures placement processes.

Lecture 3 hours Offered: FALL. SPRING

Introduces the physical, chemical, biological, and geological foundations of the global ocean system. [D; CSU; UC] (Same as: GEOL 110; GEOG 110)

### **PHS 111**

#### **OCEANOGRAPHY LABORATORY**

1 UNIT

**Grade Only** 

Corequisite: PHS 110, GEOG 110, or GEOL 110 (may be taken previously).

Laboratory 3 hours

Offered: ALL

Provides a laboratory setting for students to become familiar with the physical, chemical, biological, and geological foundations of the oceanic environment. [D; CSU; UC]

### PHS 154 INTRODUCTION TO REMOTE SENSING

#### 3 UNITS

Pass/No Pass or Grade is Allowed

Recommended Preparation: Intermediate algebra proficiency, as determined through the Southwestern College Multiple Measures Process; RDG 158 or equivalent or through the Southwestern College multiple measures placement processes.

Lecture 3 hours Offered: FALL

Introduces fundamental concepts of electromagnetic radiation and its interactions with various media. Explores commonly used sensors and techniques of remote sensing. [D] (Same as: GEOG 154)

#### **PHS 155**

### INTRODUCTION TO IMAGE ANALYSIS

3 UNITS

Pass/No Pass or Grade is Allowed

Lecture 3 hours Offered: SPRING

Introduces principal concepts related to processing, analysis, enhancement, correction, and interpretation of images. Includes photogrammetry, information extraction, and scientific visualization. [D] (Same as: GEOG 155)

#### PHS 299

#### INDEPENDENT STUDY

#### 1-3 UNITS

Pass/No Pass or Grade is Allowed

Limitation on Enrollment: Eligibility for independent study.

Lecture 3 hours Offered: ALL

Individual study or research in some area of physical science of particular interest to the student and not included in regular courses of the college. [D; CSU]