

## **GENERAL SCIENCE**

### **GSCI 101. ASTRONOMY I (4)**

An introductory survey course in astronomy covering aspects of observational astronomy and the solar system. Historical developments, discoveries, and advances also will be discussed, compared, and contrasted. Three one-hour lectures and one two-hour lab per week.

### **GSCI 102. ASTRONOMY II (4)**

This course will cover aspects of astronomy such as stellar formation and evolution, galaxies, and cosmology. Recent discoveries with fundamental implications for modern astronomy also will be explored. Three one-hour lectures and one two-hour lab per week.

### **GSCI 103. GENERAL PHYSICAL SCIENCE (4)**

A survey course designed to explore the major physical phenomena in the natural sciences, encompassing a study of motion, energy, electromagnetism, waves (light and sound), and atomic and nuclear physics. The course will meet in three one-hour lectures and one two-hour laboratory session.

### **GSCI 104. GENERAL PHYSICAL SCIENCE (4)**

A survey course in physical science encompassing astronomy, meteorology, and geology. The principles and applications presented are characteristic of introductory courses in those separate areas. Scientific approaches to problem-solving and the interdependency of the areas of science are emphasized. This course will meet in three one-hour lectures and one two-hour laboratory session.

### **GSCI 300. HISTORY OF SCIENCE (3)**

A general survey of the progress of science from earliest times to the present. The main scientific discoveries and theories are considered in their historical perspective.

### **GSCI 301. PHYSICAL GEOLOGY (4)**

A combined course in physical and historical geology dealing with the composition, structure and history of planet Earth. Minerals, rocks, tectonic processes, and physical characteristics of the earth's surface will be emphasized in the physical component. Evolution, fossils, and the changing conditions and organisms throughout geologic time constitute the historical component. Three hours lecture and two hours lab per week.

### **GSCI 302. GENERAL ASTRONOMY (4)**

A descriptive course dealing with the physical nature of the planets and stars as seen through modern astronomy. The history of astronomical observation and development of modern principles along with properties of electromagnetic radiation and gravitation are included in the course. Three hours lecture and two hours lab per week.

### **GSCI 303. METEOROLOGY (4)**

A course dealing with the composition and structure of the atmosphere, the energy which drives it, and the physical processes involved in weather phenomena. The gathering and analysis of pertinent data are emphasized. Weather forecasting and climatology are also considered. Three hours lecture and two hours lab per week.

### **GSCI 306. INTRODUCTION TO OCEANOGRAPHY (3)**

A survey of oceanography at an introductory level, involving the properties of sea water and its movement; the chemistry, physics, and biology of the ocean; bathymetric features and submarine geology; and oceanographic instruments and methods of collecting data.

### **GSCI 307. OCEANOGRAPHY LAB (1)**

Assessing the current health and potential resources of marine environments requires knowledge of basic chemistry, physics, and biology. Oceanography laboratory includes exercises of these components as they pertain to marine systems. The laboratory will include a field trip to the Atlantic shore. Prerequisites: BIOL 101 and 102 or BIOL 208 and 209 or equivalent; ENVS 201 and 202.

**GSCI 312. HISTORICAL GEOLOGY (4)**

A course dealing with the history of planet earth focusing on the interplay between plate tectonics and life. Plate boundary positions throughout geologic time will be covered as will life on the planet over the last 3.7 billion years. Evolution, fossils, and the changing conditions and organisms throughout geologic time will be emphasized. Three hours lecture and two hours lab per week.

**GSCI 320. SPECIAL STUDIES IN GENERAL SCIENCE (1-3)**

The study of special topics in general science of special interest to students and faculty, including those topics which may be the subjects of selected television series or other media presentations.

**GSCI 350. NATURAL SCIENCE INTERPRETATION (3)**

A study of the general principles of science interpretation for the lay public. Individual preparation of programs in various formats, e.g. nature walk, fireside talk, museum presentation is expected. Extensive use is made of interpretive centers in the region.