

# GENERAL SCIENCE (GSC)

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## **GSC 110 CONTEMPORARY PHYSICAL SCIENCES 4 Credit**

Course uses the scientific method to understand and make decisions involving the realms of science, including topics and applications from astronomy, geology, chemistry, physics, oceanography, paleontology, meteorology, the biological sciences, forensic sciences, and the history of science. Students will develop proficiency in applying logical and analytical methods in designing experiments (including replicating some of the great experiments of history), manipulating data, analyzing results, and drawing valid conclusions. Communication of results and conclusions will be stressed in both oral and written form. Expected to be offered: Fall semesters Distance Learning: Spring semester, Odd years

**Grade Mode: Standard Letter, Audit, Pass/Fail, Transfer**

**Course Attributes: Fulfills ELA Exper. Science**

**Course Offerings: Hybrid, Lecture, Web Based**

**Equivalencies: GSC 110ES**

## **GSC 121 EARTH AND SPACE SCIENCE 4 Credit**

Detailed overview in depth of the earth as part of the solar system, and the other bodies that make up the solar system. First half stresses forces working on the earth and planets, including plate tectonics, weathering forces, and the development and change of atmospheres and/or oceans. Comparative planetology stresses geophysics of forces forming a planetary body, and ones resulting in the formation of moons and smaller planetoids. All elements of the solar system will be identified, including smaller objects like comets and meteoroids. Particular emphasis will be on the origin of the sun and planets, with the evolution of ideas over time being highlighted. Planetary systems around other stars will also be investigated. Laboratories will be integrated into course work.

**Grade Mode: Standard Letter, Audit, Pass/Fail, Transfer**

**Course Offerings: Hybrid, Lecture, Web Based**

## **GSC 215 HISTORY OF SCIENCE 4 Credit**

Detailed and comprehensive overview of the realms of science, including physical, biological, and geological sciences. The course will focus on the concepts in science and technology that have shaped human cultures over time, including both personal and social perspectives. Stresses history of each discipline, including the unifying ideas and the processes that scientists use in the discovery of new knowledge and to express ideas in the form of developing technologies. Laboratories will be integrated into course work as appropriate.

**Grade Mode: Standard Letter**

**Course Offerings: Hybrid, Lecture, Web Based**

**Equivalencies: GSC 158**

## **GSC 230 METEOROLOGY & OCEANOGRAPHY 3 Credit**

This will be a detailed investigation into the fluid systems of planet Earth, with comparisons with those of other planets of the solar system. Focus will be on the processes and principles governing the oceans and weather/climate systems of the world, with oceanic-atmospheric interactions being stressed. Topics include water movements, undersea geology, chemical and biological formations, weather phenomena, violent weather systems, oceanic features, and climates of the past with their effects on life. Laboratories will be incorporated into the course on selected topics.

**Grade Mode: Standard Letter, Audit, Pass/Fail, Transfer**

**Course Offerings: Hybrid, Lecture, Web Based**

## **GSC 320 GEOLOGY AND PALEONTOLOGY 4 Credit**

This course will be an intensive study of the forces and processes that have formed and altered the earth through time. Special emphasis will be on sedimentary deposits, the depositional environments, and the preservation of fossils, both invertebrates and vertebrates, which illustrate how evolution has occurred, both of the planet itself and the life forms developing. Topics include dating methods, development of the geologic time column, and the processes of evolution that have impacted life on the planet over 4.5 billion years. Laboratories will be incorporated into the course work on selected topics.

**Pre-requisite: ENG 117**

**Grade Mode: Standard Letter**

**Course Offerings: Hybrid, Lecture, Web Based**

**Equivalencies: GSC 210**

## **GSC 392 SPECIAL TOPICS: 1-6 Credit**

Courses dealing with modern topics of interest in the rapidly developing sciences.

**Pre-requisite: ENG 117**

**Grade Mode: Standard Letter, Audit, Pass/Fail, Transfer**

**Course Offerings: Hybrid, Lecture, Web Based**