# **SPACE SCIENCE (SPSC)**

#### SPSC 1301 Space Exploration 3 Credits

**Department:** College of Arts and Sciences

This course is intended to provide a basic understanding of many aspects of space exploration, including discovering the physical makeup of the universe and evidence surrounding its origin, learning the discoveries made in the solar system and evidence surrounding its origin. This course in addition to lecture material will include a class project to assess teamwork skills.

 $\textbf{Grade Mode(s):} \ \textbf{Standard Letter,} \ \textbf{Registrar do not use FN,} \ \textbf{Registrar do not}$ 

use FS

#### SPSC 1401 Space Science 4 Credits

Department: College of Arts and Sciences

An introduction to the sciences behind robotic and human exploration of space with laboratory.

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not

use FS

## SPSC 3301 Microgravity 3 Credits

**Department:** College of Arts and Sciences

A study of physical, chemical, and biological phenomena under the

conditions of reduced gravity.

Prerequisite(s): PHYS 1401 or PHY 2425

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not

use FS

#### SPSC 3302 Space Transportation Systems 3 Credits

**Department:** College of Arts and Sciences

Introduction to space transportation systems and their payloads.

Prerequisite(s): PHYS 1401 or PHYS 2425

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not

use FS

#### SPSC 3303 Orbital/Celest Mechanics 3 Credits

**Department:** College of Arts and Sciences

The mechanics of the movement of bodies in space under the influence

of gravity.

Prerequisite(s): PHYS 1401 or PHYS 2425

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not

use FS

## SPSC 4301 Special Topics/Space Science 3 Credits

Department: College of Arts and Sciences

An individual library or laboratory project in conference with faculty. With permission of the department chair, student may repeat the course for credit when the area of the study is different.

May be Repeated for a maximum of 6 hours

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not

use FS

#### SPSC 4302 Space Vacuum Physics 3 Credits

**Department:** College of Arts and Sciences

The physics of vacuum as applied to phenomena in space. Introduction to production and measurement of vacuum in laboratories on Earth.

Prerequisite(s): PHYS 1402 or PHYS 2426

Grade Mode(s): Standard Letter, Registrar do not use FN, Registrar do not

use FS

# SPSC 4303 Planetary Materials 3 Credits Department: College of Arts and Sciences

A study of the chemistry and mineralogy of extraterrestrial materials including moon samples and meteorites. Introduction to the laboratory

techniques used to examine these materials.

Prerequisite(s): (CHEM 1311 and CHEM 1111) or GEOL 2471

**Grade Mode(s):** Standard Letter, Registrar do not use FN, Registrar do not

use FS