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## EARTH AND SPACE SCIENCE (BS) - ASTROPHYSICS AND PLANETARY GEOLOGY TRACK

## **Program Overview**

Earth and Space Science is an interdisciplinary field which works to advance humanity's understanding of the Earth and the wider universe. Students are provided with a solid foundation in earth systems and processes (geosphere, hydrosphere, atmosphere, and biosphere) and the impacts humans have on these systems, both past and present. Additionally, students will learn about the origins of the planets and the exploration of the solar system. All four tracks in ESS combine classroom, laboratory, and field experiences, as well as provide opportunities for mentored research projects and hands-on learning experiences.

Astrophysics is the study of planets, stars, galaxies and the universe itself. Planetary Geology is the study of planets beyond Earth, and to an extent the study of Earth as a planet. This concentration offers students a set of foundational courses in astronomy, physics, mathematics, and geology, as well as principles of astronomical observation and experimental analyses. These principles are then applied to a student's particular interests within the field of astronomy and space science. These programs provide students with the background and tools to be successful in academia, public and private research organizations, and space-related private industry.

## **Career Opportunities**

Majoring in a physical science, such as our Astrophysics and Planetary Geology degree, sets you up for a wealth of possible careers because you will become an excellent problem solver. Working for or with NASA as they move into the 2010s and beyond is only one of the many possibilities. People with similar degrees also work as writers, doctors, lawyers, and engineers.

- Physics degree holders are in the top 2 scoring groups of majors on the MCAT (2003 statistics)
- NASA expects not to have enough people to replace those who will be retiring in the next 20 years. NASA funds missions to study the Earth as well as astronomical objects.
- News outlets need science journalists, and movies often employ scientists as consultants.
- Staff for Members of Congress and patent lawyers need technical and scientific backgrounds.

Becoming an Astrophysics and Planetary Geology major will open up a world (or even a universe!) of possibilities for you after you leave Columbus.