

AST 192: Life in the Universe - Introduction to Astrobiology

Are we welcome in the universe? What are the requirements for life to exist in a long-term sustainable way on planet? This course explores these questions while exploring key concepts in the natural sciences that determine the distribution of Earth-like life, planets, and intelligent civilization in the universe. Topics such as star and planet formation, planetary geology, biological conditions for life, and sustainability are considered in a broad and introductory way to explore these questions. Prerequisite: High school science and Intermediate Algebra or equivalent. Three lecture hours and three laboratory hours per week. Instructional Support Fee applies.

Course Student Learning Outcomes

After taking this course students will be able to: 1. Utilize basic concepts in geoscience, astronomy, physics, chemistry, and life science to describe and understand the essential features of the world around them, quantitatively and qualitatively. 2. Define the characteristics that are essential to habitable environments. 3. Critically compare and contrast the potential habitability of different planets. 4. Critically assess potential changes in the Earth environment that may occur as a result of human impacts or environmental processes. **Credits:** 4

Program: Astronomy