



Center for
Education
Through
Exploration

Arizona State
University

Habitable Worlds: A General Education Science Course

Developed by faculty and staff at ASU's School of
Earth and Space Exploration

Support students in deepening their understanding of abstract concepts and making science more relevant through project-based learning. Guide them through the formation of stars, planets, and life itself as they explore the profound question: *Are we alone in the universe?*

Course Structure

Habitable Worlds engages students in the search for habitable exoplanets by framing their exploration around the question, "Are we alone?" Developed with NASA Astrobiology, this project-based course uses the Drake Equation as a guiding lens, helping students investigate the origins and characteristics of stars and planets, the requirements for life, and the sustainability of civilizations. Through interactive, hands-on quests, students apply scientific techniques to their own virtual search for inhabited worlds, gaining a deeper understanding of the universe and our place within it – all for just \$40 per student.

Core Components

-  Project-based Course
-  Virtual Field Trips
-  Designed as a General Science Requirement
-  Interactive Lessons with Personalized Feedback
-  Learn By Doing Pedagogy, Online & At-Scale
-  \$40 per Student

Virtual Field Trips

Take your students on immersive journeys through ancient ecosystems and extreme environments, revealing the forces that shaped Earth's habitability. These interactive, media-rich experiences bring the planet's history to life, offering a deeper understanding of how life thrives – and what that means for discovering life elsewhere in the universe.

**Project-Based
Learning: Each
Student Hunts For
Habitable Planets**

The search for life beyond Earth becomes an engaging, project-based exploration. As students form new stars and explore alien worlds, they uncover key factors that equip them to assess one of humanity's most complex questions: are we truly alone? This journey reveals the scientific principles that make life possible, challenging students' understanding and encouraging critical thinking.

Personalized Learning Paths

As students navigate their own journey through the cosmos, they are encouraged to explore ideas, spaces, and complex problems, with real-time, targeted feedback guiding them at every step. Faculty gain valuable insights into student progress, helping them tailor their teaching to ensure each learner deepens their understanding and learns from their mistakes.

Developed by Educators, for Educators, with Educators

Authored by President's Professor Ariel Anbar and Dr. Lev Horodyskyj from Arizona State University, *Habitable Worlds* was designed by educators, for educators, to enhance teaching strategies and foster stronger connections between students and introductory biology.



Instant Feedback

Provide students with personalized feedback and learning pathways, enhancing their understanding and engagement throughout the course.

Invite Your Students to Ask: Are We Alone?

Request a demo to experience *Habitable World*'s personalized lessons, real-world applications, and narrative-driven learning firsthand.
Scan the QR code or visit <https://www.habworlds.org/>

