

ASU launches online ocean futures undergraduate degrees

By Matt Oxford, ASU News
April 9, 2025

Our oceans make up three quarters of the planet's surface and contain most of its biodiversity. Due to rapid and global changes, they are endangered — making more urgent a deeper knowledge of ocean science and stewardship.

To that end, Arizona State University is offering two of its ocean degrees — the [Bachelor of Science in ocean futures](#) and the [Bachelor of Science in ocean futures with a concentration in coastal and marine science management](#) — through [ASU Online](#) in addition to in-person on the Tempe campus.

Both online programs, offered by the [College of Global Futures](#), are now enrolling for a fall 2025 start.

“We are thrilled to offer our ocean futures undergraduate degrees online, expanding access to world-class education on a national and global scale,” said [Miki Kittilson](#), dean of the College of Global Futures. “By bringing this program to learners everywhere, we are empowering future leaders to tackle the critical challenges facing our oceans, no matter where they are in the world.”

ASU joins a small community of universities in the United States with online undergraduate degrees focused on ocean sciences. It is also the first landlocked university to do so.

“Our new BS programs will provide a unique curriculum that includes, in addition to marine biology and ocean science, courses on ocean conservation, ocean communities, ocean stewardship and partnerships,” said [Susanne Neuer](#), founding director of the School of Ocean Futures. “Online students also have access to a wide array of field courses, for example at the [Bermuda Institute of Ocean Sciences](#).”

Both new online degrees, housed in the [School of Ocean Futures](#), are STEM programs designed to train the next generation of ocean stewards and innovators.

The bachelor's degree in ocean futures broadly explores the natural processes of the ocean and human impacts shaping ocean health while addressing global marine challenges. Additionally, students will take stewardship and partnership courses to develop a practical understanding of the social and economic dimensions of ocean health.

The coastal and marine science concentration emphasizes quantitative approaches to solving coastal and marine challenges. This option is ideal for students planning to pursue graduate studies, such as ASU's [online master's in coastal and marine science and management](#).

Typical careers from ocean futures students include:

Marine science and research.

Conservation and environmental management.

Ocean policy, governance and advocacy.

Marine technology and innovation.

Fisheries and ocean economy.

Science communication and education.

Water-quality management.

Field and adventure careers.

The blue economy — a term for the sustainable use of ocean resources — is a multitrillion-dollar industry, and skilled workers will be needed who can preserve the health of the oceans while driving economic growth and supporting thriving communities.

"It's our decisions that are stressing the oceans and their coasts, and that's empowering because by making different decisions — in governance, business, community planning — we can steer towards thriving ocean futures," said [Stephanie Pfirman](#), Foundation Professor and deputy director at the School of Ocean Futures.

(Video: <https://www.youtube.com/watch?v=8dRWvkpuOIY>)

Faculty from the School of Ocean Futures teach from three different locations: Arizona, Hawai'i and Bermuda.

"Having faculty in Bermuda and Hawai'i provides students access to expert faculty who offer firsthand knowledge of the local marine ecosystems and ocean communities of the Pacific and Atlantic," Neuer said.

The School of Ocean Futures features faculty from two research units out of the [Julie Ann Wrigley Global Futures Laboratory](#), the world's first comprehensive, university-based approach to ensuring a future where well-being is attainable for all of Earth's inhabitants.

The Bermuda Institute of Ocean Sciences has over 120 years' worth of research experience. BIOS includes a field station that houses multiple laboratories and vessels that conduct research on the Atlantic Ocean.

The Center for Global Discovery and Conservation Science in Hawai'i leads spatially explicit scientific and technological research focused on mitigating and adapting to global environmental

change.

Students also have [access to optional hands-on opportunities in Hawai'i, Bermuda, Mexico and more.](#)

“Study abroad courses are transformative experiences for learners, and they’re really fun too,” said [Sharon Hall](#), associate dean of the College of Global Futures. “These field opportunities are especially important for online students, giving them a chance to dive beneath the surface of their coursework to immerse in community and hands-on experiences that bring marine science and sustainability challenges to life.”

This story originally appeared on [ASU News](#).

Main image



Arizona State University PhD student Andrea Brenner aboard the RV Atlantic Explorer. The ocean vessel is part of the Julie Ann Wrigley Global Futures Laboratory's Bermuda Institute of Ocean Sciences and houses faculty from the School of Ocean Futures.

Gallery



ASU students have access to high-tech equipment, like the Atlantic Explorer research vessel, through study abroad opportunities where they can spend a fall or summer in Bermuda studying marine science in the classroom, in the lab and in the water.



School of Ocean Futures Assistant Professor Jesse Senko (right) shows an ASU PhD student how to measure a sea turtle's shell on a boat in Baja, Mexico, as part of his ongoing research linking applied conservation science with innovation and governance.



Assistant Professor Liza Roger (left), from the School of Ocean Futures and the School of Molecular Sciences, holds a piece of coral for her ASU research students in the aquaria room at the Rob and Melani Walton Center for Planetary Health in Tempe.



Greg Asner (left), a professor in ASU's School of Ocean Futures and director of ASU's Center for Global Discovery and Conservation Science, working with ASU student Uhiwai Wall on coral restoration as part of the 'Āko'āko'a Reef Restoration Program in Hawai'i.



School of Ocean Futures Assistant Professor Laura Larocca (left) teaches SEA 310: Paleoclimate Perspectives on Contemporary Climate Change to a class of students at Armstrong Hall in Tempe.



School of Ocean Futures Assistant Professor Cliff Kapono (right), an analytical chemist and professional surfer based in Hawai'i, blends a cultural heritage of surfing and Native wisdom with chemistry to investigate how coral reefs survive hostile conditions.