

Marine Science Master of Professional Science Degree (2020-2021)

Using a transdisciplinary process, this degree provides students with a deep understanding of marine science and ecology, and the implications of the global decline of marine biodiversity and the impact that this decline has on marine ecosystems. With an emphasis on synthesizing scientific literature, data analysis and interpretation, while developing leadership and management skills, coursework in this degree will prepare students for employment as marine project managers, marine scientists and conservation biologists in the government and private sector.

Graduates of the MPS in Marine Science will be able to:

- 1. Explain the underlying ecological principles and functioning of marine ecosystems.
- 2. Create local, regional, and global solutions to environmental problems facing marine predators and their habitats.
- 3. Analyze the success and failures of sustainable resource management strategies by reviewing federal and state laws and case studies.
- 4. Demonstrate an understanding of common statistical procedures used in marine science data management and analysis.
- 5. Demonstrate the ability to interpret quantitative results from scientific literature and other sources, and clearly communicate these results to others.
- 6. Understand the role of the manager in the application of leading change and innovation within an organization.
- 7. Demonstrate proficiency in written, oral, and interpersonal communication, and in critical thinking.

Marine Science Core

MARI 505 Dynamics of Marine Ecosystems

MARI 605 Sustainable Management of Marine Resources

MATH 620 Statistics and Data Management for Science Professionals

Professional Skills Core

PROF 505 Strategic Management of Innovation

PROF 510 Communication for Environmental Professionals

PROF 515 Ethical Practice and Policy

PROF 590 Capstone I

PROF 690 Capstone II

Complete one of the following tracks:

Conservation of Marine Mammals Track

MARI 520 Identification and Life History of Marine Mammals

MARI 620 Marine Mammal Rescue and Rehabilitation

Conservation of Marine Predators Track

MARI 510 Conservation of Marine Predators MARI 610 Impacts of Predators on Marine Ecosystems

Coral Reef Biodiversity and Conservation Track

MARI 515 Coral Ecology and Conservation
MARI 615 Coral Reef Restoration and Aquaculture