

PROPOSAL FOR MINOR PROGRAM OF STUDY

1. School/College: Franklin College of Arts and Sciences

2. Department/Division: Marine Sciences

3. Minor Name: Scientific Diving

4. Proposed Effective Date: Fall 2026

5. Which campus(es) will offer this program? Athens

6. CIP: 30320101

7. Program Description:

The proposed Minor in Scientific Diving aims to provide undergraduate students in a wide range of academic programs with the knowledge, skills, and credentials to engage safely and effectively in underwater exploration and research. This program is designed to enhance students' understanding of the marine environment and its conservation, allowing them to directly observe and collect data on marine habitats and biota, survey archaeological and cultural resources, and support underwater infrastructure. A Minor in Scientific Diving will also enhance students' employability in marine policy and resource management, coastal engineering and technology, education, tourism, and animal care. This hands-on experiential program fosters a deeper understanding of and appreciation for marine ecosystems, ocean processes, and underwater sampling and surveying techniques. Additionally, a Minor in Scientific Diving encourages safety and technical proficiency and develops team building and problem-solving skills in challenging underwater conditions. This minor will prepare students with specialized diving certifications and safety training, making them more competitive for advanced research opportunities and professional careers in the marine sciences.

The Minor in Scientific Diving will equip students with practical skills that will broaden their academic training. Scientific diving is a critical tool for conducting underwater research in marine biology, marine fisheries, marine ecology, marine paleontology, and ocean engineering. Students from the Warnell School of Forestry and Natural Resources, the Odum School of Ecology, the College of Engineering, and the Franklin College of Arts and Sciences have shown interest in this program. The minor will also be of interest to Ocean Science (B.S.) majors because it builds on existing field-based experiences by providing advanced training in underwater research techniques. Finally, the proposed minor will appeal to students across campus who have an interest in recreational diving, marine tourism, and environmental protection.

The Minor in Scientific Diving is consistent with UGA's commitment to experiential learning and interdisciplinary training, offering students a unique opportunity to integrate classroom knowledge with hands-on field experience. The program aligns with nationally recognized SCUBA Schools International (SSI) standards, ensuring that graduates hold widely respected diving credentials. In addition to core diving proficiency, students will gain transferable skills that are highly valued by employers, enhancing student access to internships, research experiences, and professional networks. For example: agencies such as the National Oceanic and Atmospheric Administration, state Departments of Natural Resources, and environmental consulting firms seek personnel trained in underwater habitat assessment, coral and seagrass monitoring, aquaculture, and fisheries surveys; employers in offshore exploration, coastal engineering, marine technology, and renewable energy value employees who can support the installation and monitoring of subsea infrastructure and sensor

testing and maintenance; industries such as eco-tourism and aquarium operations (e.g., the Georgia Aquarium) view diving proficiency and environmental knowledge as assets for educational outreach, visitor engagement, and animal care.

The introductory course MARS 4740L/6740L, Scientific Diving I, does not require students to become certified with their Open Water diver certification, but students can obtain the certification if they do the optional field trip to the Florida panhandle. An optional field trip fee applies with no cost for the digital diver certification card. To ensure the safety of all students while they train in the Marine Sciences Testing and Training Pool, all dive gear that is professionally maintained is provided as a course fee. For the advanced course MARS 4750/6750, Scientific Diving II, and for the minor, students must finish classroom activities leading to Diver Alert Network certifications (diver first aid, CPR and oxygen administration) and the four diving specialties (Deep, Wreck, Navigation/limited visibility and Marine Biology); students must also log a total of 24 dives related to their specialties during 5 scheduled trips to Lake Jocassee, S.C., to obtain their specialty and Advanced Open Water diver certifications. The dive gear and field trip fee applies with no additional cost for the digital diver certifications.

Student Interest and Demand

The Department of Marine Sciences has offered MARS 4740L/6740L, Scientific Diving I, and MARS 4750/6750, Scientific Diving II, for several years now. These courses have enrolled students from across disciplines at UGA. In the past three calendar years (2022-2024), 231 students have enrolled in MARS 4740L alone from 12 different colleges and schools (see Table 1), with the highest enrollment from the Franklin College of Arts and Sciences, Terry College of Business, the College of Engineering, and the Odum School of Ecology. During this same time 26 students have enrolled in MARS 4750 from 8 different colleges and schools, primarily from the Franklin College of Arts of Sciences, the Odum School of Ecology, and the Terry College of Business. This lower enrollment may be because students are less likely to continue in scientific diving if the course is an isolated elective for their major and does not lead to a formal credential. MARS 4750/6750 is currently only offered in the fall semester because weather conditions in spring semester are not conducive to diving in natural waters, as students are required to participate in off-campus diving trips to complete designated advanced dives and perform tasks related to course topics. The department plans to also offer this course as a summer Maymester course, assuming there is student demand and funding from the college. Both scientific diving courses have always accommodated all interested students, and the department is able to accommodate more students in both courses.

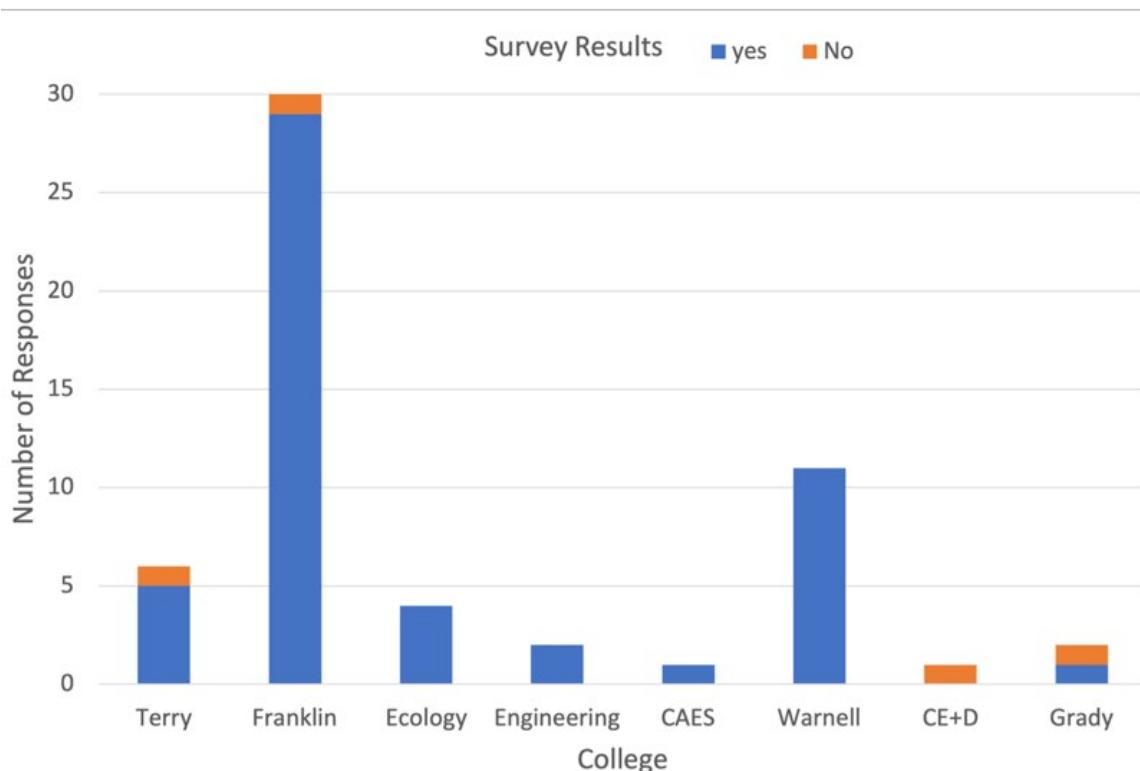
Table 1. Student enrollment in MARS 4740L, Scientific Diving I, for calendar years 2022-2024.

Franklin College of Arts & Sciences	85	College of Family and Consumer Sciences	5
Terry College of Business	68	College of Veterinary Medicine	4
College of Engineering	24	School of Public and International Affairs	4
Odum School of Ecology	14	Mary Frances Early College of Education	2
College of Agricultural and Environmental Sciences	9	College of Environment and Design	1
Warnell School of Forestry and Natural Resources	7	No College Designation	3
Grady College of Journalism and Mass Communication	5		

Table 2. Student enrollment in MARS 4750, Scientific Diving II, for calendar years 2022-2024.

Franklin College of Arts & Sciences	10		College of Engineering	1
Odum School of Ecology	5		College of Agricultural and Environmental Sciences	1
Terry College of Business	4		College of Veterinary Medicine	1
Warnell School of Forestry and Natural Resources	3		College of Family and Consumer Sciences	1

To gauge student interest in a potential Minor in Scientific Diving, the Department of Marine Sciences carried out a Qualtrics survey in spring 2025 that was administered to all past students enrolled in MARS 4740L and MARS 4750, students enrolled in the Ocean Science (B.S.) major, and students enrolled in the Biology (B.S.) major with an Area of Emphasis in Marine Biology. The survey received 57 total responses from students in various colleges and schools, with 53 of 57 indicating that they would be interested in the minor. What is most compelling is that 24 of these 53 students were enrolled in majors outside of the Franklin College of Arts and Sciences. These data show that the proposed Minor in Scientific Diving would appeal to students across UGA.



8. Program of Study/Requirements:

Students are encouraged to take the following courses, with at least one lab, to prepare for upper-level MARS courses:

- MARS 1010, The Marine Environment (3 hours)
- AND MARS 1010L, Introduction to Marine Science Lab (1 hour)
- MARS 1020, Biology of the Marine Environment (3 hours)
- AND MARS 1020L, Introduction to Marine Biology Lab (1 hour)

Completion of the Minor in Scientific Diving involves 8 hours of required coursework and 7 hours of electives for a minimum of 15 credit hours. All courses used to satisfy the minor requirements must be completed with a grade of "C" (2.0) or higher.

Required Courses (8 hours)

- MARS 4400/6400, Introduction to Marine Policy (3 hours)
- MARS 4740L/6740L, Scientific Diving I (2 hours)
- MARS 4750/6750, Scientific Diving II (3 hours)

Elective Courses (7 hours)

Students can fulfill all 7 credit hours of electives with upper-level MARS prefix courses OR 4 hours from upper-level MARS prefix courses and 3 hours of upper-level courses from other departments (if approved by the department). Upper-level courses are at the 3000-level or above.

No more than 3 credit hours may be taken from the following MARS courses:

- MARS 3900, Introduction to Experimental Marine Sciences (1-3 hours)
- MARS 4600, Field Experiences in Coastal Georgia (1 hour)
- MARS 4850, Advanced Topics in Ocean Science (1-3 hours)
- MARS 4960R, Faculty-Mentored Undergraduate Research I (1-3 hours)
- MARS 4970R, Faculty-Mentored Undergraduate Research II (1-3 hours)
- MARS 4980R Faculty-Mentored Undergraduate Research III (1-3 hours)
- MARS 4990R, Undergraduate Research Thesis (or Final Project) (1-3 hours)

A maximum of 3 credit hours may be taken from the following courses:

- ANTH 3150, Water Worlds (3 hours)
- ANTH 4005/6005, Ancient Ships and Seafaring (3 hours)
- ANTH 4095/6095, Underwater Archaeology (3 hours)
- ECOL 3220, Biology and Conservation of Marine Mammals (3 hours)
- ECOL 4280/6280, Coral Reef Ecology (3 hours)
- GEOG 4350/6350-4350L/6350L, Remote Sensing of Environment (3 hours)
- GEOG 4370/6370-4370L/6370L, Geographic Information Science (3 hours)
- GEOL 4090/6090, Marine Geology (3 hours)
- GEOL 4510/6510, Marine Micropaleontology (3 hours)
- GEOL 4530/6530-4530L/6530L, Principles and Environmental Applications of GIS (3 hours)

Other courses outside this list must be approved by the Department.

Total = 15 hours

Documentation of Approval and Notification

Proposal: Minor in Scientific Diving

College: Franklin College of Arts and Sciences

Department: Marine Sciences

Proposed Effective Term: Fall 2026

School/College:

- Head of the Department of Marine Sciences, Dr. Daniela Di Iorio, 3/25/2025
- Franklin College of Arts and Sciences Associate Dean, Dr. Paula Lemons, 12/16/2025

Use of Course Notifications:

- Head of the Department of Anthropology, Dr. Theodore Gragson, 2/18/2025
- Warnell School of Forestry Associate Dean, Dr. Rhett Jackson, 3/19/2025
- Head of the Department of Geography, Dr. Hilda Kurtz, 5/6/2025
- Head of the Department of Geology, Dr. Adam Milewski, 2/18/2025
- Odum School of Ecology Associate Dean, Dr. Pejman Rohani, 2/22/2025