

Syllabus
SMS 324- Introduction to Research Diving
(Summer/ Fall 2023)

Course Information

Classification	SMS 324- Introduction to Research Diving; 3 credits.
Objectives	This course will provide an introduction to research diving and satisfy the 100 hours of required training for scientific divers as prescribed by the American Academy of Underwater Sciences (AAUS). This training is required to participate in scientific diving activities at many universities, including UMaine, and at all AAUS member organizations throughout the United States.
Description	Students will be instructed in advanced diving skills, dive rescue, first aid, oxygen administration, and research diving techniques. Practical field diving activities will be a large focus of the course. The course will be taught by the UMaine Diving Safety Officer (DSO), selected UMaine faculty, and guest lecturers experienced in using scuba diving as a research tool. Following successful completion of course objectives, students will be eligible to participate in diving research projects as a scientific diver-in-training or scientific diver. Students will also be eligible to apply for applicable recreational diving certifications. Participation is not a guarantee of certification.
Location	UMaine Darling Marine Center; 193 Clark's Cove Road, Walpole, ME 04573
Schedule	The Summer session of SMS324 will begin on Wednesday, 31 May, 2023 and meet every Wednesday (31 May- 16 Aug.); the Fall session of SMS324 will begin on Wednesday, August 30, 2023 and run every Wednesday (Aug. 30- Dec. 20). Class time is generally 8am-6pm; weather and tides may dictate meeting outside normally scheduled hours.
Fees	Course Materials & Equipment Fee- \$850 (<i>subject to change</i>)

Course Requirements

Prerequisites	<p><u>Administrative</u></p> <ul style="list-style-type: none">• <i>Permission</i>- permission of the instructor is required to enroll. Permission will be granted when the necessary pre-requisites are met.• <i>Coursework</i>- BIO100 and SMS100; or equivalent• <i>Status</i>- sophomore or graduate student status <p><u>Pre-Course Documentation:</u></p> <ul style="list-style-type: none">• Nationally recognized diving certification• UMaine Diver's Medical/Physical Examination• UMaine Legal Documentation• Medical Insurance specific to scuba diving <p><u>Practical Exercises:</u></p> <p><i>Swim-test</i>- potential students must demonstrate swimming and water-comfort/skills ability acceptable to the instructor, including but not limited to:</p> <ul style="list-style-type: none">○ Swim underwater 25 meters/yards without surfacing.○ Swim 400 meters/yards in less than 10 minutes.○ Tread water for 15 minutes (last 2 minutes without the use of hands).○ Snorkel with fins 800 meters/yards in less than 17 minutes.		
Attendance	This is an in-person/ face-to-face course; there is no remote-learning option. Participation in all classroom and field sessions is mandatory; absence or inability to participate will likely disqualify the student from certification. Make-up sessions will be scheduled at the discretion of the instructor.		
Grading	<table><tr><td><ul style="list-style-type: none">• Field Activities/ Personal Dive Log = 40%• UMaine Scientific Diving Exam = 30%• AAUS E-learning and Exam = 20%</td><td><ul style="list-style-type: none">• Written Assignments = 10%• Rescue Exam- Pass/Fail• First Aid Exam- Pass/Fail</td></tr></table>	<ul style="list-style-type: none">• Field Activities/ Personal Dive Log = 40%• UMaine Scientific Diving Exam = 30%• AAUS E-learning and Exam = 20%	<ul style="list-style-type: none">• Written Assignments = 10%• Rescue Exam- Pass/Fail• First Aid Exam- Pass/Fail
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Course Materials

- Required Texts/
Equipment All required texts for this course are provided by the instructor. Costs of required texts are covered by the course and lab materials fee.
- Students must provide a computer workstation with internet access and the ability to access and utilize various e-learning/web-based instructional programs.
- Recommended
Texts
- Marine Life of the North Atlantic- A. Martinez, DownEast Books, 1994
 - NOAA Diving Manual, Fourth Edition, Best Publishing Company, 2001

Equipment

Student divers are encouraged to provide all of their own diving equipment, with the exception of scuba cylinders/tanks. All personally owned equipment must conform to the minimum standards of the AAUS and UMaine Scientific Diving Program and be appropriate for the cold water diving environment. When applicable, proof of annual equipment service is required (*). As noted, some items can be provided by the UMaine Scientific Diving Program.

Required Personal Equipment

All participating divers must provide their own:

- Mask, Fins, Snorkel
- Exposure Suit (7mm wetsuit at minimum; 2-pc./farmer john style recommended)
- Hood, Gloves, and Boots
- Diver's tool/ knife
- Underwater watch (simple Timex, Casio, Freestyle recommended, ~\$25-40)
- Equipment bag

Additional Required Equipment

All participating divers must also be equipped with the items listed below. If not personally owned, these items will be provided by the UMaine Scientific Diving Program with payment of course fees.

- Regulator with alternate air source, low pressure inflator hose, and submersible pressure gauge (*)
- Depth gauge & timing device/watch OR Dive Computer (*)
 - Buoyancy compensator (BCD) with power inflator (*)
 - Weight system with weights (weight belt or BC-integrated weights acceptable)
 - Whistle and Surface Marker Buoy (for surface signaling)
 - UW Light and UW Compass

Instructor Information

Christopher M. Rigaud, UMaine Diving Operations Manager/ Diving Safety Officer

Address: Darling Marine Center, 193 Clark's Cove Road, Walpole, ME 04573

Email: crigaud@maine.edu Web: <http://www.umaine.edu/scientificdiving>

Phone: 207-563-8273 / 207-949-2289 Office Hours: 8-4 weekdays

Chris has served as the UMaine Diving Safety Officer since 2003. He holds a B.S. from LIU-Southampton College, and a M.S. from Texas A&M University Corpus Christi. He has been a PADI Scuba Instructor for over 20 years, and is also an SDI/TDI Instructor, DAN Instructor, Emergency Medical Technician, Diver Medic Technician, and Public Safety Rescue Swimmer. He has served as a working diver and diving supervisor on scientific projects for numerous institutions and has served multiple terms on the Board of Directors of the American Academy of Underwater Sciences and the Diving Control Board of the National Science Foundation US Antarctic Program.

Colby E. Johns, UMaine Scientific Diving Assistant

Address: Darling Marine Center, 193 Clark's Cove Road, Walpole, ME 04573

Email: colby.johns@maine.edu

Phone: 860-377-3020

Colby is a graduate of the UMaine School of Marine Sciences (B.S., 2016). She was certified as an Open Water Diver at UMaine in 2015 and earned her UMaine/AAUS Scientific Diver certification soon after. Colby served as the UMaine Scientific Diving intern and was certified as a PADI Divemaster in 2016, less than a year after her initial certification. She is a qualified drysuit and nitrox diver, and has served as the UMaine Scientific Diving Assistant since 2017.

University Policy Statements

Academic Honesty- <https://www.maine.edu/board-of-trustees/policy-manual/section-314/>

Students Accessibility Services- if you have a disability for which you may be requesting an accommodation, please contact Student Accessibility Services, 121 East Annex, 581.2319, as early as possible in the term. Students who have already been approved for accommodations by SAS and have a current accommodation letter should notify and schedule a meeting with the course instructor within the first 2 weeks of the course.

Course Schedule Disclaimer (Disruption Clause): In the event of an extended disruption of normal classroom activities (due to COVID-19 or other long-term disruptions), the format for this course may be modified to enable its completion within its programmed time frame. In that event, you will be provided an addendum to the syllabus that will supersede this version.

Observance of Religious Holidays/Events: The University of Maine recognizes that when students are observing significant religious holidays, some may be unable to attend classes or labs, study, take tests, or work on other assignments. If they provide adequate notice (at least one week and longer if at all possible), these students are allowed to make up course requirements as long as this effort does not create an unreasonable burden upon the instructor, department or University. At the discretion of the instructor, such coursework could be due before or after the examination or assignment. No adverse or prejudicial effects shall result to a student's grade for the examination, study, or course requirement on the day of religious observance. The student shall not be marked absent from the class due to observing a significant religious holiday. In the case of an internship or clinical, students should refer to the applicable policy in place by the employer or site.

Sexual Discrimination Reporting

The University of Maine is committed to making campus a safe place for students. Because of this commitment, if you tell a teacher about an experience of **sexual assault, sexual harassment, stalking, relationship abuse (dating violence and domestic violence), sexual misconduct or any form of gender discrimination** involving members of the campus, **your teacher is required to report** this information to Title IX Student Services or the Office of Equal Opportunity.

If you want to talk in confidence to someone about an experience of sexual discrimination, please contact these resources:

- *On campus:* **Counseling Center: 207-581-1392** or **Cutler Health Center: at 207-581-4000.**
- *Off campus:* **Rape Response Services: 1-800-871-7741** or **Partners for Peace: 1-800-863-9909.**

Other resources: The resources listed below can offer support but may have to report the incident to others who can help:

For support services on campus:

Title IX Student Services: 207-581-1406,

Office of Community Standards: 207-581-1409,

University of Maine Police: 207-581-4040 or 911.

Or see the [Title IX Student Services website for a complete list of services \(open in a new window\)](#).

Also, [Student Wellness Resource Center \(opens in a new window\)](#).