OE 400: Ocean Seminar 1 Fall 2020

Instructors: Dr. Tom Weber

Email: tom.weber@unh.edu

Telephone: 862-1659 Office: Chase 229

Dr. Nathan Laxague

Email: nathan.laxague@unh.edu

Telephone: 862-4023 Office: Chase 121D

Credits: 1

Class Hours: Thursdays 11:10-12:30, Chase 105 (or Chase 171 as assigned)

Office Hours: M 1:30pm-3:00pm via Zoom (see course website)

or by appointment

Class Objectives: This class introduces students to the broad range of ocean engineering sub-

disciplines; uses experiential learning activities to help students make connections between ocean engineering and their core engineering and science classes, as well as growing students' practical skills with sensors and data analysis; helps students create links with the UNH marine research enterprise. These activities are conducted with the underlying fabric of a 'grand challenge', and are framed to help students relate their education to societal problems that ocean engineers can help solve. The 2020 grand

challenge is food security.

Class Format: This class will be conducted in Chase 105 (lecture hall) and in Chase 171 (OE

undergraduate instrumentation lab). The full class will assemble in Chase 105 for an introductory lecture/discussion, for seminars from UNH ocean scientists and engineers, for discussions of the grand challenge, and for short

student presentations.

Students will also be divided into two groups. Each group will spend several weeks in the undergraduate instrumentation lab working on sensor assembly and data collection, and several weeks in Chase 105 working on ocean data

analysis.

During the semester, students will be asked to 'map' their way from an ocean engineering sub-discipline (e.g., marine renewable energy) to a topic area (e.g., marine pollution) to a general approach (e.g., aquaculture) to the grand challenge (food security). In doing so students will be learning about a specific ocean engineering sub-discipline including tools, technological challenges, open science questions, etc. Students will share this gained

knowledge with the class as a whole through oral presentations.

Grading This is a credit/fail class. Students who are engaged in the class throughout

the semester by regular attendance in class, participation in class discussions,

participation in class lab- and computer-based activities, and who make assigned oral presentations, will receive credit for this class.

Student Effort

Course content is designed with the federal definition of a credit hour in mind, such that each credit hour entails a minimum of 3 hours of engaged time per week per credit, for a total of 3 hours (minimum) per week for this class when averaged over the semester. Engagement activities for this class include class time, assigned class activities (e.g., preparing or completing an in-class activity), conducting research into ocean engineering sub-disciplines, and preparing an oral presentation.

Class Participation:

Regular class attendance and participation in classroom discussions is an important component of student success in this course. Both class attendance and participation are expected of all students.

COVID-19 Changes

We all have a responsibility during the COVID-19 pandemic to protect our own health and the health of friends, family, and community members. Violations of the COVID-19 protocols by even a single individual can cause significant disruptions or discontinuation of in-person academic activities. Any student creating such disruptions undermines the opportunity for others to learn and engage with the UNH community, and as such, is in serious violation of the UNH Student Rights, Rules, & Responsibilities.

In alignment with our collective commitment to the ongoing health and safety of our community during the COVID-19 Pandemic, there are several changes in classroom expectations:

- 1. All students are required to wear masks in class and in campus buildings unless a medical exception is made through a formal accommodation process with the Student Accessibility Services. Information on the proper use of masks, acceptable mask types, other PPE, and social distancing guidelines visit https://www.unh.edu/coronavirus. Failure to comply with PPE and social distancing classroom protocols is a violation of the Student Rights, Rules, & Responsibilities. If you refuse to comply, you will be asked to leave the classroom/building immediately, and you may also be reported to the Office of the Dean of Students and the CEPS associate dean.
- 2. Prior to class, please wait outside the building if the weather permits, or in the hallway/common area outside the classroom entrance, observing social distancing and leaving plenty of room for the prior class to exit the room and building. Chase 105 has a traffic pattern that we will follow, with a single entrance near the front of the room and a single exit near the back.
- 3. Chase 105 is equipped with hand sanitizer and surface wipes, found immediately to your left upon entering the room.
 - a. Use hand sanitizer as you deem appropriate.
 - b. Use a surface wipe to clean your personal space upon taking your seat, and throw the used wipes away on the way out of class or take the wipe with you. The number of wipes available in the classroom has been chosen under the

assumption that each student will wipe down their space at the beginning of each class.

- 4. Sit only in marked seats, identified on the desktops in Chase 105.
- 5. Contact tracing is mandated by the State of New Hampshire, and in the event that one of us tests positive for COVID-19 it will be our responsibility to assist with this process. Accordingly,
 - a. Please use the same seat each time you attend class
 - b. Be aware that we will be filling out a seating chart and/or taking a picture of the class to identify where students have been sitting.

This class is beginning the semester operating in a yellow mode of operation (see https://www.unh.edu/coronavirus/operation). This means we are meeting in person (a remote learning option is being made available for students who feel they need it). If your health and safety requires shifting to an orange or red mode of university operation, the modality and schedule of this course may change.

All in-person class meetings will end on Friday, November 20. The class will move to a remote modality starting Monday 23. This will include Zoom synchronous meetings at the regular course times, and may also include asynchronous activities (e.g., prerecorded lectures) that will be made available on Canvas. A detailed schedule and list of activities will be made in advance of this time.

Chase 105 is equipped with a cameras, microphones, and speakers to provide remote access to class instruction, an option that will be used by some students in the class to accommodate potential isolation and quarantine due to the COVID pandemic. Lectures will be live-streamed and recorded, and made available for educational use by students enrolled in the class both for instruction and as a review tool, by the course instructor, and by other university officials who support course instruction. Your voice or image may be captured on the recordings, and by enrolling in this class you are consenting to such recording for these purposes. The University and Zoom have FERPA-compliant agreements in place to protect the security and privacy of UNH Zoom accounts. You may not share recordings outside of this class (OE 400, Fall 2020). Doing so may result in disciplinary action.

Please make sure that you have all necessary technology to participate in this course remotely (e.g., accessing Canvas, participating in Zoom lectures, downloading/viewing recorded lectures).

Important Dates:

Monday, 31 August: First day of classes

Monday, 7 September: Labor Day; UNH Holiday, no classes

Friday, 2 October: Last day for students to drop courses

Tuesday, 3 November: Election day (please vote)

Tuesday, 10 November: Classes follow a Wednesday schedule Wednesday, 11 November: Veteran's Day Observed, no classes Friday, 20 November: Last in-person class (unless there is an earlier transition to orange/red)

Monday, 23 Nov: First remote-learning class (unless there is an earlier transition to orange/red)

Wednesday, 25 November: Thanksgiving recess, no classes

Friday, 27 November, Thanksgiving recess, no classes

Monday, 11 December, last day of fall-semester classes.

Note that there is no final exam for this class.

Academic Honesty:

Ethical behavior is essential for the engineering professionals due to the nature of the work and is expected during your academic training as well. You are required to comply with all University policies regarding Academic Honesty and to familiarize yourself with those policies (https://www.unh.edu/student-life/09-academic-honesty). Suspected violations of academic honesty are handled following Section 9.7, Procedures for Dealing with Academic Misconduct in the Student Rights, Rules, and Responsibilities Handbook, and may result in failure of an assignment, a failing grade in the course, probation, suspension, or expulsion.

Collaborating is acceptable and encouraged in this course only to the extent that it supports peer-topeer learning. This means that you are welcome to discuss the assignments conceptually, to help one another understand approaches to solutions, and to help one another become better acousticians. HOWEVER, the assignments that you completes should be written/completed by you alone.

Disabilities:

The University is committed to providing students with documented disabilities equal access to all university programs and facilities. If you think you have a disability requiring accommodations, please contact Student Accessibility Services (SAS) at 201 Smith Hall. If you have received an accommodation letter for this class, please contact us immediately so we can discuss the necessary arrangements. Contact SAS at

www.unh.edu/disabilityservices/clockwork, (603) 862-2607, sas.office@unh.edu.

Classroom-Behavior Expectations

Students are encouraged to fully participate in classroom lectures. Questions, discussion, and other comments on the academic material of the course are encouraged and help enhance class-room time.

To insure a climate of learning for all, disruptive or inappropriate behavior (repeated outbursts, disrespect for the ideas of others, etc.) may result in exclusion (removal) from this class. As a reminder, cell phone use, including text messaging, is not permitted in this class by Faculty Senate rule unless by instructor permission.

Emotional or Mental Health Distress

Your academic success in this course is very important to us. If, during the semester, you find emotional or mental health issues are affecting that success, please contact the University's Psychological and Counseling Services (PACS) (3rd fl, Smith Hall; 603 862-2090/TTY: 7-1-1), which provides counseling appointments and other mental health services.