

## Syllabus:

### **Introductory Ocean Science**

**MAR-105**

-- Spring 2015 --

*Instructor:*

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*SMAST-1 Rm 110, x8892*

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## **Course Description**

### **Course Description:**

Essential principles of ocean sciences. This course explores topics such as how the ocean and life in the ocean shape the features of the Earth; the ocean as a major influence on weather and climate; how the ocean supports a great diversity of life and ecosystems; and how the sustainability of ocean resources depends on our understanding of those resources and their potential and limitations. Various examples of ocean instruments used for sampling and measurements are introduced.

### **Prerequisite:**

None.

### **Course Credits: 3**

### **Required Texts:**

- 1) Ocean Studies: Introduction to Oceanography, 3<sup>rd</sup> ed., Joseph M. Moran, published by The American Meteorological Society
- 2) AMS Ocean Studies Investigations Manual, published by The American Meteorological Society
- 3) Various excerpts from the American Meteorological Society website under their Ocean Studies course: <http://www.ametsoc.org/amssedu/online/oceaninfo/>

## **Course Objectives**

This course provides a general introduction to the essential principles of ocean sciences.

Upon successful completion of the course, the student will be able to:

- Explain basic oceanographic principles within the different sub-disciplines of physical, biological, chemical, and geological oceanography, and how they relate to global climate.
- Describe how science (particularly ocean science) works, how scientific theories are advanced, and how science is an evolving understanding of the world around us.

- Discuss the science underpinning of oceanography and its interaction with the atmosphere and global climate.
- Give examples of the role of the ocean in the Earth System in the context of ocean related environmental issues and current events.

## **Communication Plan**

### **Expectations for Electronic Communication**

- Please use email \*ONLY\* when the subject is of a personal and confidential matter. If you have a question for which others in the course could benefit from the answer, please post the question in the appropriate discussion board forum.
- The instructor and/or TA generally check email Monday through Friday during normal business hours. Please copy both instructor and the TA on any correspondence. You can expect a reply from one of us within 24 hours during the work week. Reply on weekends are less dependable, but generally also giving within 24 hrs.
- The instructor will also check the discussion forums multiple times during the work week. S/he will post often during the first weeks of the course and then drop off in activity while expecting participants to fill any void. Rest assured however, s/he \*will\* be participating in what we hope will be lively discussions and will \*always\* reply to any discussion comment directed specifically at us.
- The instructor and/or TA will not generally email students to confirm receipt of assignments. If you do not hear from us after you submit your work, consider it a good thing.

## **Methods of Instruction**

### **Evaluation and Grading Breakdown:**

- Weekly Reading Assessments / Investigations Assessments: 25%
- Mid-Term: 25%
- Final Exam: 25%
- Discussion Board Participation: 25%

### **Policy on Late Assignments and Missing Assignments:**

Per Instructor

### **The Weekly Schedule**

Weekly learning modules run from Monday to Sunday. Assignments / Assessments for a given week are due by the end of that week (i.e., midnight Sunday). Students are expected to keep pace during the week with assignments and Discussion Board assignments as posted in the weekly learning modules.

### **Time Considerations**

Students should be prepared to spend between 3-6 hours per week on reading and course assignments. Remember that in a traditional “live” course you would be coming to class for 3 hours and then spending an additional 3-6 hours (at least) outside of class on assignments and reading. Online and blended learning courses are no different. In a fully online course environment, the expectation is that you will be spending those 3 “class hours” on your own, working on the concepts that you would usually get in a live lecture. Please budget your time accordingly.

## **Attendance Policy**

### **Attendance:**

This course is a 3 credit course. Completion of online Reading Assessments and Investigations Questions is mandatory. Timely participation in weekly Discussion forums is also required.

## **Incomplete Policy**

According to the university catalogue, an incomplete may be given only in exceptional circumstances at the instructor's discretion. The student must be passing at the time of the request or be sufficiently close to passing. If the work is not completed within one year of the recording of the incomplete grade, the grade will become an F(I). The incomplete policy for this course is that at least 70% of the course must be already completed and an exceptional circumstance (i.e. medical issue) must exist. If you feel you require an incomplete for an exceptional reason, you need to email me and state your reasons for the incomplete in writing. We will then decide on a course of action.

## **Student Academic Integrity Policy**

All UMass Dartmouth students are expected to maintain high standards of academic integrity and scholarly practice. The University does not tolerate academic dishonesty of any variety, whether as a result of a failure to understand required academic and scholarly procedure or as an act of intentional dishonesty.

A student found responsible of academic dishonesty is subject to severe disciplinary action which may include dismissal from the University. The procedure for responding to incidents of academic dishonesty may be found in Section III of this document. You may also refer to the Student Handbook for information about the judicial process.

A high standard of academic integrity promotes the pursuit of truth and learning and respect for the intellectual accomplishments of others. These are values that are fundamental to the mission of this University. Such values are undermined by academic dishonesty.

Academic freedom is a fundamental right in any institution of higher learning. Honesty and integrity are necessary preconditions of this freedom. Academic integrity requires that all academic work be wholly the product of an identified individual or individuals. Joint efforts are legitimate only when the assistance of others is explicitly acknowledged and deemed appropriate by the instructor of the course. Ethical conduct is the obligation of every member of the University community, and breaches of academic integrity constitute serious offenses.

Maintenance of the standards of academic integrity and the successful administration of this policy depend on the mutual cooperation of faculty and students.

Faculty cooperation is essential for successful application of the procedures defined by this Academic Integrity Policy. Faculty members promote academic integrity by making clear on their syllabi their expectations concerning homework assignments, collaborative student efforts, research papers, examinations, computer-based infractions, and the like. Efforts should be made to detect and to prevent cheating and plagiarism in all academic assignments. If faculty members have evidence of academic dishonesty, they are expected to report such evidence promptly.

Students must assume responsibility for maintaining honesty in all work submitted for credit and in any other work designated by the instructor of the course. Students are also expected to report incidents of academic dishonesty to the instructor or dean of the instructional unit.

The intent of this policy is to make clear the standards of academic integrity at UMass Dartmouth.

**\*For additional information on violations, infractions, and consequences visit the UMass Dartmouth Student Academic Integrity Policy at the link below.**

<http://www.umassd.edu/studentaffairs/studenthandbookintroduction/studentconductpolicies/academicintegritypolicy/>

## Center for Access and Success

In accordance with University policy, if you have a documented disability and require accommodations to obtain equal access in this course, please meet with the instructor at the beginning of the semester and provide the appropriate paperwork from the [Center for Access and Success](#). The necessary paperwork is obtained when you bring proper documentation to the Center, which is located in Liberal Arts, Room 016; phone: 508.999.8711.

<http://www.umassd.edu/dss/>

## Resources

### **Tutoring**

If you are having difficulty with the class please:

- Post a message on the Discussion Board – be sure to use your classmates for troubleshooting and problem solving.
- Make an appointment to come in and meet with the instructors during my office hours.
- Contact the Academic Resource Center (ARC) for support:

**Academic Resource Center, Liberal Arts – Room7  
Phone: 508.999.8708, Fax: 508.910.6404**

### **Technical Help**

If you are in need of technical assistance the IT Service Desk is available to students.

### **Claire T. Carney Library, lower level**

508.999.8884 (x8884) or [Email](#)

Sunday:	12:00pm-2am
Monday thru Thursday:	7:30am-2am
Friday:	7:30am-11pm
Saturday:	9:30am-1pm

**Students living in the Residence Halls may also contact the Residential Technology (ResTech) Support Center:**

Visit [ResTech](#) in Elmwood Hall, lower level

Call the ResTech Help Line at 508.999.8040 (x8040)

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## Lecture Schedule

Week	Monday Date	Topic	Notes
1	Jan 26	Ocean in the Earth System	
2	Feb 2	Ocean Basins and Plate Tectonics	
3	Feb 9	Properties of Ocean Water	
4	Feb 16	Marine Sediments	
5	Feb 23	The Atmosphere and Ocean	
6	Mar 2	Ocean Currents	
7	Mar 9	Ocean Waves and Tides	
	Mar 16	-- Spring Break --	
8	Mar 23	The Dynamic Coast	
9	Mar 30	Marine Ecosystems	
10	Apr 6	Life in the Ocean	
11	Apr 13	The Ocean, Atmosphere and Climate Variability	
12	Apr 20	The Ocean and Climate Change	
13	Apr 27	The Future of Ocean Science	