Modified Oceanography Syllabus

Spring 2020

MiraCosta College

OCEA 101 - INTRODUCTORY OCEANOGRAPHY (LECTURE) - CLASS# 1904

3 Lecture Hours; 3 Units; Letter Grade; Student may petition for Credit/No Credit

MEETING TIMES: 1/21/2020 - 5/21/2020 - Tuesday/Thursday 4:30 pm to 5:45 pm - Room OC4529

INSTRUCTOR: Ray Rector

CONTACT: E-mail - oceanprof@seascisurf.com

OFFICE HOURS: Tuesdays – 5:45 pm to 7:00 pm; Online Canvas

CLASSROOM WEBSITE: http://www.seascisurf.com/ Click the "MiraCosta Ocea101 Tu-Th" link

COURSE DESCRIPTION: This course explores the major processes and features of the world's oceans. Topics include the origin and history of the ocean basins, atmospheric circulation and weather, ocean circulation, and the dynamics of waves, tides, and coastlines. The course also reviews marine life (including plankton, nekton, benthos, and marine mammals), explores the oceans as a resource for people, and considers human impacts on marine environments.

COURSE TEXTBOOK: No required purchase of a textbook for this course. However, the optional and highly recommended course text is **Essentials of Oceanography**, 12th or 11th Edition; Authors: Trujillo & Thurman





12th Edition: Print ISBN: 9780134073545, 0134073541 eText ISBN: 9780134298092, 0134298098 11th Edition: Print ISBN: 9780321814050, 0321814053

eText ISBN: 9780133558890, 0133558894

COLLEGE'S FREE OPEN-SOURCE E-TEXT URL: http://gotbooks.miracosta.edu/oceans

CLASS CANVAS URL: http://www.miracosta.edu/instruction/distanceeducation/index.html

PROFESSOR'S WEB URL: <u>http://www.seascisurf.com/</u> Click the MiraCosta Ocea101 Tu-Th" link

STUDENT LEARNING OUTCOMES: Upon completion of this course, students should be able to:

- **1.** Explain the theory of plate tectonics and relate it to the formation of major sea floor features.
- 2. Reconstruct the circulation patterns of atmosphere and ocean circulation systems, and analyze their interrelationships.
- **3.** Describe the major principles involved in the formation and behavior of waves and tides, and evaluate their effects on coastal processes.
- **4.** Summarize the major physical properties of the oceans and evaluate how each one affects marine communities and marine life.
- **5.** Summarize the major types of marine pollution, including global warming, and evaluate how each one affects marine communities and marine life.

CLASS ENROLLMENT NOTES: It is the student's responsibility to add, drop, or withdraw from classes before the deadlines stated in the class schedule. Petitions to add, drop, or withdraw after the deadline will not be approved without written proof of circumstances beyond the student's control, which made her/him unable to meet the deadline. Lack of money to pay fees is not considered an extenuating circumstance. Students anticipating difficultly in paying fees before the deadline should check with the Financial Aid Office about sources of funds or other alternatives for which they may be eligible. If you decide to withdraw from this course, you are reminded to do so before the following deadlines: February 2, 2020 is the last day to withdraw with a refund and with no grade (no "W") placed on permanent record.), or April 24, 2020 (last day to withdraw with a "W" on your transcript). If you stop coming to class, and fail to withdraw by the 04/24 deadline, then a final grade must be assigned to you.

pass is the 2/21/2020. IMPORTANT NOTE: If you withdraw/drop or get dropped from this OCEA101 lecture section, then you will be automatically dropped from your ocean lab course too.

STATEMENT OF RETENTION: Students, please discuss your plans to withdraw from class with your instructor. You might have options that may allow you to continue in class.

ACCOMMODATION OF DISABILITY: If you have a disability, you are encouraged to contact Disabled Students Programs & Services at 795-6658. Their office is located in Building 3000, adjacent to Parking lot 3C. They will help you determine what assistance is available for you.

INSTRUCTOR'S ONLINE COURSE POLICIES:

A. Student Work Load Obligations: Independent direction, discipline and motivation of the student are critical to both learning course content and academic success in this online course. It will be up to you, the student, for staying up with homework assignments, quizzes, and exams. Make sure and consult the instructor and/or fellow classmates about anything in this course that you find difficult and/or confusing. There are no make-up exams or accepted late work, unless the student provides proof of some compelling reason for the make-up. It is the student's responsibility to contact me personally to forewarn me of any problem in completing the regular-scheduled exams or other coursework by their due dates. Business, pleasure, or being generally ill, is not a compelling reason. Being deadly sick, or having a death in the family is good reason. Be ready to supply proper documentation.

B. Instructor-Initiated Contact Policy: This course is taught as a completely on-line course. That is, the communication between the instructor and the students, as well as among students, takes place via electronic means on the Internet. The instructor will be initiating contact with students on a nearly daily basis, via announcements, discussion board posts, email, and by phone. Students are expected to log into this class's MiraCosta Canvas course page regularly (several time per week) to update communication with instructor and fellow students.

C. Course Assignments and Testing: Assignments, either for discussion on the bulletin board, or for completion and return to the instructor, will be posted on the course Canvas classroom page. Student contributions will be evaluated on both the quality (intelligent use of scientific terminology learned from using the textbook and other sources) and quantity (frequency and length) of comments. Reports from students, which are submitted directly to the instructor, will be evaluated based on quality (use of appropriate scientific vocabulary, for instance) and on rigor of the analysis. Testing will occur via the Internet, and tests will use a variety of formats (true-false, multiple choice, matching, short answer, and essay).

D. Deadlines and Backing-up: Timelines and Deadlines: Quizzes will be available each week and will appear with a due date. Availability for quizzes and exams prior to the finishing deadline is roughly three to four days. The research writing assignment will not be accepted or submitted following the due date. Note that because it sometimes happens that computer networks (including your own computer) are down or unavailable, it is preferable to get assignments done a day or two earlier, so as to avoid trying to post an assignment on the very last minute of the due date, only to find that one's Internet Service Provider is down, for example. ALSO, as with any writing endeavor on a computer, <u>YOU MUST ALWAYS BACK-UP ALL</u> <u>YOUR WORK</u> on an external memory device, in timely increments. The excuse that you permanently lost your entire writing assignment file during a computer crash is not acceptable, because those sorts of mishaps are totally avoidable by doing regular backup. Additionally, you need to make sure to have a planned BACK-UP COMPUTER at your disposal: family member's, friend's, school, or even your own secondary computer/smart phone.

Online Netiquette and Student Code of Conduct:

• Students are expected to respect and obey standards of student conduct while interacting online in this course. As your instructor, I have the following expectations of your communicative behavior while online:

- Promote a positive learning environment by exhibiting mutual respect and consideration of the feelings, ideas, and contributions of others, as reflected in your written dialog.
- Demonstrate a genuine desire to learn, interact, and improve.
- This class will be conducted in accordance with the college code of student conduct and basic standards
 of academic honesty. Cheating, plagiarism, or other forms of academic dishonesty are totally
 unacceptable and will not be tolerated. Violations of standards of academic honesty will be reported to
 the school dean for appropriate action. A detailed explanation of my plagiarism policy is found on the
 menu page for this course and on the instructor's website. It is well worth your time to read my detailed
 policy if you have any concerns regarding plagiarism or cheating.

MODIFIED GRADING/EVALUATION

I. Quizzes (10 @ 15 points each) = 150 points. Note: You get three (3) attempts per quiz. Open book.

- II. Exams (4 @ 100 points each) = 400 points. Note: You get one (1) three-hour attempt per exam. Open book
- **III. Assignments** (3 total) = 100 points: Ocean Environmental Concern Research Proposal = 20 pts; Ocean-in-The-News Discussion Board Post Assignment #1 = 40 pts; Ocean-in-The-News Discussion Board Post Assignment #2 = 40 pts
- V. Late Work Policy: No late work accepted No exceptions.
- VI. Extra Credit Policy: Extra credit is available up to 40 points maximum. Last day to turn in extra credit work is Sunday May 17, 2020 absolutely no EC work accepted after this date.
- VII. Grading Scale: Your final grade is based purely on point percentage out of 650 pts:
 - 100% 90% = A 89% -- 80% = B 79% -- 66% = C 65% -- 55% = D

Note: Minor adjustments to the total course grade points may be made by instructor during the course period. If changes are made, the instructor will inform the students in a timely manner.

ASSESSMENT ACTIVITIES - LOGISTICS AND VITAL INFORMATION: Assessment of student learning outcomes for this class includes 10 quizzes, 2 exams, and 3 assignments. Each assessment activity has a specific submittal due date. Make sure to keep a VERY CLOSE track of the class schedule of activities, so that you stay on track with your coursework, and get all your fully completed work turned in on time. I suggest printing out the class schedule and taping it somewhere around your work area that you can view it regularly. Below are the most important course dates after spring break.

- 1) Canvas Quizzes 4 and 5 are due Monday March 30, 2020 end of the day
- 2) Exam II completion date is Sunday, April 5, 2020 end of the day
- 3) Last day to drop without a "W" (withdraw) is Friday, April 24, 2020
- 4) Ocean-in-the-News Discussion Post Assignment #1 due Sunday, April 25, 2020
- 5) Canvas Quiz 6 is due Sunday April 25, 2020 end of the day
- 6) Canvas Quiz 7 is due Sunday April 25, 2020 end of the day
- 7) Exam III completion date is Sunday, April 26, 2020 end of the day
- 8) Canvas Quiz 8 is due Sunday May 17, 2020 end of the day
- 9) Canvas Quiz 9 is due Sunday May 17, 2020 end of the day
- 10) Ocean-in-the-News Discussion Post Assignment #2 due Sunday May 17, 2020
- 11) Canvas Quiz 10 is due Sunday May 17, 2020 end of the day
- 12) Last day to turn in extra credit is Sunday May 17, 2020
- 13) Final exam completion date is Sunday May 24, 2020

EXTRA CREDIT: There are several extra credit assignments available: they include virtual fieldtrips, and a couple other research activities. Extra credit assignments are listed in the Extra Credit Assignment Folder.

Last day to turn in extra credit work is Sunday May 17, 2020. Absolutely no EC work accepted after this date. Up to 40 points of extra credit is allowed in this course.

STUDY MATERIALS FOR THIS COURSE:

There are several major sources of geological information at your disposal for successfully completing this course - they are: 1) your optional (highly-recommended) textbook and accompanied online textbook support; 2) the free open-source website textbook that is listed below; 3) The Endless Voyage Video Lessons available online from the instructor's personal website, and 4) the instructor's lecture notes and PowerPoint lectures also found at his personal website. The first and foremost course resource is your textbook and its accompanying website. Carefully read and study all assigned textbook reading prior to completing the associated quizzes, exams, and assignments. Note: the pay textbook has a complimentary textbook support site, which has additional resources and activities to help master the curriculum, which includes many good animations.

- 1) Textbook and Support Websites: Essentials of Oceanography 12th Ed. Trujillo and Thurman
- 2) No-cost, E-Textbook site: http://gotbooks.miracosta.edu/oceans

3) Instructor's Personal Student Website: www.seascisurf.com

PROFESSOR'S CLASSROOM WEBSITE RESOURCE: The instructor has set up a website specifically as an academic resource for his earth sciences students. This site is located at http://www.seascisurf.com/ Clicking on the **Mira Costa OCEA101 Tu/Th** link will give you direct access to a wide variety of classroom information and oceanographic resources. Classroom information includes professor contacts, class syllabus and schedule, important dates/deadlines, classroom lecture notes, PowerPoint presentations, exam study guides, practice exams, research project guides and resources, and field trip information. It is strongly urged that you take utmost advantage of this site. Additionally, the site has links to the "Endless Voyage" oceanography instructional video series – a set of 26 half-hour lessons that requires a high-speed connection to watch. I have listed the "Endless Voyage" video series number(s) that correspond to the specific topic(s) of homework study each week within the class schedule below the textbook chapter reading assignments. Note that information found within the "Endless Voyage" videos are included in the test questions within the quizzes and exams.

Date/ Week	Class Meeting Lecture and Discussion Topics	Homework & Testing Textbook Reading and Online Video Viewing
Week 9 Sun 3/15 – Sat 3/21	Spring Break	No Class/No Work
Week 10 Sun 3/22 – Sat 3/28	Spring Break - Extended	No Class/No Work
Week 11 Sun 3/29 – Sat 4/4	Canvas Quiz 4 - Seawater Properties Canvas Quiz 5 - Atmosphere/Ocean Circulation Deadline to take and submit quizzes is Monday 3/30	Canvas Quiz 4 - TT Ch 5 Canvas Quiz 5 - TT Ch 6, 7
	Exam 2 – (Chapters 5 through 7) Deadline to take and submit exam is Sunday 4/5	Test on Canvas
	Marine Life - Evolution & Classification Marine Life - Physical Factors and Habitats Primary Productivity and Trophic Levels	TT Chapters 12, 13 GB Chapters 13, 14

MiraCosta Oceanography Tu-Th Schedule – Second Half of Spring 2020

	Marine Feeding Relationships	EV Videos 18, 19, 20
	Types of Phytoplankton and Seaweeds Marine Zooplankton & Marine Biological Pump	PowerPoints Lectures
Week 12 Sun 4/5 – Sat 4/11	Marine Invertebrates In Benthic and Pelagic Marine Communities	TT Chapters 14, 15 GB Chapters 15, 16 EV Videos 21, 22, and 23 PowerPoints Lectures
Week 13 Sun 4/12 – Sat 4/18	Marine Fishes, Mammals and Birds In Benthic and Pelagic Marine Communities	TT Chapters 14, 15 GB Chapters 15, 16 EV Videos 21, 22, and 23 PowerPoints Lectures
	Quiz 6 - Ocean Waves & Tides Deadline to take and submit quiz is Sunday 4/25	TT Chapters 8, 9; GB Chap 10
	Ocean-in-the-News Discussion Assignment #1 Deadline to post assignment is Saturday 4/25	Post on Discussion Board
Week 14 Sun 4/19 – Sat 4/25	Marine Biological Resources – Marine Plants and Animals; the Fisheries Marine Physical and Energy Resources	TT Ch 13-16; GB Ch 13-16 EV Video 24
	Quiz 7 - Shorelines and Coastal Waters Deadline to take and submit quiz is Saturday 4/25	TT Chapters 10, 11; GB Chapters 11. 12
	Exam 3 - Waves and Beaches – (Chapters 8-10) Deadline to take and submit exam is Sunday 4/26	TT Chaps 8-10; GB Chaps 10-12
	Last day to withdraw with a "W" Friday 4/24	
Week 15 Sun 4/26 – Sat 5/2	Environmental Concerns - Coastal Pollution	TT Ch 11, 16, 17; GB Ch 17 EV Video 25, 26; Teacher Refs
Week 16 Sun 5/3 – Sat 5/9	Environmental Concerns - Coastal Pollution	TT Ch 11, 16, 17; GB Ch 17 EV Video 25, 26; Teacher Refs
	Quiz 8 - Marine Life I – Overview & Plankton Deadline to take and submit quiz is Sunday 5/17	TT Chapters 12, 13; GB Chapter 13, 14
Week 17 Sun 5/10 – Sat 5/16	Environmental Concerns – Climate Change	TT Ch 11, 16, 17; GB Ch 17 EV Video 25, 26; Teacher Refs
	Quiz 9 - Marine Life II – Marine Animals and Marine Communities and the Fisheries Deadline to take and submit quiz is Sunday 5/17	TT Chapters 14, 15; GB Chapter 15, 16
	Ocean-in-the-News Discussion Assignment #2 Deadline to post assignment is Sunday 5/17	Post on Discussion Board
Week 18 Sun 5/17 – Sat 5/22	Quiz 10 - Marine Pollution & Climate Change Deadline to take and submit quiz is Sunday 5/17	TT Chaps 11,16,17; GB Chap 17
	Extra Credit – Last day for EC credit is Sun 5/17	Submit in Assignment Folder
	Final Exam Deadline to take and submit exam is Friday 5/22	TT Chaps 8-16; GB Chaps 10-17

Disclaimer: This is a tentative schedule and may be changed by the instructor at anytime during semester.

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