

**OCEA 101L - INTRODUCTORY OCEANOGRAPHY (LABORATORY) – [CRN 1829](#)**

3 Laboratory Hours; 1 Unit; Letter Grade; Student may petition for Credit/No Credit

**PREREQUISITES:** Previous completion or current enrollment in the parent course OCEA101

**COURSE DURATION/FORMAT:** 8/19/2024 to 12/14/2024; Purely Online – Canvas and Asynchronous

**INSTRUCTOR:** Ray Rector **CONTACT:** e-mail – [oceanprof@seascisurf.com](mailto:oceanprof@seascisurf.com)

**OFFICE HOURS:** Thurs 4:30pm to 6:00pm; Rm OC4529; Online Canvas: Discussion Board and Zoom

**LABORATORY TEXTBOOK/MANUAL:** None required for this lab. However, student will be required to print out lab worksheets from a website. Details about required lab worksheets are found in this syllabus.

**CANVAS COURSE WEBSITE:** <http://www.miracosta.edu/instruction/ais/tic/canvas/index.html>

**PROFESSOR’S RESOURCE WEBSITE:** [www.seascisurf.com/](http://www.seascisurf.com/) Click the **MiraCosta Ocea101L Lab** link

**COURSE DESCRIPTION:** This laboratory course is designed to accompany the Oceanography 101 lecture course. It offers virtual hands-on experience with oceanographic materials and techniques in both the laboratory and field. Topics include reading navigational charts and topographic maps, interpreting sea floor features, analysis of seawater chemistry, and study of waves and tides using the Internet. On virtual field trips, students will study waves, currents, and coastal processes, and examine organisms in coastal marine habitats and at an aquarium.

**STUDENT LEARNING OUTCOMES: OCEA101L Core Competencies:**

|  |   |
|--|---|
| <p><b>Course student learning outcomes (CSLOs)</b> describe what students should be able to do upon successful completion of OCEA 101L. These are assessed using exams, projects, and other assignments.</p>   | <p><b>MCC core competencies</b> are broad general education outcomes that demonstrate real-world skills. Each CSLO is mapped to at least one core competency—this means you gain experience with these skills in OCEA 101L.</p>                       |
| <p><b>SLO #1:</b> Use and interpret information on nautical maps and charts, including contour lines, map scales, latitude and longitude, identification of seabed features, bathymetric profiles, and application of navigational skills to nautical problems.</p>                  | <ul style="list-style-type: none"> <li>• Inquiry, analysis, and independent thinking</li> <li>• Critical Thinking</li> <li>• Written Communication Skills</li> <li>• Integration of knowledge</li> <li>• Teamwork and collaborative skills</li> </ul> |
| <p><b>SLO #2:</b> Analyze seawater samples for salinity and oxygen content, and interpret the results using oceanographic concepts.</p>  | <ul style="list-style-type: none"> <li>• Inquiry, analysis, and independent thinking</li> <li>• Critical Thinking</li> <li>• Written Communication Skills</li> <li>• Integration of knowledge</li> <li>• Teamwork and collaborative skills</li> </ul> |
| <p><b>SLO #3:</b> Evaluate the dynamics of waves, tides and ocean currents, and interpret the results using oceanographic concepts.</p>  | <ul style="list-style-type: none"> <li>• Inquiry, analysis, and independent thinking</li> <li>• Critical Thinking</li> <li>• Written Communication Skills</li> <li>• Integration of knowledge</li> <li>• Teamwork and collaborative skills</li> </ul> |
| <p><b>SLO #4:</b> Evaluate biological data from coastal marine communities, and apply oceanographic concepts to the data.</p>  | <ul style="list-style-type: none"> <li>• Inquiry, analysis, and independent thinking</li> <li>• Critical Thinking</li> <li>• Written Communication Skills</li> <li>• Integration of knowledge</li> <li>• Teamwork and collaborative skills</li> </ul> |
| <p><b>SLO #5:</b> Interpret oceanographic observations made in the field, including analysis of coastal bluff erosion, measurement and analysis of ocean waves, assessment of factors controlling beach size, and analysis of data collected during a half-day ocean expedition.</p> | <ul style="list-style-type: none"> <li>• Inquiry, analysis, and independent thinking</li> <li>• Critical Thinking</li> <li>• Written Communication Skills</li> <li>• Integration of knowledge</li> <li>• Teamwork and collaborative skills</li> </ul> |

## **CLASS ATTENDANCE, ENROLLMENT, AND IMPORTANT DEADLINES:**

**Mandatory First Week Attendance:** ALL STUDENTS registered in this course prior to the start date MUST sign-in into the official Canvas course page sometime on or before the end of the FOURTH DAY of classes on the first week of the semester - **Thursday, August 22<sup>nd</sup>, 2024**, to stay registered in the course. If you do not log by the above date, then I will definitely drop you from the class and give your seat to a waitlisted student. Additionally, if you do not submit your first quiz by **Sunday, August 25<sup>th</sup>, 2024** you will be dropped from class.

### **Important Enrollment and Grading Dates:**

- 1) No "W" Deadline: The last day to drop this course and NOT receive a "W" is **Friday, September 13<sup>th</sup>, 2024**
- 2) With "W" Deadline: The very **last day to withdraw** from this course (**last day to withdraw with a "W"**) is **Tuesday, November 19<sup>th</sup>, 2024**. If you fail to withdraw by 11/19/24 and you stop participating in class, then a final grade must be assigned to you.
- 3) Pass/No Pass Deadline: Last day to change from Letter-Grade to Pass/No-pass is **Saturday, December 14<sup>th</sup>**.

**Student Participation and Drop Policies:** A student needs to participate in this lab class each and every week in order to be considered an active student. Lab participation means actively submitting assignments, taking tests, and posting on the discussion board each week. Note here that just logging into the course does not constitute participation. Inactive students will be dropped from the course in a timely manner consistent with the instructor's drop policy. Registered students who do not login onto CANVAS and participate in our virtual classroom over a period of fourteen (14) consecutive days will be dropped from this course for lack of participation. Students, who remain enrolled in a class beyond the published withdrawal deadline, as stated above, and listed in the class schedule, will receive an evaluative letter grade in this class.

**Student Withdrawal Responsibility:** It is the student's responsibility to drop all classes in which he/she is no longer participating.

**ACCOMMODATION OF DISABILITY:** A student with a verified disability may be entitled to appropriate academic accommodations, including the assistance of a note-taker in the classroom, and/or extended time for taking exams. Students with disabilities who may need academic accommodations should notify their professor immediately. Please contact the Disabled Students Program and Services (DSPS) Office for further information.

**INSTRUCTOR'S ONLINE CANVAS ATTENDANCE POLICY:** It is the student's responsibility to drop all classes in which he/she is no longer attending. Students who do not login onto this Canvas course and participate in our virtual lab classroom over a period of 16 consecutive days will be dropped from this course for lack of participation. Students, who remain enrolled in a class beyond the published withdrawal deadline (as listed in the official class schedule), will receive an evaluative letter grade in this class.

**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.

### **INSTRUCTOR'S ONLINE LAB 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 lab assignments and tests. 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.

**B. Instructor-Initiated Contact Policy:** This oceanography lab course is run as a completely on-line course starting on Canvas. 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 ZOOM. Students are

expected to log into the Canvas course page regularly (several time per week) to update communication with instructor and fellow students.

**C. Course Assignments (Modules):** Each week you are given a laboratory assignment topic to explore. All laboratory assignment work will be posted on the Canvas course site, and each week's laboratory assignment is packaged into a "Module". The laboratory assignment is found in the Canvas course "Module" folder on the left-hand menu of the course page. Each module has several activities to complete: 1) First, if that specific lab has a pre-lab component, then complete the pre-lab assignment worksheet (like you did during the first half of the semester) and then take a pre-lab quiz on Canvas (question set based on the information that you filled out in the pre-lab worksheet); 2) Next, fill out a laboratory activity worksheet (like the ones that you completed in the on-campus lab class) that is based off the information provided in the lab activity worksheet document. Note that you may or not be required to submit (upload) your completed lab worksheet document onto Canvas – depending on the specific lab; and finally, 3) take a post-lab quiz that assesses what you learned/mastered during the completing of the lab activity assignment(s). Note that all lab quizzes will taken on Canvas.

**D. Course Testing:** Lab quizzes are found in the lab modules. Quizzes and exams are also found in the "Quizzes" folder on the left-hand menu on our Canvas course page. Lab quizzes and exams will use a variety of formats (true-false, multiple-choice, matching, short answer, and essay). Students have unlimited time to take the lab quizzes, and you get three tries for each quiz. The laboratory final exam has a time-limit (4 hours), and you only get one attempt at taking the final exam. All quizzes and tests are open book, open note tests, BUT you are strictly prohibited from getting any help from any other person – lab tests are individual-effort exercises.

**E. Deadlines, Computer/Internet Mishaps, and Backing-up: Timelines and Deadlines:** You have a week time period to complete each laboratory module, including the doing the lab activities (filling our worksheet), taking the post-lab quiz, and writing a short lab reflection. The laboratory modules will be made available each week, and students have a complete week to finish and submit their work. Each module will appear with a due date (always 11:59 pm on Sunday evening). The midterm exam and final exam will have a multi-day test-taking window. As noted above, exams have a 3-hour, non-stop, time limit, with only one try allowed.

**Backing up Work:** 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, **YOU MUST ALWAYS BACK-UP ALL YOUR WORK** on an external memory device, in timely increments. The excuse that you permanently lost your entire writing assignment file during a computer crash or Internet disruption is not acceptable, because those sorts of mishaps are totally avoidable by doing regular backup. Additionally, you need to make sure to **ALWAYS HAVE A BACK-UP COMPUTER** at your disposal: family members, friends, or library, school, or even your own secondary computer/smart phone. Finally, you must have a **reasonably high speed, solidly consistent, trustworthy Internet connection**, especially for test taking, viewing streaming videos, and assignment submission.

**F. Online Netiquette and Student Code of Conduct:** This class will be conducted in accordance with the college code of student conduct and basic standards of academic honesty. 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 academic 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.

Cheating, plagiarism, or other forms of academic dishonesty are totally unacceptable and will not be tolerated in this class. Violations of standards of academic honesty will be reported to the school dean for appropriate action. A detailed explanation of academic integrity of students is found below: The academic integrity of the students in this course and the MiraCosta Community College District Standards of Student Conduct, require that all student work including, but not limited to, discussion postings, assignments, essays, papers, and exams be free of plagiarism. Students must fully cite any text, graphics, or others' ideas they include in that work. For additional details, please review [the Standards Of Student Conduct document](#)

As part of my commitment to academic integrity, student work in this course may be submitted to an online plagiarism checking service. Any student caught cheating or plagiarizing will be subject to the disciplinary procedures given in District Policy 3100, which may include receiving a failing grade for the assignment. Any cheating or plagiarism will be reported to the Dean of Student Affairs. Specifically, the following behaviors are examples of cheating/plagiarism (this list is not exhaustive).

1. Copying directly from the textbook. Note: you're welcome to summarize the information from when completing homework assignments, but please phrase homework answers in your own words!
2. Using unauthorized notes while taking an exam, or copying another student's work.
3. Sharing quiz or exam answers or collaborating with another student during a test.
4. Turning in homework that contains large blocks of text that are identical or nearly identical to another student's (both parties will receive zero score).
5. Copying from any source (including the Internet) without citing the source.
6. Turning in work completed for another class (unless pre-authorized by the instructor).
7. Passing off any work as your own that is not, including the use of work completed by other students.

In order to avoid any possibility of someone else plagiarizing your work, I highly recommend that you not share any content-specific material (such as exam answers, homework, or field trip reports) with any other students.

Please note that if I receive any course work from two or more students that is identical or strikingly similar, I reserve the right to assign all such students a score of zero for the assignment in question. Also please note that if I suspect academic dishonesty on an assignment or an exam, I reserve the right to schedule a one-on-one Zoom meeting to give you the opportunity to demonstrate that you understand the answer(s) you supplied. If a student is unable to demonstrate their understanding of an exam/assignment answer, I reserve the right to assign the student a score of zero for that exam/assignment.

**Instructor's Artificial Intelligence Policy:** The use of AI for help in doing coursework is prohibited in this class. The use of generative AI tools (such as ChatGPT, Bard, etc...) is not allowed in this course for any part of a graded assignment, discussion, or assessment. Doing so is considered a violation of the academic honesty standards of Chaffey College. Violations could result in failure of the assignment and further appropriate action with the Dean's office.

If you have any concerns regarding plagiarism, cheating, or using AI, please contact me, the instructor.

#### **GRADING/EVALUATION:**

- I. LABS:** Fourteen (14) Laboratory Module activity assignments. Labs are worth 50 points each (quizzes = 30 points; plus worksheet = 10 points; plus reflection = 10 points); except PT lab (60 pts) = 710 points total
- II. EXAMS:** A Midterm Exam and Final Exam = 150 points total for each exam for total of 300 points
- III.** Personal Introduction Discussion Board Assignment = 20 points
- IV.** Late lab assignments are accepted with a timely-reported valid reason
- V.** Authorized make-ups for missed lab assignments get a 1-week extension.
- VI.** There are no make-ups for exams.
- VII.** Total possible points = 1030 points
- VIII.** Extra credit is offered – up to 40 points; **Note:** Last day to submit extra credit is Sunday, Dec 8, 2024
- IX. Grading Scale:** Final course grade is based purely on points earned percentage:

**100% – 90% = A**

**89% -- 80% = B**

**79% -- 70% = C**

**69% -- 55% = D**

**< 55% = F**

**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. **The last day to turn in extra credit work is Sunday, December 8<sup>th</sup>, 2024.** Absolutely no EC work will be accepted after this date. Up to 40 points of extra credit is allowed in this course.

**REQUIRED LAB MATERIALS:** The following are the optimal technological conditions for success in this online lab course: 1) a reliable, fast-running computer, with a good-sized monitor screen; 2) a reliable, fast-speed Internet connection; and 3) a decent-sized thumb drive to back up your entire lab; and 4) a printer.

**LABORATORY ACTIVITIES:** Worksheets, Quizzes, and Reflection: Each week's ocean lab module includes the following: 1) Lab preparation documents and video links to provide with all the background information that you need for completing the lab activities; 2) activity worksheet with a set of questions to answer (possibly includes an additional pre-lab activity worksheet); 3) post-lab quiz (possibly includes a pre-lab quiz too), and 4) a writing reflection assignment. It is best to print out the worksheet, and then fill it out while working through the module exercises (PDF file). Alternatively, you can fill it out electronically (DOC file). Download the worksheets out of the Canvas course Module folder. Also note that it is advised to print out a color copy of the worksheet if there are colored images/illustrations.

**IMPORTANT TESTING NOTES:** The online quizzes are a means of self-assessment on how successfully you have completed the lab worksheet. Most of the post-lab quizzes have 30 multiple-choice questions that are based straight off the questions and problems in the corresponding worksheet. The post-lab quizzes are open-book/notes and are untimed. Students get three attempts at taking each post-lab module quiz. After the third attempt, the student will get to see the correct answers. Additionally, you will also be required to write a brief post-lab reflection and post it on Canvas on the discussion board. Lastly, you are also required to submit (upload) a copy (DOC, PDF, JPG format) of your completed lab worksheets for a grade (instructions near bottom of lab module folder).

## **WEEKLY ONLINE LAB PROCEDURES:**

### **A. Accessing/Preparation the Lab Week's Online Lab Activities**

- 1) Go to the Canvas Course Home page
- 2) Click on the current week's Lab Module. Inside the Lab Module, you will find a list of activity folders to work through, starting with opening the top one, and then down through the list – one by one.
- 3) For the worksheet folders, download, print-out, and preview the lab exercise worksheet(s). Worksheet comes in both PDF (print and fill out by hand) and DOC formats (fill out electronically). Note some labs have pre-labs too. Preview the worksheet to get a general idea what you will be doing.
- 4) Make sure to, both, read the associated lab preparatory documentation, and watch listed videos prior to the start of answering the lab worksheet questions. Additionally, study the professor's lab PowerPoint PDF slide show that is URL-linked in the lab worksheet for additional information and guidance.

### **B. Five-Point Procedure for Completing Your Online Lab Module Activities:**

- 1) Lab Preview, Instructions, and Worksheet: Begin by reading the first page of the lab module for an overview of the lab, the set of lab instructions and downloading of the worksheet and figures.
- 2) Lab Activities: Begin working on the lab activities by studying the lab module information pages (that follow the first module page), including listed worksheet figures, files, web links, and videos. Complete all parts of the lab worksheet. Again, use the module info pages, worksheet figures and linked resources to help you in answering all the questions. Note that some labs come with pre-lab quizzes that you take prior to starting the main portion of the lab.
- 3) Post-Lab Quiz: When you have completed the worksheet, go back to the lab module, and take the post-lab quiz (immediately follows the lab worksheet folder in the module). Note that you get three un-timed attempts, with your highest-scoring attempt retained in the grade book. After each of the first two attempts, you get to see what you got right and wrong; after your last attempt, you get to see all the correct answers.
- 4) Post-Lab Reflection: After you have completed your last post-lab quiz attempt, open the post-lab writing reflection activity and compose and post your lab reflection on the discussion board.
- 5) Submit Worksheet: Finally, after the post lab quiz and reflection has been completed, you will need to submit a copy of your completed worksheet. Upload a copy of your completed worksheet as either a DOC, PDF, RTF, or JPG file. Do not submit a PAGES file. That completes a weekly lab assignment.

Contact the instructor for help/guidance if you get really stuck on any problem or need clarification on instructions and/or execution of any part of the lab assignment. You can email via either Canvas or instructor's email contact.

## Fall 2024 Online Oceanography Laboratory Schedule - MiraCosta College

| Week                            | Lab Module Assignment   | Lab Due Date               |
|---------------------------------|---|----------------------------|
| <b>Week 1</b><br>8/19 – 8/25    | Personal Introduction on Discussion Board   | Thursday, August 22, 2024  |
|                                 | LAB 1 – Units of Measurement and Ocean History  | Sunday, August 25, 2024    |
| <b>Week 2</b><br>8/26 – 9/1     | LAB 2 – Isostasy  | Sunday, September 1, 2024  |
| <b>Week 3</b><br>9/2 – 9/8      | LAB 3 – Maps and Charts   | Sunday, September 8, 2024  |
| <b>Week 4</b><br>9/9 – 9/15     | LAB 4 – Plate Tectonics<br><b>Last day to withdraw with refund &amp; no "W" is Friday, September 13<sup>th</sup></b>  | Sunday, September 15, 2024 |
| <b>Week 5</b><br>9/16 – 9/22    | LAB 5 – Marine Sediments  | Sunday, September 22, 2024 |
| <b>Week 6</b><br>9/23 – 9/29    | LAB 6 - Wave Behavior   | Sunday, September 29, 2024 |
| <b>Week 7</b><br>9/30 – 10/6    | LAB 7 - Ocean Tides   | Sunday, October 6, 2024    |
| <b>Week 8</b><br>10/7 – 10/13   | <b>MIDTERM EXAM</b> - Online/Canvas   | Sunday, October 13, 2024   |
| <b>Week 9</b><br>10/14 – 10/20  | LAB 8 - Sea Level Hazards & Ocean Waves – <u>Virtual Field Lab</u><br>Oceanside Pier, Oceanside, CA   | Sunday, October 20, 2024   |
| <b>Week 10</b><br>10/21 – 10/27 | LAB 9 – Beach and Bluff Erosion – <u>Virtual Field Lab</u><br>Stonesteps Beach, Encinitas, CA   | Sunday, October 27, 2024   |
| <b>Week 11</b><br>10/28 – 11/3  | LAB 10 – Beach Profiling - <u>Virtual Field Lab</u><br>South Tamarack Beach, Carlsbad, CA   | Sunday, November 3, 2024   |
| <b>Week 12</b><br>11/4 – 11/10  | LAB 11 - Lagoon Geology and Ecosystem – <u>Virtual Field Lab</u><br>Batiquitos Lagoon, Carlsbad, CA   | Sunday, November 10, 2024  |
| <b>Week 13</b><br>11/11 – 11/17 | LAB 12 - Intertidal Zone Ecosystems – <u>Virtual Field Lab</u><br>Swamis Beach, Encinitas, CA   | Sunday, November 17, 2024  |
| <b>Week 14</b><br>11/18 – 11/24 | LAB 13 - Birch Aquarium – <u>Virtual Field</u> - La Jolla, CA<br><b>You get 2 weeks to complete this lab</b><br><b>Last day to withdraw with a "W" is Tuesday, November 19<sup>th</sup></b> | Sunday, December 1, 2024   |

|                                    |   |                           |
|------------------------------------|---|---------------------------|
| <b>Week 15</b><br>11/25 – 12/1     | LAB 14 – Ocean Research Cruise – <u>Virtual Field Lab</u> - Dana Point Harbor, CA <b>You get 2 weeks to complete this lab</b> | Sunday, December 8, 2024  |
| <b>Week 16</b><br>12/2 – 12/8      | Study Week for Final Lab Exam<br>Lab Make-ups and Extra Credit Work   | Sunday, December 8, 2024  |
| <b>Finals Week</b><br>12/9 – 12/15 | <b>FINAL EXAM</b> – Online/Canvas   | Sunday, December 15, 2024 |

**Please Note:** This schedule may be changed or modified by the instructor at any time during the semester. Students will be notified in a timely basis if changes are made.