

Communicating Ocean Sciences to Informal Audiences SIO180

Winter 2016 Course Information

Instructors:

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Course Description:

Students develop fundamental science communication and instructional skills through the understanding and application of learning theory, interpretive techniques, and pedagogical practices, which occur in the context of communicating ocean science concepts to a diverse audience at Birch Aquarium at Scripps.

Meeting Time:

Wednesdays, 1:00 p.m. - 3:50 p.m.
Birch Aquarium, West Classroom

When you arrive at the Aquarium, please enter through the main ticket booth and check-in at the Visitor Services Office.

In lieu of a scheduled lab each week, students will be required to complete several activities at Birch Aquarium throughout the quarter. Students, and their groups, will choose from a list of times provided by the instructors for these activities.

The SIO shuttle stops at the Aquarium. Free 3 hour parking is also available.

Office Hours:

Wednesdays, 4:00 p.m. -5:00 p.m. or by appointment

TritonEd

All course materials will be available on the course TritonEd site. Written assignments should be turned in online prior to the start of class. If you have questions about using the site or require paper copies of assignments, please let an instructor know as soon as possible.

Requirements:

1. Attend class and participate in discussions and on-line assignments.
2. Complete assigned readings and be prepared to do **Quick Writes** at the start of class. If you are late to class and miss the Quick Write you may not be able to make it up. Quick Writes missed due to absence cannot be made up, but valid excuses will be taken into consideration.
3. Develop a written **Elevator Talk** that details your area of research or a topic of interest to you. The talk will be revised during the quarter to reflect topics covered in class.

4. Identify a sample of science narrative and complete a **Narrative Analysis**, based upon concepts discussed in class, describing why it is an example of effective science communication.
5. Observe ocean science activities along with visitors at Birch Aquarium at Scripps and Scripps Pier and complete an **Observation Instrument**. Please refer to the information page *Lab Schedule* regarding dates and times.
6. Participate in presenting ocean science activities to visitors at Birch Aquarium at Scripps (BAS), sometimes with a partner/group. These presentations will occur outside of class time, in lieu of a scheduled lab session for the course.
Participation Day will involve your participation in inquiry-based, grade-level appropriate activities led by BAS staff. Each activity has accompanying kits and materials that you will use when presenting your activity. The **Activity Days** will involve implementing an activity you have designed, with a partner or group, based on criteria and models presented in the course.
7. Develop an activity of your own design with your partner/group. The activity design process has three parts:
 - a. Prepare an **Activity Idea Proposal** with your partner/group, which briefly describes your idea for an activity. This is a partner/group assignment and each group will turn in one activity proposal that they have developed together. Please feel free to discuss your ideas with the instructors and your classmates before developing your proposal.
 - b. Prepare a **Written Activity Plan** with your partner/group describing the goal and key concepts of the activity along with a description of the activity you plan to do. You will be given an activity template to use as you design your lesson. Be sure to incorporate how you will use the concepts discussed in class. This is a partner assignment and each set of partners will turn in one activity plan that they have developed together. Again, please feel free to discuss your ideas with the instructors and your classmates before developing your plan.
 - c. A **Final Written Activity Plan** prepared by you and your partner/group will reflect any changes you have made to the activity based on your experiences implementing the activity with a live audience on the floor of the Aquarium.
8. Prepare an **Activity Debrief** after you teach the activity for the public, sharing what went well and how you might change your activity to be even more effective were you to teach it again. THIS IS AN INDIVIDUAL ASSIGNMENT. You can discuss your ideas with your partner/group before writing your debrief, but each person is responsible for writing his or her own activity debrief in his or her own words.

9. Conduct **Peer Evaluations** of activities for other groups in the class after watching them conduct their activities on the floor of the Aquarium.

10. Conduct a **Final Presentation** during the final session of the course. You will have ~15 minutes for this presentation, which should demonstrate how you have implemented at least 1 course concepts into the design of your activity. The presentation must be interactive. You will do this as a partner pair or group.

Grading:

Attendance

- Attendance will be taken into consideration when assigning final grades.
- Missing three or more classes may result in an automatic F.
- Missing 1 teaching obligation will drop the final grade by one letter.

Assignments

Points

In-class assignments

Participation in class discussions (10 x 20 points each)	200
Peer Evaluations	50
Final Presentation*	100

Written Assignments

Quick Writes (9x 10 points each)	90
Elevator Talks (2x 40 points each)	80
Identification of Narrative Piece	30
Narrative Analysis	100
Activity Idea Proposal	100
Activity Plan*	150
Activity Debrief*	200
Final Activity Plan	200

Floor Activities

Observing (Observation Instrument) (2x50)	100
Participation Day	100
Activity Day (2 x100)*	200
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	1700

All assignments denoted with an asterisk (*) must be completed in order to pass the course. If you are taking the course S/U, you must complete all items with an asterisk (*) and earn at least 1200 points to receive a satisfactory grade.

Late assignments may be penalized 10% for each day they are late. Documented, valid excuses will be taken into consideration. If you will be absent due to other academic commitments (research cruises, conferences, etc.), you must contact an instructor prior to your absence to discuss how to make up assignments. Any partner issues that affect your ability to complete work in a timely manner must be brought to our attention as soon as they arise.