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Teaching Statement
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“Tell me and I forget. Teach me and I remember. Involve me and I learn.” - Benjamin Franklin

This quotation is the backbone to my teaching style and philosophy: learning by doing. This is vital in the marine science and policy field, where student growth stems by trial and error. It is the repeated field experiment that makes one a better scientist, and it is the scientific testing of a management technique that makes one a better interdisciplinary expert in this field. In my future classrooms, I plan to emphasize learning by doing, by trial and error, and by getting your feet wet, literally and figuratively, in the field.

Active Learning: A growing body of literature demonstrates that active learning, rather than passive, historically-lecture based classes, significantly improves student learning and long-term retention. While lecturing can be an effective and efficient way to deliver certain types of information, lecturing can sometimes drown students in content, without the opportunity to engage. Instead, active learning invites students to interact with the material, to reflect, and to learn through doing. Active learning techniques I plan to involve in my classrooms include possibly 1) assigning students different readings (particularly scientific journal articles or excerpts of new policies, after teaching students how to effectively read this type of literature), with the accountability they will be asked to explain readings to the class — an exercise that increases agency and retention over the material; 2) leading structured class discussions; 3) encouraging students to engage in the think-pair-share model on class readings; and 4) asking students to write one-minute papers on certain topics in class and share their viewpoints.

On writing, I am an avid supporter of writing to learn. Not only can writing help with material recall and reflection, but I believe that good writing skills are the most important fundamental skill for a career in marine science and policy. From writing scientific journal articles, to drafting a briefing document for a Congresswoman, to building a Clean Water Act permit, writing skills are a versatile key to success. Additionally, writing is a life skill. Therefore, I plan for my assessments to be typically writing-based, including essays and short-answer tests. I recognize that grading writing-based assignments can be time-intensive, but I am committed to providing the time needed given my strong belief in writing-based exercises.

Inclusion and Motivation: All students bring a unique background and set of interests, and it is these differences that make classrooms and learning more engaging. To get to know my students and help create an inclusive classroom, at the beginning of each semester I plan to send out short surveys asking each student on how to pronounce their name, main interests, questions about their background, preferred pronouns, and anything else they'd like to share. I believe that doing so helps ensure students feel that their learning experience is valued, that they are seen as a person, and have a seat at the table in the classroom. I will also instill respect throughout the classroom by addressing an inclusion statement the first day of class, in the syllabus, and asking for students to anonymously comment on inclusion in the classroom throughout the semester via an anonymous comment box.

Assessments: Recognizing that all students learn differently, I will require diverse assessments that offers a more equitable opportunity for different learning styles to perform. I will create smaller assessments, such as bi-weekly journal entries, short quizzes, minute papers, and homework. To encourage the development of public speaking skills and articulating thoughts verbally, I plan to also include participation in final grade. However, to account for different learning styles and personalities, participation can come in many flavors, such as through online journal entries, participation in the classroom, or visiting my office hours and asking thoughtful questions. For example, I implemented this flexible participation as a Teaching Assistant (TA) in the fall of 2019 in an Ocean Law and Policy course, where students were given an option to participate in weekly journal entries reflecting on readings. This gives all students, including quieter ones in class, the opportunity to participate as best suited to their learning style.

I am generally not a strong proponent of exams. Not only do I think exams can inaccurately capture the extent of student learning and leads to cramming rather than long-term retention, it is unlikely students will encounter an assessment like exams as a performance metric in future careers in the marine science field. Instead, I try to model assessments based on what students might experience in the real world, such as through presentations and public speaking. In the Ocean Law course I TAed, I created a “role play” assignment where students practiced testifying before a mock U.S. House of Representatives Natural Resource Committee hearing on offshore oil and gas exploration. This required them to distill complex scientific information into a policy forum, practice public speaking, and learn about the policy process on Capitol Hill. For me, it is more important that students understand the process to understanding concepts, the methodology to conducting an experiment, and how to interpret and share results, rather than memorizing facts.

Interdisciplinary Approach: My research interests are interdisciplinary, and often involve conducting science to inform ocean policy decisions. My classes are equally as interdisciplinary. For example, while I may teach about marine mammal biology, it is so that my students can apply their marine mammal biology knowledge to questions they may answer in their work, such as understanding how federal policy managers may need to consider the underwater hearing capabilities of certain whale species in regulating offshore energy development. As such, I may ask my students to write policy memos in my biology class directed to government leadership on complex scientific topics, so they can better understand how to communicate science to other audiences.

Passion: Finally, above all else, I recognize that passion for a subject can make or break a students’ experience. My entrée into the world of marine science is due to one passionate marine science educator I learned from in high school as a camp counselor. From explaining sea turtle biology to leading bird banding, her passion for the marine environment was simply contagious. Every day, I strive to channel that same energy and curiosity in the marine environment to share that gift with my students, and in doing so, hopefully motivate them to learn and grow in the marine science and policy field or carry this energy into the sector of their choice.