



Course Title: **Marine Environmental Science (Lab)**

Course Number: ENV 115L

Term: **Fall 2022**

Course Credits: **1**

Class Meeting Times: **Thur 8:30-11:20**

Class Location: **Henry Hall Lab 4 & in the field**

Instructor Name: **Dr. Lupita Ruiz-Jones**

You can call me Dr. Lupita or Professor Lupita

Email: guadalupe.ruiz-jones@chaminade.edu

Office Location: **Wesselkamper 104**

Cell Phone (welcome to text, lmk who you are): **505.603.1985**

Office Hours: **Tues 11:00-1:00 / Wed**

12:30-1:30 & 2:30-3:30 / Thur 11:30-1:00 in-person or zoom (zoom link in Canvas - text me to lmk you want to zoom)

In-person class: no eating or drinking in the lab.

In the field: plan accordingly so that you arrive on time and with any gear you need. Always bring your sun protection and water.

Course description from University catalog

This course introduces students to the scientific methodologies used to determine and study the current major marine environmental issues. Issues studied include: global warming, marine pollution, marine debris, oil spills, fisheries exploitation, fisheries by-catch, marine alien species and coral reef degradation. Laboratory exercises are conducted in the field and on the Chaminade campus. Students taking this course will be engaged in field science activities. Course must be taken concurrently with ENV 115.

Course overview

This lab course focuses on pono (respectful) science with the community, keen observation, and data collection in the near shore marine environment of Oahu. You will practice making keen



observations (practicing kilo) of our local environment and communicating your critical analysis. We will have field visits to a few different marine sites not too far from campus. You will submit short reflections on Canvas after visits where you meet with local organizations working in the marine environment.

In addition to diving deeper into some of the lecture concepts and thinking about what it means to do pono science with the community, you will think critically about what it means to do research and engage in the process through three endeavors: **Hawaiian Critter Project, Team Kilo and Photo Project, and Field Data Analysis Project**. For your **Hawaiian Critter Project** you will dive deeper into the biology and ecology of a Hawaiian marine critter and create an engaging presentation that draws connections to a local marine environmental issue. For your **Team Kilo and Photo Project** you will examine a local marine issue and practice making keen observations (kilo) and thinking critically about what you notice. You will present your analysis in a photo-essay (an intentional collection of photographs with descriptions organized with logical flow and accompanied by data figures). Teams will present in class during week 14. For the **Field Data Analysis Project** you will create data figures of data we collect as a class at our field sites; this will include an R tutorial workshop series to learn data management and data graphing skills. This course satisfies the General Education Learning Outcome for Quantitative Reasoning: students will analyze and interpret quantitative data.

Classroom etiquette (in the time of COVID)

If and when it is deemed safe for us to unite in the same physical classroom, our primary goal will be to keep each other safe. **No eating or drinking during lab.** Keep physical space between you, your peers and me. And if you have any COVID symptoms, be responsible and stay home, and let me know your situation.

Course Learning Outcomes and their evaluation

By the end of the course, you will be able to:

1. Identify and describe common marine organisms found in Hawaiian waters.
 - a. Evaluated via critter quizzes and Hawaiian Critter Project.
2. Think like a scientist by developing research questions and analyzing different types of sources.
 - a. Evaluated via Team Kilo and Photo Project and Field Data Analysis Project.
3. Analyze data figures and draw conclusions founded in evidence.
 - a. Evaluated via discussions, Hawaiian Critter Project, Field Data Analysis Project, sand Team Kilo and Photo Project.
 - a. Satisfies General Education Learning Outcome for Quantitative Reasoning.
4. Explain the significance of a challenging marine environmental issue.
 - a. Evaluated via analyses conducted of selected Hawaiian critter and during Team Kilo and Photo Project

See Canvas Modules for the tentative schedule.

Grading breakdown

* The grade listed in Canvas is NOT accurate because it does not include all components of your grade, including Participation. If you are ever curious about your grade ASK ME :)

20% = Engaged participation with peers, me, and guests (requires arriving to class prepared)

15% = Critter quizzes (4)

15% = Kilo Field Reflections (short reflections on Canvas after field visits)

15% = Hawaiian Critter Project

15% = Team Kilo and Photo Project focused on a local coastal marine issue

20% = Field Data Analysis Project (including engagement in R tutorial workshops)

A = Outstanding scholarship and an unusual degree of intellectual initiative

B = Superior work done in a consistent and intellectual manner

C = Average grade indicating a competent grasp of subject matter

D = Inferior work of the lowest passing grade

F = Failed to grasp the minimum subject matter; no credit given

Late work policy

If something happens and you know you need an extension on an assignment, contact me. If we do not make a prior arrangement, 10% of the assignment points will be deducted for each day after the assignment due date- does not apply to canvas discussion posts.

Workload expectations

Students are expected to devote a minimum of 2 hours of focused work out of class for each 1 hour of class time per week.

Attendance and your grade

As an enrolled student in the course, I expect that you will attend every class unless you are sick or have a COVID-related situation. If you have more than two unexcused absences your grade will be negatively impacted. An important aspect of learning is active engagement. There is no substitute for being in class when it comes to understanding and thinking critically about the material. Due to the COVID-19 pandemic, it is essential that you stay home if you have any symptoms -- your absence will be excused. Unexcused absences occur when playing hooky to go surfing, to sleep, to cram for an exam in another class, etc.

Course website

We will use Canvas and google drive.

Course Policies - same as those listed in the lecture syllabus

This syllabus and course schedule are living documents: they are free to change. I try to adhere as closely as possible, but there will be times in which we will take longer on a particular topic or add or delete a topic to enhance the course. I like to be able to react to you as the course proceeds and go with the flow a bit in order to make the course experience sort of custom fit to you!

You are responsible for all of the information in this document: not reading it does not make you exempt from knowing what's in it!

Use this syllabus to understand how your grade is determined ~ it is basically a contract between you and me.