



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

Course Number: **ENV 115L**

Term: **Fall 2023**

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 12:00-2:30 (except on a few Tuesdays only until 1:00) / Wed 12:30-1:30 / Thur 12:00-2:30 / or we can schedule a meeting anytime!**

Office hours are 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, Kilo and Photo Project, and Team 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 **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 **Team 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.

### **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 Hawaiian Critter Project.
2. Think like a scientist by developing research questions and analyzing different types of sources.
  - a. Evaluated via Kilo and Photo Project and Team Field Data Analysis Project.
3. Analyze data figures and draw conclusions founded in evidence.

- a. Evaluated via discussions, Hawaiian Critter Project, Team Field Data Analysis Project, and 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 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 final grade, including Participation. If you are ever curious about your grade ASK ME : )

10% = Engaged participation with peers, me, and guests; requires arriving to class on time and prepared (roll call in Canvas)

- To earn an A involves:
  - Coming prepared
  - Regularly asking questions and responding to questions
  - Being prepared to share your thoughts
- To earn a C involves:
  - Being present
  - Demonstration of lack of preparedness

10% = Kilo Field Reflections (short reflections on Canvas after field visits)

10% = Service learning project and reflections on Presence (after field visits to sites where you will be contribute to restoration efforts: Palolo Stream and Kalauha'iha'i)

15% = Hawaiian Critter Project

15% = Kilo and Photo Project

40% = Team Field Data Analysis Project (also considered service learning because you will contribute to temperature monitoring at Kalauha'iha'i and Kānewai to share with Maunalua Fishpond Heritage Center)

- 15% = engagement in Intro to Data Science workshops and reflections on canvas
- 25% = Infographic created in collaboration with Team; includes data graphs and reflection on team work. All team members do not necessarily get the same grade.

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. 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. Unexcused absences occur when playing hooky to go surfing, to sleep, to cram for an exam in another class, etc.

### **Credit Hour Policy**

The unit of semester credit is defined as university-level credit that is awarded for the completion of coursework. One credit hour reflects the amount of work represented in the intended learning outcomes and verified by evidence of student achievement for those learning outcomes. Each credit hour earned at Chaminade University should result in a minimum of 45 hours of engagement, regardless of varying credits, duration, modality, or degree level. This equates to one hour of classroom or direct faculty instruction and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks for one semester. Terms that have alternative lengths, such as 10 week terms, should have an equivalent amount of faculty instruction and out-of-class student work to meet each credit hour. Direct instructor engagement and out-of-class work result in total student engagement time of 45 hours for one credit. The number of engagement hours may be higher, as needed to meet specific learning outcomes.

### *Specific Credit Situations*

The minimum 45 hours of engagement per credit hour can be satisfied in fully online, internship, or other specialized courses through several means, including (a) regular

online instruction or interaction with the faculty member and fellow students and (b) academic engagement through extensive reading, research, online discussion, online quizzes or exams; instruction, collaborative group work, internships, laboratory work, practica, studio work, and preparation of papers, presentations, or other forms of assessment. This policy is in accordance with federal regulations and regional accrediting agencies.

- ENV115L is a 1 credit class requiring a MINIMUM of 45 clock hours of student engagement, per the official CUH Credit Hour Policy.
- We will meet once a week: 2h 50min each week = ~40h for the semester (we do not meet Thanksgiving week)
- Most weeks you will have reflections that are expected to take you ~1h per week (14h).
- It is expected that background research and preparation of your Hawaiian Critter Project will take you ~12h.
- It is expected that completion of your Kilo and Photo Project will take you ~6h.
- It is expected that your Team Field Data Analysis Project will take you ~12h.

### **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.*