Department: Biology
Working Title: Undergraduate Student Researcher, CSU COAST
Classification: Instructional Student Assistant
Number of Openings: 1
Pay Rate: $16/hour
Appointment: 15-20 hrs/week
Expected Dates of Employment: 5/15/2022 - 8/15/2022
Deadline to Apply: May 18, 2022

Requisition #: BIO_ISA_2223_3

DUTIES OF THE POSITION

Recently, our collaborative team consisting of researchers from Sonoma State University, UC Davis, and San Diego State University) were funded by California Sea Grant for the project “A multi-pronged approach to kelp recovery along California’s north coast”, to develop the science behind an array of approaches in kelp restoration, including urchin removal, kelp re-seeding, and seastar reintroduction.

The selected student will assist in running an experiment testing for the effects of salinity on microscopic development of bull kelp. The student will learn techniques in conservation aquaculture by seeding and growing bull kelp on “green gravel”, a restoration tool that has emerged as a cost/time effective technique that transplants laboratory reared kelp into the field by settling microscopic kelp spores onto gravel pieces.

Building on two years of experimental bull kelp culturing and restoration experience in the Hughes Lab at Sonoma State University (in collaboration with colleagues from UC Davis and San Diego State), the selected student will develop the next phase of green gravel research by experimentally testing for the effects of salinity on microscopic bull kelp development. The student will be mentored by PI Hughes and graduate students with experience in experimental bull kelp culturing. We will use the seawater facilities at UC Davis’ Bodega Marine Lab, where we have established a kelp culturing array where experiments are conducted.

The student will have the opportunity to attend the all-investigator meetings for the Sea Grant-funded multi-campus project team. This will connect the student with other PIs and students working on all other facets of our collaborative project. The student will also participate in regular Hughes Lab (hughesecology.com) meetings where we discuss the most recent literature, DEIJ issues in marine and conservation science, and host fun group-oriented activities. Finally, the student will have the opportunity to participate in monthly Kelp Ecosystem Landscape Partnership for Research on Resilience (KELPRR) meetings, which are hosted by the Greater Farallones National Marine Sanctuary (https://farallones.org/climate/kelp/), and is a consortium of a vast group of stakeholders concerned with issues related to the ongoing severe loss of bull kelp forests in northern California.

To develop their own presentation and writing skills, the student will present their work both to the Hughes lab group and to our Sea Grant-funded multi-campus project team. The latter will be a part of an all-undergrad mini-symposium team meeting. To develop communication skills, the mentors will guide the student on
presenting to these different audiences in practice presentations. If possible, the student may incorporate this research into an undergraduate thesis and will be encouraged to present their findings at the annual Sonoma State Science Symposium. The student will generate either a first-authored or co-authored manuscript by incorporating their research into either a standalone manuscript or as part of a larger effort investigating multiple stressors on bull kelp development.

MINIMUM QUALIFICATIONS

The ability to learn and perform assigned work; work cooperatively with faculty, staff, and other students; and accept responsibility. Completion of specific coursework may be required in order to teach, grade, complete research, or tutor for a course. Admission or registration as a University student. Note: Exceptions to the minimum eligibility qualifications may be granted at the sole discretion of the University.

HIRING CRITERIA

Candidates will be reviewed based on experience.

HOW TO APPLY

Send an email to hughes@sonoma.edu with the subject line “Kelp Internship Application” and the following materials:

- A resume with relevant coursework, relevant skills, any work and research experience, and any leadership and community volunteering experience.

- A personal statement that briefly (350 words or less) describes your most important personal experiences, including any barriers overcome, and how they have influenced your development and scientific interests.

- Contact information for 1-2 references.

HIRING NOTIFICATION

Applicants will be notified by email from Brent Hughes.

SUPERVISOR

Brent Hughes, Ph.D.

OTHER INFORMATION

- The classification, Instructional Student Assistant, is one of three classifications in a collective bargaining unit, Unit 11. Instructional Student Assistants, who must be currently enrolled University students, perform tutoring, grading, or teaching-related duties under the supervision of faculty or professional staff.
- Sonoma State University hires only individuals lawfully authorized to work in the United States. All offers of employment are contingent upon presentation of documents demonstrating the appointee’s identity and eligibility to work, in accordance with the provisions of the Immigration Reform and Control Act.
- The university is an Affirmative Action/Equal Opportunity Employer. We consider qualified applicants for employment without regard to race, religion, color, national origin, ancestry, age, sex, gender, gender identity, gender expression, sexual orientation, genetic information, medical condition, disability, marital status, or protected veteran status.
- This position is considered a “mandated reporter” under the California Child Abuse and Neglect Reporting Act and is required to comply with the requirements set forth in CSU Executive Order 1083 as a condition of employment.
- Successful candidates may be required to do a background check (including a criminal records check) before work in the position can begin.