



## About GES

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The Department of Oceanography launched the undergraduate Global Environmental Science (GES) program in 1998 with the generous support of the Pauley Foundation. The vision and brainchild of Oceanography Emeritus Professor Dr. Fred Mackenzie, the GES program is known for its rigorous math and science foundation, integrated study of environmental- and sustainability-related issues, and faculty-mentored research experience requirement. This research experience results in every GES graduate having completed a faculty-mentored research project, written a thesis, and presented their research results in a public forum. As a result of the challenging curriculum and research experience requirement, GES graduates are well-prepared to enter the workforce in environmental science-related fields and industries or continue on to graduate studies in many different subjects in the sciences, social sciences, law, medicine, and engineering.

## Contact Information

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# FALL 2022

## GES SYMPOSIUM

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Friday, December 9, 2022  
11:30pm - 12:30pm HST  
MSB 114

Reception to follow on  
MSB Lanai



Photo credit: Nicholas Yos



# Biographies

## GES Symposium

GES students presenting at this symposium conducted faculty-mentored research, analyzed their results, and compiled their findings into a thesis format. Many theses are converted into peer-reviewed journal publications; a feat usually accomplished by students once in graduate school. The GES Symposium is a celebration and culmination of undergraduate research efforts and experiences, so join us in supporting, engaging, and applauding our presenters.

## Agenda

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| 11:30 | Opening Remarks   |
| 11:35 | Chelsea Jiang   Catherine Chan (Natural Resource & Environmental Management)<br><i>Analyzing Consumer Perceptions Towards the Honolulu Disposable Food Ware Ordinance Bill 40 Ordinance 19-30</i> |
| 12:00 | Jacob Vasquez   Godwin Severa (Hawai'i Natural Energy Institute)<br><i>Advanced Impregnated Activated Carbons for Fuel Cell Air Purification</i>  |



### Chelsea Jiang

Born in New York and raised in the Northeastern USA, Chelsea loved exploring the tranquil New England wilderness and wildlife around her. She developed an interest in the environment and sustainability when she was in high school. She went on to study Architecture hoping to incorporate sustainability into the built environment. A desire to deepen her understanding of the environment brought her to the GES program at UH Mānoa, where she honed her interests to exploring how human behavior affects the environment. Her thesis topic explores public perception of a city-wide environmental policy in Honolulu related to plastic pollution. After graduation, she would like to use the knowledge she gained and apply herself to the environmental planning field and public outreach endeavors.

### Jacob Vasquez

Jacob was born in the Central Coast of California and raised in Grover Beach, where he grew up surrounded by the ocean, dunes, mountains, wildlife, and forestry. He knew that he had a deep passion for the environment, particularly to improve on the existing water and electricity systems. Throughout high school and the first two years of college he was interested in civil engineering because of the infrastructural component. When he noticed that the courses focused mostly on structural engineering, he sought a new major that was more aligned to his interests. He found GES where he was able to explore urban planning, water systems, transportation, and renewable energy. After a year in the GES program, he found a project mentor in Dr. Godwin Severa at the Hawai'i Natural Energy Institute and a project on the improvement of air purification for fuel cell vehicles. Throughout Jacob's studies, he has managed to be the President and growth director of a fraternity, while working multiple part-time jobs (sometimes at the same time) and conducting research for his undergraduate thesis. Upon graduation, Jacob plans on staying in Hawai'i and pursuing a career in renewable energy, transportation, conservation, and/or physical oceanography.

