

Syllabus

Course Name:	Hawai‘i Green Collar Institute – Hidden Treasures of Our Coastal Ecosystems
Instructor/Qualifications:	Pauline Sato and Chelsey Jay – Mālama Learning Center staff, Amber O’Reilly – Kahuku High School
Organizations In Partnership:	Mālama Learning Center, Hawai‘i State Teachers Association, Department of Education
Number of Credits:	3.0 PD Credit Allow for Audit: Yes
Overview	<p>In this new course, grades 4-12 teachers will be able to learn about what makes our coastal ecosystems in Hawai‘i so special specifically with a focus on the ‘Ewa Plain and Kalaeloa (Barber’s Point area) in particular. Subjects covered will include native Hawaiian plants and animals (both common and endangered), anchialine pools, ‘ōpae ‘ula (red shrimp), and avian fossils and the stories they tell. This course will give teachers the opportunity to learn first-hand from scientists and resource managers with a background in protecting these hidden coastal treasures.</p> <p>This course will be composed of a diverse range of activities such as guest speakers and site visits on the topics of healthy coastline ecosystems and what we can do to conserve these places for future generations. Teachers will practice hands-on lesson plans that have a STEAM (Science, Technology Engineering, Art, Math) approach and will secure contacts of resource people in the field of environmental conservation that they can call upon to enhance their school curriculum.</p> <p>Preference will be given to Leeward O‘ahu teachers of students in grades 4-12. Teachers successful in completing this course will receive 3 PDE3 credits.</p>
Purpose of the Course:	<p>The purpose of the course is to:</p> <ol style="list-style-type: none"> 1. Provide professional growth opportunity to improve teaching effectiveness to ready students for the 21st Century, 2. Expand participants’ awareness of environmental education and green collared jobs particularly related to healthy coastal ecosystems,

	<ol style="list-style-type: none"> 3. Expose teachers to real life work experiences outside of the classroom to create teaching that is rigorous and relevant, 4. Enable teachers to shape the next generation of employees to be equipped with essential workforce skills in green careers, and 5. Provide opportunities to expand networks among resource people in businesses, agencies, organizations, and other schools that are involved in caring for the Earth.
<p>Specific Objectives:</p>	<p>Participants will be able to:</p> <ol style="list-style-type: none"> 1. Describe at least 5 environmental issues that face Hawai‘i’s coastal environment, 2. Give 5 reasons why it is important to maintain healthy coastal ecosystems, 3. Identify at least 5 native coastal plants and/or animals, 4. Develop a unit plan about the Hawaiian coastal environment and actions that can be done to protect it, 5. Depict the breadth of green collar jobs in Hawai‘i related to ecosystem protection and management, 6. Design and implement two STEAM and standards-based lesson plans as part of the unit, incorporating resources presented in this course, 7. Develop appropriate assessments that demonstrate student achievement of the identified standards and benchmarks, 8. Create a digital reflection/presentation about the insights gained through this course and their service-learning/community service workday field experience, and 9. Create an online portfolio that showcases the unit outline and lessons implemented, including all necessary documents/resources that support each of the lessons, evidence of student learning, student work samples, assessment results/reflection pieces, and reflections.
<p>Activities to Achieve Objectives:</p>	<p>Day 1 (October 22, 2016): Indoor Field Day.</p> <p>This course will begin with a “behind-the-scenes” tour at Bishop Museum to see fossil bird bones of now extinct species once found in the coastal region of Kalaeloa as well as other interesting artifacts. Following the Bishop Museum, teachers will visit the Polynesian Voyaging</p>

Society’s headquarters at the Marine Education Training Center at Sand Island and learn from crew members about lessons in conservation learned from the Worldwide Voyage, ways to get involved with students, and how we can all contribute to mālama honua, caring for our island Earth. If Hikianalia is in dock, teachers may also get an on-board tour.

Day 2 (November 5, 2016): Outdoor Field Day.

On the second day, teachers will be able to visit the Kalaeloa unit of the Pearl Harbor National Wildlife Refuge managed by the U.S. Fish & Wildlife Service to learn about the anchialine pools, ‘ōpae ‘ula, and native plants that make up this unique ecosystem. Then they will go to the uplands at Camp Pālehua (former Camp Timberline) to learn about the watershed (ahupua‘a) and the impact of land activities on the coastline and ocean and will go over STEAM-based lesson plans and portfolio requirements. Teachers will discuss curriculum ideas and alignment to state and national standards and SLOs.

Day 3 (TBD by Teachers): Service-learning or community workday field experience related to protecting and preserving coastal and marine environments.

On the third day, teachers will volunteer with an organization working on coastal or marine conservation for at least three hours to better understand the work involved by professionals and gain hands-on experience (suggested organizations and sites will be provided). Teachers will prepare a digital presentation on this volunteer experience that will be used as a learning tool with other teachers and students.

Day 4 (TBD): Google Hangout

A final two hour “virtual” meeting (via Google Hangout or other technology) will be held so that participants will be able to reflect on their learning experiences, share about the curriculum they have developed, and discuss their field experience related to caring for the coastal and marine environment. Questions on the portfolio will be addressed.

Course Schedule:

Dates of the course:

- Day 1 - Saturday October 22, 2016 8:30am-4pm (at

(Dates/times/location)	<p>Bishop Museum & Marine Education Training Center, Sand Island)</p> <ul style="list-style-type: none"> ● Day 2 - Saturday November 5, 2016 8:30am-4pm (at Kalaeloa Unit of Pearl Harbor National Wildlife Refuge & Camp Pālehua) ● Day 3 - Date of choice for volunteer experience (at location of choice) ● Day 4- Google Hangout meeting (TBD) <p>*Lunch provided on both meeting dates.</p>
Requirements:	<ul style="list-style-type: none"> * Prior approval from teacher’s principal or supervising administrator is needed to use this course for reclassification (Form 201a) * 100% Attendance on all days for which you are registered. (No make-up session allowed) * Completed course application form including statement on why you would like to participate, what you hope to gain from this experience, and how this will help you in your teaching, is required. * The application and course information can be downloaded from the Mālama Learning Center website (www.malamalearningcenter.org). Alternatively, contact info@malamalearningcenter.org to have the materials sent via e-mail. * Applications must be received by Mālama Learning Center no later than October 5, 2016. Seats will be filled as applications are received, therefore early submission is encouraged. * Completed portfolio submitted to the Instructor by February 6, 2017.
Content of Learning Portfolio	<p>Participants will reflect continually throughout this class. First, they will examine their preconceived notions regarding environmental issues and green jobs in Hawai‘i and the value of field trips/service learning. They will consider how they may be able to incorporate lessons from this PD into their own curriculum. They will also reflect on the skills they feel they currently develop in their students and also what skills the green business community may deem as important.</p>

	<p>Using Google applications, participants will be responsible for developing an online portfolio that involves:</p> <ol style="list-style-type: none"> 1. Completing a Pre/Post Self Assessment, 2. Daily reflections of field experiences (indoor/outdoor) and Service Learning Project, 3. Creating a unit outline on “the Hawaiian coastal ecosystem and green collar jobs,” 4. Creating two STEAM and standards-based (Common Core State Standards, Next Generation Science Standards, Hawai‘i Content and Performance Standards III) lesson plans that are grounded in General Learner Outcomes based on what was learned in the course, 5. Creating a rubric to assess and reflect on their lessons, 6. Collecting student evidence on whether or not the two lessons were effective; student evidence will need proper and appropriate captions, and 7. Completing a final reflection covering the pedagogy used to connect classroom and field activities in the subjects of science and math, their overall experience in this class, and how it has impacted their teaching/professional objective or goals. <p>Portfolio is due on February 6, 2017</p>
<p>Cost of Course:</p>	<p>HSTA teachers: \$150/person. Make payment at: http://pd.hsta.org/</p> <p>*Mālama Learning Center will reimburse \$50 of the course fee to teachers who complete the course and portfolio requirements by the end of the course.</p> <p>Cost includes lunch on the two meeting dates, supplies, and transportation to field sites. Funding from the Disney Conservation Fund is subsidizing substantial expenses.</p>
<p>Fee Payment to:</p>	<p>Registration and payment at: http://pd.hsta.org/</p> <p>Actions Required: To officially register for this course, you must complete four steps:</p> <ol style="list-style-type: none"> 1) On PDE3, add yourself to the "wait list" for this section.

	<p>2) Go to http://pd.hsta.org/ and locate your course and section number</p> <p>3) Complete the online payment</p> <p>4) Visit http://malamalearningcenter.org/ and submit the application to Mālama Learning Center to participate in this course.</p> <p>Once you complete the online payment and have been approved by the Mālama Learning Center, HSTA will move you from the "wait list" to "registered" on PDE3. Refund/Cancellation Policy: If you need to cancel your registration for this course once you have paid, please remember that full refunds will only be given up to 14 calendar days PRIOR to the State Date of the Course. Read the full HSTA refund/cancellation policy here: http://pd.hsta.org/cancellation-refund-policy/</p>
<p>Payment Deadline:</p>	<p>Payment due by October 7, 2016. No refunds will be given after that date.</p>
<p>Other Instructions:</p>	<p>Participants must attend all sessions and complete all elements of the Learning Portfolio by February 6, 2017.</p> <p>Note: MLC reserves the right to cancel the class if there is not a minimum of 15 registrants. Maximum registration is 25.</p>