

LILIANA CAUGHMAN [LC]

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EDUCATION

Portland State University	
PhD in Earth, Environment, and Society	<i>in progress</i>
Evergreen State College	
Master of Environmental Studies	2017
University of California, Berkeley	
Bachelors of Arts, Physics	2014
Santa Barbara City College	
Associates of Science and Mathematics	2012

AWARDS & HONORS

Evergreen Graduate Sustainability Fellowship Recipient | NSF GRFP Honorable Mention | Emory Pyle Scholarship Award | UC Berkeley Shinnyo Fellow | Western State Conference Scholar Athlete Award | Laurie Converse Scholar: for female excellence in STEM | Gregory Scholarship Recipient | Phi Theta Kappa Honor Society | Captain: College Ethical Debate Team |

TEACHING EXPERIENCE

Northwest Indian College: Adjunct Faculty - Mathematics & Sciences (2015 – 2017)
South Puget Sound Community College: Graduate Teaching Assistant – Oceanography (Winter 2016)
Sustainability in Prisons Project: Educator – Topics in Sustainability & the Environment (2015 – 2017)
UC Berkeley – Center for E3S: Educator & Mentor - Topics in research skills & scientific communication (2012 – 2014)
Santa Barbara City College Achievement Zone: Student Athlete Tutor – Mathematics & Sciences (2010-2012)

PROFESSIONAL EXPERIENCE

Institute for Sustainable Solutions

Graduate Student Researcher **2017 – Present**

Work as a researcher for the ISS, the hub for sustainability at Portland State University. Supporting curriculum development, student leadership, and research that contribute to a just, prosperous, and vibrant future for our region and the world.

Nisqually Indian Tribe

Food Sovereignty Assessment Consultant **2016 – 2017**

Work with Nisqually Garden and Health Department to design and implement a food sovereignty assessment research project, in support of FSA grant. Design and create survey to be distributed throughout Nisqually community. Organize and analyze data and compile report. Create unique methods for dissemination appropriate for tribal community.

Northwest Indian College

Adjunct Faculty Mathematics & Science **2015 – 2017**

Teach adult learners in introductory level college mathematics and science courses on the Nisqually Reservation. Write curriculum, deliver courses, support student needs, and advise student research. Assist in locating research, grant, and professional development opportunities. Include culturally relevant components to each course to meet college mission.

Courses taught: Math 70 - Intro to Quantitative Reasoning, Math 98/99 - Pre-Algebra for College Students, Math 102 - College Algebra, Biology 111 - Finding things out in Life Sciences & Sustainability, Geology 101 - Intro to Earth Science & Local Geology

Sustainability in Prisons Project - Evergreen

Graduate Student Researcher & Program Coordinator **2015 – 2017**

Research duties include evaluating SPP education and conservation programs, collaborating on grant writing, presenting at conferences, publishing articles, etc. Generally working in a collaborative, engaged community of scientists, researchers, faculty, staff, and students. Education and outreach responsibilities include coordinating a monthly science and sustainability lecture series program at Washington State prisons.

DNV GL – Renewable Energy North America

Professional Engineer - Wind Energy

2014 – 2015

Assess the wind resource and expected energy output of proposed utility-scale wind farms across North America. Conduct long-term wind resource and energy production assessments. Conduct statistical uncertainty analyses. Analyze wind and other climatic data. Inspect sites and measurement equipment. Perform wind flow modeling. Assess site conditions for turbine suitability. Predict wind farm energy production. Write technical reports and communicate results to clients.

Center for Energy Efficient Electronics Sciences – NSF & UC Berkeley

Assistant Program Manager

2012 – 2014

Organize and manage a number of programs and operations for E3S, an NSF Science and Technology Center. Duties: Facilitate administrative and research projects; Teach research and analytical techniques; Assist with mentor training and student orientation; Conduct workshops and seminars; Organize research symposium; Assist Program Director; Coordinate NSF REU interns; Write NSF grant proposals; Network with university and corporate partners.

Scripps Institution of Oceanography - UC San Diego

Undergraduate Research Fellow

2013 – 2014

Working under Dr. Amato Evan on research in the field of Atmospheric Science and Climate Physics. Analyzed high-resolution WRF data models of the positive feedback system in the Sahel region of Africa. Conducted experiments to better understand the land-ocean-atmosphere variability and the phenomena of desertification in these regions. Research as part of the SIO SURF REU program, funded by NSF.

Physics Department - Santa Barbara City College

Student Assistant

2010-2012

Initiated innovative techniques for student success with the professor, integrated classroom learning with technology and the Internet. Ran social media site and website, increasing student accessibility. Assisted with creative labs and laboratory set up.

RELEVANT COURSEWORK AND SKILLS

Programs: LateX, Matlab, Excel, JMP Statistical Analysis, Powerpoint, Photoshop

Graduate Courses: Ecological & Social Sustainability, Research Design & Quantitative Methods, Energy Policy Analysis, Human Ecology, Climate Science, Biogeochemistry, Environmental Education, Atmospheric Physics, Research Colloquium in Earth and Planetary Science, Earthquake of the Week Committee, Shinnyo Fellow Leadership Course

Undergraduate Courses: Quantum Mechanics, Advanced Experimentation Lab, Basic Semiconductor Circuits Lab, Electro Dynamics, Linear Algebra, Differential Equations (with PDE), Programming for Engineers, Field Botany

Skills: Strong in interdisciplinary research, interpersonal communication, teaching, leadership, public speaking, presentations, writing, editing, setting and reaching goals, planning, accountability, and networking. **Analytical and creative minded.**

SELECTED PUBLICATIONS & PROFESSIONAL DEVELOPMENT

Chapter: State of the World Book – World Watch Institute

Co-authored a chapter for the 2017 book series that aims to identify the planet's most pressing environmental challenges. Focusing on sustainability education efforts in prisons and environmental justice. 2017

Journal Article: Diversity in STEM and Sustainability Education

Written paper currently in review to be published in special issue of *Interdisciplinary Environmental Review*. Analysis explores the relationship between science education for diverse populations and sustainability curriculum. 2017

Conference Presentation: Diversity in STEM and Sustainability Education

Just Sustainability Conference presentation was given on sustainability education program evaluations focusing on Northwest Indian College and the Sustainability in Prisons Project. 2016

Talk: Sustainability in Prisons Project Overview

Gave a lunchtime talk at the Washington State Department of Ecology that introduced the work of the Sustainability in Prisons Project and highlighted recent research on incarcerated student success. 2015

Panelist: Research Experiences for Undergraduates

Contributed as a speaker on a panel at an assembly of visiting researchers at UC Berkeley, answering questions about university level research and offering advice. 2014

Seminar Presentation: Glacial Earthquake Literature Review

Condensed and critiqued recent publications on contemporary research of glacial quaking in high latitude regions of the Earth for the Earthquake of the Week Committee at UC Berkeley Seismology lab. 2014

Seminar Presentation: Earthquake of the Week

Presenting current state of Earthquakes internationally based on USGS data. Focusing on analytical details of largest most recent earthquake in US 2014

Poster Session: "The Sahel Region of Africa: A Positive Feedback System"

Abstract accepted and poster presented at annual American Geophysical Union Conference. 2013

Panelist: Represented the female students of UC Berkeley Physics

Panel Participant and interviewee for NASA title IX compliance inquiry of Cal physics department. 2013

MEMBERSHIPS

American Geophysical Union | American Physical Society | Association for Women in Science