National Research Foundation
Lexi Taylor
Cal Poly Humboldt
#1 Harpst St. Arcata, 95521
May 10, 2024

Re: **Mitigation of Climate Change Impacts on Amazonian Tribes and Communities**
Dear National Research Foundation,

I am writing to express my interest in the opportunity to contribute to the mitigation of climate change impacts on Amazonian tribes and communities. With a focus on developing strategies to address vulnerabilities, promote resilience, and integrate traditional knowledge into mitigation efforts, I am enthusiastic in being a participant in receiving your grant for my proposal. My project aims to mitigate climate change impacts on Amazonian tribes and communities by assessing vulnerabilities, fostering community engagement, and integrating traditional knowledge into resilience-building efforts. The project will work closely with local tribes and communities to co-design and implement strategies for future mitigation efforts.

The Amazon rainforest is not only a global biodiversity hotspot, but also home to indigenous peoples whose livelihoods and cultural heritage are deeply intertwined with the ecosystem. Addressing the impacts of climate change in this region is essential to protecting both biodiversity and humans. As an Environmental Science student focusing on Energy and Climate, I bring skills and experiences that qualify me to do this project. Additionally, my commitment to social justice and environmental stewardship aligns closely with the goals of this project. For this project I am requesting **$272,200.29.**

I am qualified to conduct this project as I am studying Environmental Science and Management with a concentration in Energy and Climate. I have also visited the Amazon in multiple regions and have first handedly seen the current crisis and have heard the social implications that have resulted. I am passionate about this topic and believe it is important for the means of preserving biodiversity, protecting indigenous communities, and becoming resilient to climate change.

Thank you for your consideration Sincerely,

Lexi Taylor
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Lmt82@humboldt.edu
(916)-257-2548

ESM 435: SGP: Grant Proposal Cover Sheet

Applicant Name (PI) and Contact Information	**Lexi Taylor**		
	Address	**#1 Rossow St., Arcata, CA, 95521**	
	Phone	**(916)-257-2548**	
	Email	**Lmt82@humboldt.edu**	
Project Title	**Mitigation of Climate Change Impacts on Amazonian Tribes and Communities**		
Organization (where the PI is working)	**Name**	**Cal Poly Humboldt**	
	Address	**1 Harpst St., Arcata, CA, 95521**	
	Phone	**(707)-826-4402**	
	Email		
Amount Requested	**$272,200.29**	**Project Start Date**	**August 2024**
		Project Duration	**August 2025**

Abstract

The Amazon rainforest, known for its rich biodiversity and cultural significance, faces unprecedented threats from climate change. This proposal addresses the urgent need to mitigate climate change impacts on Amazonian tribes and communities. The loss of biodiversity in the Amazon, exacerbated by anthropogenic causes, poses risks not only to ecological systems but also to indigenous inhabitants whose livelihoods and cultural practices are deeply intertwined with the rainforest. The proposed project aims to assess vulnerabilities faced by Amazonian communities due to climate change and develop strategies for mitigation and resilience.

The project aims to mitigate climate change impacts on Amazonian tribes and communities, assess vulnerabilities faced by Amazonian communities due to climate change, collaborate with the tribes directly with their participation and engagement while listening to and addressing their concerns, put together lessons/workshops/classes for participants in project to learn traditional knowledge practices to apply in mitigation and resilience measures, apply and build infrastructure reliance adaptations plans, and to apply traditional knowledge and practices in designing and/or adapting current infrastructures to be more resilient to climate change impacts.

Building on existing research and initiatives, the project emphasizes community engagement and the integration of traditional knowledge and practice into assessment and mitigation efforts. By collaborating directly with local tribes, the project seeks to empower communities to adapt to climate change while preserving their cultural heritage. This project will be done by conducting vulnerability assessments, projecting future impacts, facilitating knowledge exchange through lessons and workshops, and by other means. The proposed project has a duration of 12 months and requests $272,200.29.

Through this interdisciplinary approach, the project aims to advance current mitigation attempts, strengthen community resilience, and contribute to environmental justice in the Amazonian region. The proposed research is timely and essential in addressing the urgent threats posed by climate change to vulnerable communities and ecosystems in the Amazon rainforest.

The PI is qualified to conduct this project as they are a student at Cal Poly Humboldt studying Environmental Science and Management with a concentration in Energy and Climate. The PI has a special connection to and knowledge of the Amazon rainforest as they have visited multiple regions and have first handedly seen the current crisis and social implications.

The National Research Foundation, who would be sponsoring the PI, is an organization who values solutions to modern challenges on both a national and global scale. They prioritize academic research that works to improve the environment from climate change implications.

Mitigation of Climate Change Impacts on Amazonian Tribes and Communities

Statement of Problem

Amazonian regions contain a large percentage of the planet's biodiversity. Over 3 million species of plants, trees, animals, and amphibians make up the Amazon across nine countries (Green Peace, 2020). The Amazon has historically been a hotspot for biodiversity, however, due to the increase in climate change, there is a huge risk in losing all the Amazon has to offer. Around the world anthropogenic activities are contributing to climate change, leading to destruction, alterations, and transformation of ecosystems and our planet. With a loss in biodiversity, a mass extinction of animals and other species will result, species that not may only be central to the functions of the environment, but also that have a right to exist (Peixoto et al., 2020).

Climate change also threatens indigenous groups that live in these regions. A rapid change in climate can impact food security, public health, water resources, and cultural/traditional practices. As local tribes and communities in these areas typically have social and economic disadvantages, their sensitivity to these issues is heightened (Hofmeijer et al., 2013). The current infrastructure within Amazonian tribes and communities are not resilient to the impacts of climate change, threatening the livelihood of those living there.

Specific Aims

- Mitigate climate change impacts on Amazonian tribes and communities
- Assess vulnerabilities faced by Amazonian tribes and communities due to climate change
- Collaborate with tribes directly with their participation and engagement, while listening to and addressing their concerns
- Put together lessons, workshops, and classes for participants in project to learn traditional knowledge practices to apply in mitigation and resilience measures
- Apply and build infrastructure reliance adaptations plans
- Apply traditional knowledge/practices in designing and and/or adapting current infrastructures to be more resilient to climate change impacts

Literature Review

Historically, decades of deforestation, invasions on indigenous lands, and the exploitation of natural resources have exacerbated the effects of climate change. Previous efforts in research have primarily focused on conservation initiatives and sustainable development, aimed for mitigating impacts of climate change on Amazonian tribes. Results in these areas have been mixed, with some initiatives showing positive outcomes in terms of biodiversity conservation and community resilience, while others have faced challenges in implementation and sustainability. Considering the impeding and rapidly increase in the change of climate on this planet, mitigation measures both extreme and minimal are being considered for counteraction. Assessment of ranging vulnerabilities- social, infrastructural, public policies,

etc. (Menezes, et al., 2018) have been in the past evaluated separately, in contradiction to as a whole. Research into how climate change impacts are geographical and to what extent regions are to be the most effected have been researched and quantified (Marengo et al., 2012).

Research on conservation initiatives have concentrated on the interactions between human actions and environmental conservation (Venturini et al., 2023). Research has found for there to be an effectiveness in protected areas and community based-conservation initiatives. Protected areas, including national parks, reserves, and indigenous territories have played a vital role in conserving the Amazon rainforest, and have preserved habitat quality, prevented deforestation, and maintained species diversity (Venturini et.al, 2023). Additionally, there have been studies on community based-conservation initiatives and how they have built the bridge between conservation efforts and social and cultural factors. A study in Brazil on the Kayapo indigenous group shows the effectiveness of an ecological research program that has used the power of interpersonal relationships in conservation efforts (Zanotti 2014). This ecological research program requires both the indigenous tribe to be a part of it, as well as do graduate students from around the world come to study and contribute.

Sustainable development in the Amazon region in the form of community-based forest management initiatives empower local communities of the Amazon while conserving its biodiversity. In Brazil the Extractive Reserves (Reservas Extravistas) are a notable example of community-based forest management. These reserves are designated areas within the Amazon where local communities have legal rights to harvest non-timber forest products, while adhering to sustainable harvesting practices and conservation rules (Maciel 2018). Research on the Extractive Reserves have shown them to contribute to forest conservation by incentivizing sustainable resource management practices and reducing deforestation rates compare to unprotected areas (Wadt 2008). Through this, the Extractive Reserves contribute to environmental conservation and socioeconomic development.

Studies have identified challenges in scaling up community-based forest management initiatives in the Amazon, including issues related to governance and market access. In the Brazilian Amazon region there is the Bolsa Floresta program, which has worked to overcome these challenges, implemented by the Amazonas Sustainable Foundation (FAS). The Bolsa Floresta program addresses the issue of governance by establishing governance structures that involve local communities in decision-making processes related to land management, resource use, and revenue distribution (Silva 2021). Market access is another challenge that community-based forest management initiatives face in the Amazon region. The Bolsa Floresta program addresses this issue by facilitating access to markets for sustainably harvested forest products. The program also links local and international buyers to these products to help communities generate income from non-timber forest products, while maintaining the ecological integrity of the forest.

Research on mitigating climate change impacts on the Amazon region are critical for developing effective strategies to preserve this ecosystem and its biodiversity. These efforts have encompassed a wide range of research including climate change science, ecology, and conservation biology. One area of research focuses on understanding what causes climate change and how that impacts the Amazon rainforest. Studies use a combination of field observations, remote sensing data, and climate models to assess changes in temperature, precipitation patterns, and extreme weather events in the region (Soares-Filho 2010). By quantifying the impacts of climate change, researchers can identify vulnerabilities relative to the region, and base mitigation efforts and adaptations on this. Another key focus of research has been on the role of forests in sequestering carbon dioxide from the atmosphere. Studies have researched the approximate carbon storage capacity of Amazonian forests and have evaluated the effectiveness of conservation efforts (Bottazzi 2014). By quantifying how much carbon dioxide can be taken up by Amazonian forests, researchers can evaluate their current conservation and restoration implementations, and analyze how to best mitigate climate

change. Projects like the Sustainable Amazonian Agroforestry Systems (SAAS) project in the Peruvian Amazon have implemented conservation efforts with mitigating the impacts of climate change. They have done this by promoting sustainable land management practices and enhancing carbon sequestration in the Amazon region. To maximize land productivity while conserving biodiversity, some practices that have been implemented include alley cropping, silvopastoral systems, and shade-grown cacao or coffee (Netuzhilin 2009).

Review Criteria

The proposed project will allow more research and development into ecological restoration, mitigation measures, and environmental justice, while working with local community members and traditional knowledge. It is aimed to advance current mitigation attempts in particular areas, and to strengthen collaborative efforts with researchers and local communities, while focusing on the inclusion of indigenous knowledge. Vulnerabilities faced by communities and the project environment are aimed to be assessed in a way that will enhance scientific data interpretation and projections, specifically regarding climate change effects in both the near and distant futures. With this will there be long-term monitoring and evaluation, with constant assessment. By working to reduce impacts of climate change in disadvantaged communities with a consideration for traditional knowledge and practices, engagement with local communities is essential, and all feedback is to be considered for inclusion. This research is crucial now more than ever in attempting to reduce climate change impacts on disadvantaged communities by climate change and preserve the environmental significance of the Amazon rainforest.

Summary

The proposed project highlights the critical importance of addressing the imminent threat to the Amazon rainforest and its biodiversity due to climate change. With over 3 million species at risk of extinction, including those vital to environmental functioning, urgent action is required. Impacts extend beyond just ecological concerns, but also pose significant risks to indigenous tribes and communities whose livelihoods, food security, and cultural practices are deeply intertwined with the rainforest. Existing infrastructure in these communities are ill-equipped to withstand the growing challenges posed by climate change, heightening their susceptibility to vulnerabilities.

Current research has shown that there has been a focus on conservation initiatives, sustainable development, and climate change mitigation efforts. Studies have demonstrated the effectiveness of these initiatives in terms of biodiversity and community resilience, although challenges in implementation persist.

The proposed project aims to mitigate climate change impacts on Amazonian tribes and communities by assessing their vulnerabilities and collaborating directly with them to develop strategies. By integrating traditional knowledge and practices into mitigation and resilience efforts, the project seeks to decrease the effects of climate change. Through research, community engagement, and knowledge exchange, the project aims to not only protect vulnerable communities but also preserve the Amazon rainforest for generations to come.

Methods

To carry out the proposed project, a small team of related field researchers including experts or students in climate change, engineering, native studies, biology, botany, will be needed in addition to a translator will be needed. The team will map out a plan according to the timeline to be efficient and make the most out of the allocated time. The team will fly out to the region where the worked with community lives and will stay on and off in relative areas for approximately one year. There will also be post-assessments and follow ups for years after concluding the project.

The project will entail conducting comprehensive vulnerability assessments to identify and understand the specific challenges faced by Amazonian communities in the wake of climate change. These assessments will delve into various factors, including the impacts on food security, public health, water resources, and cultural practices. Projection studies will complement these assessments by projecting future climate change impacts, providing valuable insights into the trajectory of environmental changes and mitigation efforts. In addition to vulnerability assessments and projection studies will other methods be included. These methods will include Participatory Rural Appraisal (PRA), community surveys, focus group discussions, interviews, Traditional Ecological Knowledge workshops (TEK), the use of remote sensing and GIS, and climate modeling analysis.

PRA techniques, such as community mapping, seasonal calendars, and resource mapping, will be used to engage the local communities in identifying climate-related vulnerabilities. Seasonal calendars are a valuable research tool used to document seasonal patterns, which can also be used to identify extreme weathering events. PRA allows for researchers to gain insights into community perspectives, opinions, knowledge, and priorities (Jensen 2001). This will allow for a wider perspective and understanding of climate change impacts, as well would it engage the community and make sure their voices are heard.

Frequent surveys will be conducted to collect data from the community on the impacts of climate change, including changes in income, livelihood, and access to resources. This is important information to gather, as it will give perspectives on the communities' livelihoods, experiences, perceptions, and priorities. This will also allow for community engagement. The surveys would be designed to cover topics related to climate change vulnerabilities, adaptation and mitigation efforts, priorities, and traditional practices.

Focus group discussions will be organized with community members frequently throughout the entire project to explore and discuss perceptions, experiences, and thoughts related to climate change impacts. These discussions will provide a space for participates to share their knowledge, concerns, and thoughts on adaptation strategies. Focus group discussions are effective in bringing together communities, date collection, and exploration (Garg 2018).

Structured interviews, both formal and informal, will be conducted throughout the project with local leaders, elders, and practitioners to gather insights into traditional knowledge systems, adaptive practices, and community resilience strategies. These interviews will provide qualitative data, offering a community specific perspective on vulnerability and resilience. Interviews are effective research tools as they allow for valuable insights and personal connection (Njegovan 2017).

Traditional Ecological Knowledge workshops will be implemented to involve community members in sharing their traditional ecological knowledge related to local ecosystems, biodiversity, and natural resource management. Participants may discuss traditional practices for sustainable agriculture, hunting, fishing, medicinal plant use, and conservation techniques. Workshops may also include plant identification, and other identifications by going out into the forest. The use of TEK is effective as it offers a holistic understanding locally/regionally relevant.

Indigenous peoples have developed intricate knowledge over generations, including their observations, experiences, and traditions (Meighan 2022). This will also be useful in combination of Western knowledge that the research team will bring. Having TEK workshops will allow for collaboration between the two ways of thinking. With these workshops will there be general ones as well as more specific ones including topics of medicinal plants, cultural heritage, indigenous language, and agricultural practices.

Remote sensing and GIS techniques will be used to analyze spatial patterns of environmental change and variability, such as deforestation, land use change, and local habitats. Satellite imagery and spatial analysis will provide insights into landscape trends due to climate change and their implications for local communities.

Climate modeling analysis will be utilized to project future climate change impacts on this Amazonian region. Integrated assessments models and climate projects will help quantify and locate climate-related impacts and risks, which will be used in adaptation and mitigation efforts.

For the second part of the project, the team will focus on community collaboration and knowledge exchange. There will be lessons, workshops, and classes held for participants in this project to learn traditional knowledge practices used by the local tribes being worked with to integrate into mitigation efforts. These practices will help in brainstorm for future design in current infrastructures to be more reliable to climate change impacts. It is important in this project that there is collaboration with the community directly, and that all assessments and mitigation measures are done with their approval, as well as their participation and engagement.

With all the data obtained and collaboration efforts, mitigation strategies for the impacts of climate change in these indigenous communities can encompass a combination of indigenous practices and Western science. Mitigation techniques that can be discussed and further developed may include construction/reconstruction of critical infrastructures, implementation of green techniques, ecosystem restoration, agroforestry and sustainable agriculture, and renewable energy deployment.

Timeline:

Month 1 (Project Preparation and Planning)	• Assemble project team of experts/students in climate change, engineering, native studies, biology, botany, and a translator • Conduct preliminary research on the study area and indigenous communities • Secure necessary permits for fieldwork
Month 2-4 (Community Engagement and Baseline Data Collection)	• Travel to the Amazonian region and establish rapport with local communities • Conduct initial meeting with community leaders to form connections • Begin baseline data collection, including PRA activities such as community mapping, seasonal calendars, and resource mapping • Initiate and distribute community surveys to collect data on climate

	change impacts, livelihoods, and traditional practices
Month 5-6 (Focus Group Discussions and Interviews)	• Organize focus group discussion with community members to explore perceptions, experiences, and thoughts related to climate change impacts • Conduct both formal and informal interviews with local leaders, elders, and practitioners to gather insights into traditional knowledge systems and adaptative practices • Continue data collection and refine survey questions based on initial findings
Month 7-8 (Traditional Ecological Knowledge Workshops and Remote Sensing Analysis)	• Facilitate traditional ecological knowledge workshops to involve community members in sharing their traditional knowledge related to ecosystems and natural resource management • Use remote sensing and GIS techniques to analyze spatial patterns of environmental change, such as deforestation and land use change
Month 9-10 (Climate Modeling Analysis and Projection Studies)	• Conduct climate modeling analysis to project future climate change impacts on the Amazonian region • Integrate climate projections with vulnerability assessments and traditional knowledge to identify adaptation and mitigation strategies • Compile and analyze data from baseline assessments and refine projects based on community input
Month 11-12	• Organize lessons, workshops, and classes for community members and project team to learn and listen to traditional knowledge practices and integrate them into mitigation efforts • Collaborate with community members to brainstorm and design infrastructure resilience measures • Finalize project reports and presentations summarizing findings and recommendations • Conduct community feedback sessions and finalize post assessment plans for future follow up

PROPOSAL TITLE: MITIGATION OF CLIMATE CHANGE IMPACTS ON AMAZONIAN TRIBES AND COMMUNITIES
PRINCIPAL INVESTIGATOR: LEXI TAYLOR

BUDGET LINE ITEMS			**FUNDS REQUESTED**
A. Salaries	**Salary (Rate)**	**Total Salary (per year)**	
PI	$20/hr	$41,600.00	[redacted]
Co-PI(s)			[redacted]
Other personnel	$15.50/hr; $21.003/hr	$8,060.00; $43,742.40	[redacted]
A. TOTAL SALARIES			$125,642.40
B. Fringe Benefits (15% of total salary)			$18.846.36
C. Equipment (Only for items that are **individually** over $500)			$6,770.94
D. Travel	Domestic		[redacted]
	Foreign	$82,998.40	[redacted]
	D. TOTAL TRAVEL COSTS		$82,998.40
E. Other Direct Costs	Supplies	$437.80	[redacted]
	Equipment (<$500 each)		[redacted]
	Publication	$2,000.00	[redacted]
	Consultants		[redacted]
	Computers		[redacted]
	Other		[redacted]
	E. TOTAL OTHER DIRECT COSTS		$2,437.80
F. TOTAL DIRECT COSTS (ADD LINES A THROUGH E)			**$236,695.90**
G. INDIRECT COSTS (USE 15% RATE FOR TOTAL ON LINE F)			**$35,604.39**
H. TOTAL (DIRECT AND INDIRECT COSTS: LINES F + G)			**$272,200.29**
I. AMOUNT REQUESTED			**$272,200.29**
J. Other Support (other grants, matching funds or in-kind support)			

Budget Justification

Salaries and Fringe Benefits (Lines A and B)

This project will require the PI to work 40 hours a week for 52 weeks at $20/hr, for a total of $41,600.00 (40 hrs/week x 52 weeks x $20/hr = $41,600.00). Additionally one student intern in each of the following disciplines: climate change, engineering, native studies, biology, and botany will be hired to work for 20 hours a week for 26 weeks at $15.50/hr, for a total of $40,300.00 (5 student interns x 20 hrs/week x 26 weeks x $15.50/hr = $40,300.00). A translator will also be hired for the full duration of the project of 52 weeks and will work 40 hours a week. A Spanish to/from English translator's salary ranges between $27,000 and $68,000, for an average of $21.03/hr, for a total of $43,742.40 (40 hrs/week x 52 weeks x $21.03/hr = $43,742.40). For this project, the total salaries amount to $125,642.40 ($41,600.00 PI's salary + $40,300.00 student intern's salary (5 students) + $43,742.40 translator's salary = $125,642.40), and the fringe benefits at a total of $18,846.36 ($125,642.40 total salaries x 0.15 = $18,846.36).

Large Equipment (Line C)

This project will require a Leica C235 Controller for geospatial and field analysis at $2,250.00. The Leica C235 Controller is very reliable and accurate in off grid geospatial and field analysis in somewhere like the Amazon rainforest. In addition, 6 Lenovo Yoga 6 Laptops (each at $503.49 at Walmart) are needed for the PI and the 5 student interns. These laptops are optimal as they have an HD capacity of 512 GB and a battery life of up to 17 hours which is useful for how often they will be used to track and collect data and create spreadsheet documents. A Makeflyeasy Striver (VTOL Version) Aerial Survey Carrier Fixed Wing UAV will also be needed at $1,500.00 at RC-Wing. A drone like this for aerial surveys will be useful to assess regions that will be hard to get to on foot. Together all large equipment will cost $6,770.94 ($2,250.00 Leica C235 Controller + $503.49 x 6 Lenovo Yoga 6 Laptops + $1,500.00 Makeflyeasy Striver = $6,770.94).

Travel Costs (Line D)

This project will require project team members to travel to Iquitos, Peru. The distance from Arcata, California to Iquitos, Peru is 4,439 miles, so roundtrip there is 8,878 miles. There will be one round trip to the field site for each team member. As IRS mileage allowance is $0.40 per mile, the total cost for travelling to and from Arcata and the field site will be $24,858.40 (4,439 miles one way x 2 = 8,878 miles roundtrip x $0.40/mile x 7 team members = $24,858.40). In addition to travel to the field site and back to Arcata, living expenses must be included. For a nature lodge in Iquitos with 7 bedrooms, the cost is $4,845/month (Peru for Less), so the total cost for a year of living would be $58,140 ($4,845/month x 12 months = $58,140). Together all travel costs will cost $82,998.40 ($24,858.40 flight cost + $58,140 living costs = $82,998.40).

Other Direct Costs (Line E)

Team members will need one printer ($79.99 at Staples), 8.5x11 copy paper ($19.99 at Staples), an ink cartridge ($19.95 on Amazon), a 48 pack of journals ($22.99 on Amazon), 2 60 pack of black inked pens ($7.99 each at Staples), 7 nonmagnetic dry erase white boards ($37.00 each at Uline), and a 72 pack of black dry erase markers ($19.99 on Amazon). Other direct costs include a $2,000 publishing fee to publish the research paper in the National

Geographic magazine. Together all other direct costs will cost $2,437.80 ($79.99 printer + $19.99 copy paper + $19.95 ink cartridge + $22.99 journals + $7.99 x 2 pens+ $37.00 x 2 white boards + $19.99 markers + $2,000 publishing fee = $2,437.80).

Total Indirect and Direct Costs (Line A-Line E)

Direct costs (Line A-Line E) total out to $236,695.90 ($125,642.40 total salaries + $18,846.36 fringe benefits + $6,770.94 large equipment + $82,998.40 travel expenses + $2,437.80 other direct costs. The indirect costs total out to $35,604.39 ($236,695.90 x 0.15 = $35,604.39). So the total of direct and indirect costs is $272,200.29 ($236,695.90 direct costs + $35,604.39 indirect costs).

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Lexi Taylor

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95521 lexitaylor3876@gmail.com

EDUCATION

California State Polytechnic University, Humboldt, CA

- *Department of Environmental Science:* Candidate for Bachelor of Science in Environmental Science with a concentration in Energy and Climate
- *Cumulative GPA:* 3.82/4.00
- Expected Graduation: May 2025

Sierra Community College, Rocklin, CA August 2021 – May 2023

- *Department of Environmental Studies*
- *Cumulative GPA:* 3.47/4.00

Pertinent Coursework

- Environmental Impact Assessment
- Energy Economics and Climate Change Policy
- Grant Proposal Writing
- Environmental Law and Regulation
- Introduction to Geospatial Concepts
- Earth Systems Chemistry
- Oceans and Climate
- Environmental Communications

Other Academic Experiences

Offshore Wind NEPA Environmental Impact Assessment Spring 2024
Cal Poly Humboldt, Arcata, CA
Impact report analysis on the surrounding environments on where the new Offshore Wind Project plans to be located in Samoa, CA. Impacts including biological resources, hydrology and water quality, socioeconomic effects, etc.

Plastics Reduction Internship August- December 2023
Department of Sustainability, Cal Poly Humboldt, Arcata, CA
Led the university in reducing waste, adopting sustainable alternatives, and encouraging environmentally conscious values.

Other Relevant Experiences

Hostal Galapagos Volunteer, Galapagos Islands, Ecuador June 2023
General maintenance and care for surrounding beach areas and nature in addition to hostel bar. Content creation for hostel's Instagram page promoting environmental sustainability and activism in both English and Spanish.

Blink Spanish Immersion School Student, Medellin, Colombia June 2022
Student in an intensive Spanish immersion program.

SKILLS & INTERESTS

Technical: MS Office, JAVA, Python, C/C+; Versatile; Critical thinker
Language: Fluent in English; Learning Spanish
Interests: Environment |Travel | Culture | Education

REFERENCES

Professor Jennifer Kalt
Environmental Impact Assessment Lecturer
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Professor Matthew Hurst
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