





# **ENV 400: Current Global Environmental Issues**

Course Syllabus Spring 2025

The environment is everything that isn't me. Albert Einstein

Beyond our genetic coding, we need to go to the earth, as the source whence we came, and ask for its guidance, for the earth carries the psychic structure as well as the physical form of every living being upon the planet. Our confusion is not only with ourselves; it concerns also our role in the planetary community.

Thomas Berry

I think the environment should be put in the category of our national security. Defense of our resources is just as important as defense abroad. Otherwise what is there to defend? Robert Redford

If we do not permit the earth to produce beauty and joy, it will in the end not produce food, either.

Joseph Wood Krutch

When we try to pick out anything by itself, we find it hitched to everything else in the universe.

John Muir

You may be able to fool the voters, but not the atmosphere. Donella Meadows



School & Dept.: School of Natural Sciences and Mathematics; Environmental Programs

Meeting Days:MWFMeeting Hours:11:30-12:20Location:WSC 120

Instructor: Dr. Gail Grabowsky
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**Phone:** 735-4834 (ext. 834); cell 808-387-9319 (you may text anytime!)

**Office Location:** Wesselkamper Science Center, room 105

**Office hours:** Tu/Th 2:00-5:30 PM; WF 3:00-5:30 PM; Or by appointment (Zoom or in person)

**Course Google Drive Folder: HERE** 

## **University Course Catalog Description:**

This reading-intensive course surveys diverse publications explaining the major environmental threats facing the world today as well as the potential and actual sustainable solutions for each. The aim of the course is to have students become aware of the material as well as socioeconomic causes of environmental degradation, the detrimental impacts of environmental degradation on humans and the potential sustainable solutions to the greatest environmental challenges.

## **Course Overview:**

This interdisciplinary course surveys the major environmental challenges facing the planet-at-large and those issues that are particularly poignant to island peoples today. Students will learn, discuss and debate the major proximal cause(s) and potential short-term and long-term consequences of each issue as far as they are currently known. Students will also discover the ethical components of and tools and techniques involved in environmental and sustainability problem-solving. Issues covered will include: population growth, consumerism, climate change, food security, fresh water consumption & pollution, air pollution, waste management, species extinction, habitat depletion, overharvesting of ocean resources, urban sprawl/development, loss of indigenous knowledge and more.

## **General Purpose of the Course:**

This course was designed with the general goal of having us come to understand and be able to: explain, dialogue, intelligently argue about, problem-solve and see the connections between the major environmental issues facing the people and ecosystems of planet Earth today. The course aims to enable students to know, act, and better live in our current world. Who really knows what you might do with what you learn and do in this course, but I bet it will change your life and the lives of others through you!

## **Marianist Values:**

This class represents one component of your education at Chaminade University of Honolulu. An education in the Marianist Tradition in marked by five principles and you should take every opportunity possible to reflect upon the role of these characteristics in your education and development:

- 1. Education for formation in faith
- 2. Provide an integral, quality education
- 3. Educate in family spirit
- 4. Educate for service, justice and peace
- 5. Educate for adaptation and change

## **Native Hawaiian Values:**

Education is an integral value in both Marianist and Native Hawaiian culture. Both recognize the transformative effect of a well-rounded, value-centered education on society, particularly in seeking justice for the marginalized, the forgotten, and the oppressed, always with an eye toward God (Ke Akua). This is reflected in the 'Olelo No'eau (Hawaiian proverbs) and Marianist core beliefs:

1. Educate for Formation in Faith (Mana) E ola au i ke akua ('Ōlelo No'eau 364) May I live by God

- 2. Provide an Integral, Quality Education (Na'auao) Lawe i ka ma'alea a kū'ono'ono ('Ōlelo No'eau 1957) Acquire skill and make it deep
- 3. Educate in Family Spirit ('Ohana) 'Ike aku, 'ike mai, kōkua aku kōkua mai; pela iho la ka nohana 'ohana ('Ōlelo No'eau 1200) Recognize others, be recognized, help others, be helped; such is a family relationship
- 4. Educate for Service, Justice and Peace (Aloha) Ka lama kū o ka no'eau ('Ōlelo No'eau 1430) Education is the standing torch of wisdom
- 5. Educate for Adaptation and Change (Aina) 'A'ohe pau ka 'ike i ka hālau ho'okahi ('Ōlelo No'eau 203) All knowledge is not taught in the same school

## What this course counts for:

This course is required for Environmental Studies and Environmental Science majors and minors. It also counts for one of your Values Requirements: Education for Adaptation and Change OR Education for Service, Justice and Peace in our General Education Program. If you are an Environmental major the table below shows you how this course helps you achieve the Program Learning Outcomes for Environmental Studies and Environmental Science and at what level of proficiency. Some of the Learning Outcomes are shared between Programs but not all!

## Upon completion of the undergraduate B.S. program in Environmental Studies, students will be able to:

<b>Environmental Studies Program Learning Outcomes</b>	
Authenticate their commitment to service, justice and peace through experiential project-	
based activities that enhance the condition of the integral ecology, care for creation and value	
all voices.	
Apply analytical methods and skills from multiple disciplines to environmental problems.	
Participate in, plan and execute environmental change-making strategies that employ scientific, political, socio-cultural, artistic, educational and economic skills and knowledge.	
Design and describe new futures and ideas that solve environmental problems and foster sustainability.	
Pursue throughout their education the ever-changing knowledge and skills that prepare them for the adaptation and change essential to environmental problem solving.	

## Upon completion of the undergraduate B.S. program in Environmental Science, students will be able to:

<b>Environmental Science Program Learning Outcomes</b>	<b>ENV 400</b>
Authenticate their commitment to service, justice and peace through experiential project-based activities that enhance the condition of the integral ecology, care for creation and value all voices.	
Apply scientific reasoning and methodology to environmental problems.	
Identify the major physical, chemical and biological components, interactions and cycles of earth systems and ecosystems.	
Propose, design and participate in scientific research projects that document, describe and/or help solve environmental problems and foster sustainability.	
Pursue throughout their education the ever-changing knowledge and skills that prepare them for the adaptation and change essential to environmental problem solving.	
Introduces the concept	
Develops the concept	
Gains mastery of the concept	

## **Student Learning Outcomes for this particular course:**

Students taking this course will:

- 1. Summarize the major global and Pacific Island environmental issues
- 2. Integrate the United Nations Sustainable Development Goals into their solution strategies for each issue
- 3. Differentiate the causal sequence of events that is believed to have resulted in/created each of the global issues discussed in class
- 4. Inventory the general mechanism(s) by which each of the issues discussed is detrimental to people and/or ecosystems
- 5. Formulate and recite one or more potential solutions to each environmental issue and describe the pros and cons of each from a variety of stakeholder perspectives
- 6. Recognize the role of diverse environmental ethics in contributing to the creation of and solutions to global environmental issues
- 7. Effectively argue for particular solutions to environmental issues
- 8. Recognize their hands-on role in environmental issues of public concern
- 9. Discuss how service-learning embodies our Pacific island and Marianist values

### **Texts:**

Required: You should purchase these in the bookstore.

Myers, Norman & Scott E. Spoolman. *Environmental Issues and Solutions: A Modular Approach*. Brooks/Cole Cengage Learning. 2014. [9780538735605]

<u>Additional Selected Readings List</u>: Many additional readings will be shared with you by Dr. Gail and by YOU for your Issue Exposes in the <u>course Google Drive Folder</u>!

One of the MOST IMPORTANT INTERACTIVE DOCUMENTS FOR THIS COURSE is the "Dayby-Day Course Assignment Sheet" <u>HERE</u> in Drive (there is also a link to it in Canvas). There will also be a course Canvas folder – I use it to shoot you out into Google Drive! It also houses links to major documents and our Service Learning folder <u>HERE</u> and any discussions I assign to you.

## **Course Requirements:**

Your grade in this course will be based on the following. Each of the items/activities listed below will be described to you in writing or orally in class via an assignment description/rubric. The due dates for each activity (or its parts) are indicated on the Schedule portion of this syllabus.

- One midterm and one final exam based on all readings, videos, discussions, etc. (multiple choice questions written by Dr. Gail and YOU ALL ©)
- **Service-Learning** participation in Chaminade's *Pono Popoki Project* AND/OR working in the campus *Mala* AND/OR counting campus Manu-O-Ku for the *Hui Manu-O-Ku* AND/OR *Shepherding a Bill(s)* through the State Legislature AND/OR an activity of your own choosing that is related to the course and helps us achieve sustainability in some way.
- **Issue Exposés:** You lead class (number of times determined by class size)
- Creation of integrative **Mind Maps** illustrating causes, consequences and solutions for particular global issues

## **Course Grading:**

The proportion that each of the above contributes to your grade in this course is as follows:

	100%
Mind Maps	10%
Issue Exposé & Discussion Leading	30%
Service Learning: 15 hours	30%
Midterm & Final Exam	30% (15% each)

The points that each of the above contributes to your grade in this course is as follows:

Midterm & Final Exam	300
Service Learning: 15 hours	300
Issue Exposé & Discussion Leading	300
Mind Maps	100
•	1000

Midterm & Final Exam: Covers the readings and class discussions. Multiple choice. Date and time of each exam are noted in the Schedule portion of this syllabus. You are required to write 15 multiple choice questions as a part of your Issue Exposés and share them with the class in a Google Drive Doc in the Folder entitled "Expose Questions Repository" HERE. The vast majority of questions on each exam will be taken from your collective questions. So these questions will be the best study tool for your exams! The readings, presentations, Mind Maps and discussion notes will be your best content study aids for the exams.

**Service Learning Options:** You will need to participate in 15 hours of service-learning work throughout the semester that aims to help Hawaii and the Pacific islands achieve the <u>United Nations Sustainable Development Goals</u> (SDG) and are therefore officially tied to Chaminade's United Nations <u>CIFAL Honolulu</u> training center. This year you have FIVE opportunities to choose from. You can commit to just one of them or participate in all of them!



- 1. Helping out with **Chaminade's** *Pono Popoki Project*. <u>HERE</u> is the link to the Project Google Drive folder! Your contact person is Dr. Gail.
- 2. Helping out with our **Campus Mala Projects** = Helping out Community Engagement Specialist Mitch Steffey: mitchell.steffey@chaminade.edu by helping out with composting, gardening and native plant outplaning.



- 3. Helping count Manu-O-Ku (White Terns, *Gygus alba*) on campus. We do this at night when we can see these beautiful white birds, that are very important in Hawaiian culture, roosting in our trees. We are led by Rich Downs, Coordinator, Hui Manu o Ku and a Biologist for Pacific Rim Conservation.
- 4. Shepherding a Hawaii State Bill: There are MANY bills proposed by the Hawaii State Legislators that relate to this class! There are bills about water pollution, renewable energy, land use, endangered species, habitat protection, climate change, agriculture, environmental justice, ETC! Also, the legislature is using Zoom now! SO it is much easier to testify and follow a bill. You only have to follow ONE bill and testify in person or in writing along the way. A great place for you to start to look for a bill is here: <a href="https://www.capitol.hawaii.gov/">https://www.capitol.hawaii.gov/</a>
- **5.** An activity of your own choosing that MUST synergize with our course content: Make sure to let Dr. Gail know before about this activity. It will need to be approved first.

<u>HERE</u> is the Course Service Learning folder that contains everything you need to sign up for service opportunities, record your service and upload photographs of you doing service!

Throughout the semester you will need to keep track of your service hours using the Apply for Service Points form that comes from Chaminade's <u>Service Learning & Community Engagement Office</u> which is directed by Mitch Steffey.

**Global Environmental Issue Exposés:** In the early days of this course I led all the discussions for each of the global environmental issues that we covered, but then I learned that it is much more

interesting and a better teaching tool if you, too, lead the class ②. You are juniors and seniors now and up to the task! I'll explain the grading parameters/rubric for this assignment in class. You will choose your issue(s) the first week of class. You will also decide which article(s)/chapters the class will read. Readings may come from the textbooks for the class, or they may come from your own sources. You must have at least 10 pages of (text) reading for your Issue Exposés and you must let the class know on the Google Drive "Day to Day Assignment Sheet" HERE which article(s) they are to read three days before the date you lead class or you can earn no higher than a C for your expose. Finally, you are required to write 15 multiple-choice questions as a part of your Issue Exposés and share them with the class in the Google Drive Folder: "Exposé Questions Repository" HERE on the day you give your Exposé. The vast majority of questions on each exam will be taken from your collective questions.

Mind Mapping: One of the challenges of this class is synthesizing all the information about each particular issue into an integrated understanding of their causes and consequences. In order to facilitate this you are going diagram a "mind map" for many of the issues. Your mind maps illustrate all of the causal and consequential components of the issue and their interrelationships. Mind mapping was originally called Cartesian Cartography. I will be introducing you to this artful and enjoyable technique that allows us to better synthesize the interactions within complex or "wicked" problems.

Attendance: Excused absences include being ill with a doctor's note, missing for a work-related emergency, family-related emergency and/or missing for an athletic event/retreat/research paper presentation at a symposium. You'll need to provide some kind of documentation or a phone number of someone responsible that I may call in order to verify the reason for your absence. You are all allowed TWO unexcused absences. After your second "freebie" unexcused absence you will lose 10 points from your overall grade for each subsequent unexcused absence....

Extra Credit Options: Periodically throughout the course there will be presentations, virtual talks, webinars, workshops, etc. that you may attend that pertain to the course material. You can earn +2 extra credit points towards a lecture exam for each one you attend with content related to the course content. In order for all talks and service activities to count for extra credit you MUST have them approved PRIOR TO the event and you MUST document your presence (if Dr. Gail is not also in attendance) with a photograph of yourself participating or some other kind of evidence. You may earn up to 10 extra credit points from attending talks/presentations/webinars/workshops/etc

Course Atmosphere: This course is meant to be a seminar experience; it is not a lecture course and not a science course, it is a multidisciplinary course! We will be *discussing* issues, the readings, our ideas and opinions, making presentations, videos, debating each other and educating each other almost every day. So if you are shy you'll have to try and shed that skin and be bold! Fake it if you have to – remember that everyone's thoughts are valuable and if you don't share yours the rest of us will be denied that "gold."

## How ENV 400 Meets the Credit Hour Policy:

There are three components to the amount of time students will spend in a course:

- 1. **Seat time**: 35 hours
- 2. Time spent on key assessments:
  - 2.1. Two full 50-minute class student presentations -10 hours preparation/research/question writing/activity design x 3 = 30 hours
  - 2.2. 30 pages of reading per week -3 hours each x 15 weeks = 45 hours
  - 2.3. 15 hours mandatory service project and reflections = 18 hours
  - 2.4. Reviewing and studying for two in class essay exams = 8 hours x = 2 = 16 hours

## **TOTAL: 144 Hours**

## Nothing is Certain but Change Itself Clause...

This syllabus and course schedule are living documents: they are free to change. I try to adhere as closely as possible to each, but there will be times in which we will take longer on a particular topic or add or delete a topic to enhance the course. I like to be able to react to you as the course proceeds and go with the flow a bit in order to make the course experience sort of custom fit to you!

You are responsible for all of the information in this document: Losing it or not reading it are not excuses for not knowing what's in it!

## Other official statements that apply to all courses at Chaminade:

**Academic Honesty**: Academic honesty is an essential aspect of all learning, scholarship, and research. It is one of the values regarded most highly by academic communities throughout the world. Violations of the principle of academic honesty are extremely serious and will not be tolerated.

Students are responsible for promoting academic honesty at Chaminade by not participating in any act of dishonesty and by reporting any incidence of academic dishonesty to an instructor or to a University official. Academic dishonesty may include theft of records or examinations, alteration of grades, and plagiarism, in addition to more obvious dishonesty.

Questions of academic dishonesty in a particular class are first reviewed by the instructor, who must make a report with recommendations to the Dean of the Academic Division. Punishment for academic dishonesty will be determined by the instructor and the Dean of Academic Division and may include an "F" grade for the work in question, an "F" grade for the course, suspension, or dismissal from the University.

For the most up to date information, please refer to the <u>Academic Honesty Policy</u> on the Chaminade University Catalog website.

**Title IX and Nondiscrimination Statement:** Chaminade University of Honolulu is committed to providing a learning, working and living environment that promotes the dignity of all people, inclusivity and mutual respect and is free of all forms of sex discrimination and gender-based violence, including sexual assault, sexual harassment, gender-based harassment, domestic violence, dating violence, and stalking. As a member of the University faculty, I am required to immediately report any incident of sex discrimination or gender-based violence to the campus Title IX Coordinator.

Nondiscrimination Policy & Notice of Nondiscrimination: Chaminade University of Honolulu does not discriminate on the basis of sex and prohibits sex discrimination in any education program or activity that it operates, as required by Title IX and its regulations, including in admission and employment. Inquiries about Title IX may be referred to the University's Title IX Coordinator, the U.S. Department of Education's Office for Civil Rights, or both and contact information may be found at the <a href="Chaminade University Title IX Office Contact Information and Confidential Resources website">Con-campus Confidential Resources may also be found here at <a href="CAMPUS CONFIDENTIAL">CAMPUS CONFIDENTIAL</a> RESOURCES.

The University's Nondiscrimination Policy and Grievance Procedures can be located on the University webpage at: <a href="https://chaminade.edu/compliance/title-ix-nondiscrimination-policies-procedures/">https://chaminade.edu/compliance/title-ix-nondiscrimination-policies-procedures/</a>.

To report information about conduct that may constitute sex discrimination or make a complaint of sex discrimination under Title IX, please refer to the <u>Campus Incident Report form</u>. Chaminade University

of Honolulu prohibits sex discrimination in any education program or activity that it operates. The NOTICE of NONDISCRIMINATION can be found here: Notice of Nondiscrimination.

**CUH Alert Emergency Notification:** To get the latest emergency communication from Chaminade University, students' cell numbers will be connected to Chaminade's emergency notification text system. When you log in to the Chaminade portal, you will be asked to provide some emergency contact information. If you provide a cellphone number, you will receive a text from our emergency notification system asking you to confirm your number. You must respond to that message to complete your registration and get emergency notifications on your phone.

**Assessment for Student Work:** With the goal of continuing to improve the quality of educational services offered to students, Chaminade University conducts assessments of student achievement of course, program, and institutional learning outcomes. Student work is used anonymously as the basis of these assessments, and the work you do in this course may be used in these assessment efforts.

**Student with Disabilities Statement:** Chaminade University of Honolulu offers accommodations for all actively enrolled students with disabilities in compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and the ADA Amendments Act (2008).

Students are responsible for contacting Kokua Ike: Center for Student Learning to schedule an appointment. Verification of their disability will be requested through appropriate documentation and once received it will take up to approximately 2–3 weeks to review them. Appropriate paperwork will be completed by the student before notification will be sent out to their instructors. Accommodation paperwork will not be automatically sent out to instructors each semester, as the student is responsible to notify Kokua Ike via email at <a href="mailto:ada@chaminade.edu">ada@chaminade.edu</a> each semester if changes or notifications are needed.

Kōkua 'Ike: Tutoring & Learning Services: Chaminade is proud to offer free, one-on-one tutoring and writing assistance to all students. Tutoring and writing help is available on campus at Kōkua 'Ike: Center for Student Learning in a variety of subjects (including, but are not limited to biology, chemistry, math, nursing, English, etc.) from trained Peer and Professional Tutors. Please check Kōkua 'Ike's website for the latest times, list of drop-in hours, and information on scheduling an appointment. Free online tutoring is also available via TutorMe. Tutor Me can be accessed 24/7 from your Canvas account. Simply click on Account > TutorMe. For more information, please contact Kōkua 'Ike at tutoring@chaminade.edu or 808-739-8305.



# **Current Global Environmental Issues**

Course Schedule: Spring 2025

<b>WEEK</b> 1/6 – 1/10	<b>TOPIC</b> Course Introduction & Mechanics Introduction to Global Enviro Issues	<b>PRESENTERS</b> Dr. Gail	ACTIVITIES Introductions; Choose Topics Course Assessment TBA
1/13 – 1/17	Ideal Worlds/United Nations SDGs!	Dr. Gail	Reading/Discussion
1/22 – 1/24	Measuring the Quality of Life/ How to Change Behaviors	Dr. Gail	Reading/Discussion
1/27 – 1/31	Changing Behavior (cont'd)/ The Precautionary Principle	Dr. Gail	Reading/Discussion
2/3 - 2/7	Pop Growth/Consumerism/Waste	Dr. Gail//	Reading/Discussion/Mind Map
2/10 – 2/14	Plastics/Wastewater	/	Reading/Discussion/Mind Map
2/19 - 2/21	Food: Agriculture: Meats/Grains	/	Reading/Discussion/Mind Map
2/24 - 2/28	Food: Fisheries/Aquaculture	/	Reading/Discussion/Mind Map
3/3 – 3/7	Food Waste/Water consumption  Mid Term 3/7	/	Reading/Discussion/Mind Map Mid Term 3/7
3/10 – 3/14	Climate Change: Ocean/Land	/	Reading/Discussion/Mind Map
3/17 – 3/21	NO CLASSES: SPRING I	BREAK!	(Catch up on your reading!)
3/24 – 3/28	Fossil Fuels/Renewable Energies	/	Reading/Discussion/Mind Map
3/31 – 4/4	Mineral Resources/Habitat Loss	/	Reading/Discussion/Mind Map
4/7 – 4/11	Extinction/Other of your choice	/	Reading/Discussion/Mind Map
4/14 - 4/17	Other of your choice x 2!	/	Reading/Discussion/Mind Map
4/21 4/25	Summary of Issues; Sustainability Solutions roundtable; Create "Field Guide of Behaviors We	Dr. Gail & ALL!  c'd all be better off Adopting!'	Reading/Discussion/Mind Map



- Important Dates You Should Know:

  ➤ Second Exam: During Finals Week specific date and time TBA (April 28<sup>th</sup> to May 1<sup>st</sup>).

  ➤ Service Learning assignments are all due by Friday May 2nd at midnight!