



Him



ENV 400: Current Global Environmental Issues

Course Syllabus Spring 2023

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

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Website: https://drive.google.com/drive/folders/1QKtFbtOjrvCRRMnG3yXtpP5CH0Df DDb?usp=share link

Zoom Link: https://chaminade.zoom.us/j/2916035174

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, obesity, 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 new 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:

Environmental Studies Program Learning Outcomes	ENV 400
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:

Environmental Science Program Learning Outcomes	ENV 400
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" which lives here in Drive (and has a link to it in Canvas). There will also be a course Canvas folder – I use it mainly to shoot you out into Google Drive but I do also use the Canvas Modules to keep a clear chronological record of the major week-by-week course content and a fixed location for the course's required service-learning assignments.

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)
- Service-Learning participation in Chaminade's *Pono Popoki Project* AND/OR *The Pacific Project* AND/OR being part of the filming of one episode of Hawaii's television show: *Think Tech Hawaii Code Green* AND/OR *shepherding a Hawaii state bill in the legislature.*
- **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:

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

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.

Shepherding a Hawaii State Bill: There are MANY bills proposed by the Hawaii State Legislators this year 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 through the Hawaii State House and Senate. Dr. Gail will explain further in class. A great place for you to start to look for a bill is here: https://www.capitol.hawaii.gov/

Pono Popoki Project: Everything you might want to know about this campus project conducted in partnership with Cat Friends and the Hawaii Humane Society is in this folder. I started the project in the fall of 2020 in order to humanely reduce the number of cats on campus through trap-neuter-release. Since then we have removed 53 kittens from campus to loving homes and trapped and neutered 35 cats, but there is much more you can participate in for credit on this project. I will explain in class. And just for fun here is a kitten we caught on 1/4/23 (last night as I write this). What a cutie that now won't have to live a hard free-roaming (formally called feral) life!



Pacific Project and **Think tech Hawaii – Code Green filming:** Both of these service learning options will be explained to you in class in person.

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 ③. 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 ten pages of (text) reading for your Issue Exposés and you must let the class know on the Google Drive "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 THREE unexcused absences. After the third absence you will lose 20 points from your overall grade for each unexcused absence.... Be SURE you let me know if you will be missing class if you want me to record it for you!

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 30 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."

Other official statements that apply to all courses at Chaminade:

ADA Policy Statement from the Student Handbook: Pursuant to federal and state laws, including the Americans with Disabilities Act of 1990 as amended by the ADA Amendments Act of 2008 and Section 504 of the Rehabilitation Act of 1973, all qualified students with disabilities are protected from discrimination on the basis of disability and are eligible for reasonable accommodations or modifications in the academic environment to enable them to equal access to academic programs, services, or activities. If a student would like to determine if they meet the criteria for accommodations, they should contact the Counseling Center in the Student Support Services Building, Room 101, by phone at (808) 735-4845 or email: counselingcenter@chaminade.edu for further information.

Title IX Compliance: Chaminade University of Honolulu recognizes the inherent dignity of all individuals and promotes respect for all people. Sexual misconduct, physical and/or psychological abuse will NOT be tolerated at CUH. If you have been the victim of sexual misconduct, physical and/or psychological abuse, we encourage you to report this matter promptly. As a faculty member, I am interested in promoting a safe and healthy environment, and should I learn of any sexual misconduct, physical and/or psychological abuse, I must report the matter to the Title IX Coordinator. If you or someone you know has been harassed or assaulted, you can find the appropriate resources by visiting Campus Ministry, the Dean of Students Office, the Counseling Center, or the Office for Compliance and Personnel Services.

Credit Hour Policy: The unit of semester credit is defined as university-level credit that is awarded for the completion of coursework. One credit hour reflects the amount of work represented in the intended learning outcomes and verified by evidence of student achievement for those learning outcomes. Each credit hour earned at Chaminade University should result in 37.5 hours of engagement. For example, in a one credit hour traditional face to face course, students spend 50 minutes in class per week for 15

weeks, resulting in a minimum of 12.5 instructional hours for the semester. Students are expected to engage in reading and other assignments outside of class for at least 2 additional hours per week, which equals an additional 25 hours. These two sums result in total student engagement time of 37.5 hours for the course, the total engagement time expected for each one credit course at Chaminade. The minimum 37.5 hours of engagement per credit hour can be satisfied in fully online, internship, or other specialized courses through several means, including (a) regular online instruction or interaction with the faculty member and fellow students and (b) academic engagement through extensive reading, research, online discussion, online quizzes or exams; instruction, collaborative group work, internships, laboratory work, practica, studio work, and preparation of papers, presentations, or other forms of assessment. This policy is in accordance with federal regulations and regional accrediting agencies.

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!



Current Global Environmental Issues

Course Schedule: Spring 2023

WEEK 1/9 – 1/13	TOPIC Course Introduction & Mechanics Introduction to Global Enviro Issues	PRESENTERS Dr. Gail	ACTIVITIES Introductions; Choose Topics Course Assessment TBA
1/20	Ideal World/Precautionary Principle	Dr. Gail	Reading/Discussion
1/23 - 1/27	Changing Behaviors/Risk & Measure	es Dr. Gail	Reading/Discussion
1/30 - 2/3	Pop Growth/Consumerism	Dr. Gail/Alex	Reading/Discussion/Mind Map
2/6 - 2/10	Solid Waste/Hazardous Waste	Anella&Kaili/Aaron	Reading/Discussion/Mind Map=
2/13 - 2/17	Plastics/Wastewater	Anella&Kaili/Dr. Gail	Reading/Discussion/Mind Map
2/22 - 2/24	Food: Agriculture: Meats/Grains	Anthony,Kobe&James x 2	Reading/Discussion/Mind Map
2/27 - 3/3	Food: Fisheries/Aquaculture	Anthony, Kobe & James/Dray	Reading/Discussion/Mind Map
3/6 – 3/10	Food Waste/Water consumption Mid Term 3/10	Carlton&Francis x 2	Reading/Discussion/Mind Map Mid Term 3/10
3/13 - 3/17	Climate Change: Ocean/Land	Alecza&Bailey/Dr. Gail	Reading/Discussion/Mind Map
3/20 - 3/24	NO CLASSES: SPRING E	BREAK!	(Catch up on your reading!)
3/29 - 4/31	Fossil Fuels/Renewable Energies	Dr. Gail/Mini,Sasha&Hina	Reading/Discussion/Mind Map
4/3 – 4/5	Mineral Resources	Carly Wieczorek	Reading/Discussion/Mind Map
4/10 - 4/14	Habitat Loss/Species Extinction	Mini,Sasha&Hina x 2	Reading/Discussion/Mind Map
4/17 – 4/21	Natural Disasters/Obesity	Alecza&Bailey/Eugene	Reading/Discussion/Mind Map
4/24 - 4/28	TBD	Pono/Lihau	Reading/Discussion/Mind Map
5/1 – 5/5	Summary of Issues; Sustainability Solutions roundtable; Create "Field Guide of Behaviors We	Dr. Gail e'd all be better off Adopting!"	Reading/Discussion



Important Dates You Should Know:

- Second Exam: Thursday, May 11th, from 11:00-1:00 PM in our regular classroom.
 Service Learning assignments are all due by Friday May 12th at midnight!