ENV 201 & 201L: Conservation Biology & Ecology Lecture and Laboratory
Fall 2020
Dr. Mindy McDermott
Syllabus

Department Name: Environmental Program
Division Name/School: Natural Sciences and Mathematics; Chaminade University of Honolulu
Term: Spring 2020
Course Credits: ENV 201 = 3; ENV 201 Lab = 1
Class Meeting Days:

- ***Lectures:*** Monday, Wednesday, Friday; 11:30am–12:30pm
  Class Location: **Online via Zoom for the first three weeks** (to reassess after that time for the remaining of the semester). Should we resume in-person instruction, will be in Behavioral Science Building, Room 102
- ***Labs:*** Mondays; 1:50-5:10pm
  Class Location: Henry Hall Lab 4 (or online should you choose).

Instructor Name: Dr. Mindy McDermott
Email: mindy.mcdermott@chaminade.edu
Office Location: Henry Hall, Room 1
Office Hours: by appointment either in-person or via Zoom
Course Website:
Chaminade University uses the on-line Canvas platform. The Canvas link can be found on the Chaminade University homepage: www.chaminade.edu. There you will find media including copies of any lecture slides used in the course, links to readings and other materials, and additional information to support the learning process.

Technical Assistance for Canvas Users:

- Search for help on specific topics at help.instructure.com
- Chat live with Canvas Support 24/7/365
- Watch this video to get you started with online guides and tutorials
- Contact the Chaminade IT Helpdesk for technical issues: helpdesk@chaminade.edu, or call (808) 735-4855

University Course Catalog Description

ENV 201 Conservation Biology & Ecology (3) An introduction to conservation biology issues and goals and the principles of ecology. The course includes consideration of the impacts of human activity on ecosystems and our efforts to ameliorate destructive impacts and devise sustainable solutions. Major topics include the effects of industrialization, agriculture, pollution, species introduction and human population growth and development on the health and future sustainability of ecosystems and humans alike. Particular emphasis is placed on island ecosystems. *Course must be taken concurrently with ENV 201L.*

ENV 201L Conservation Biology & Ecology Laboratory (1) Students perform laboratory and field research techniques used in conducting conservation biology and ecological research and restoration. Analyses are conducted in the laboratory and in the field. *Course must be taken concurrently with ENV 201.*

Course Overview

This interdisciplinary course aims to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Environmental problems are identified and evaluated and possible solutions are examined.
The major topics central to this course include earth systems and resources; global change; ecology; biodiversity and its value; issues in modern biodiversity conservation; conflict between people and nature; the human aspect of conservation; protecting, managing and restoring ecosystems; sustainable development; and the role of nongovernment organizations.
If you are an Environmental Studies or Environmental Science major/minor this is a required course. If you are not one of these majors than this course counts for your General Education Natural Science requirement. WELCOME!

Marianist Values:
This class represents one component of your education at Chaminade University of Honolulu. An education in the Marianist Tradition is 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 ʻŌlelo Noʼeau (Hawaiian proverbs) and Marianist core beliefs:
1. Educate for Formation in Faith (Mana) E ola au i ke akua (ʻŌlelo Noʻeau 364) May I live by God.
2. Provide an Integral, Quality Education (Naʼauao) Lawe i ka maʻalea a kūʻonoʻono (ʻŌlelo Noʻeau 1957). Acquire skill and make it deep.
3. Educate in Family Spirit (ʻOhana) ʻIke aku, ʻike mai, kōkua aku kōkua mai; pela iho la ka nohana ʻohana. (ʻŌlelo Noʻeau 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 noʻeau (ʻŌlelo Noʻeau 1430) Education is the standing torch of wisdom.
5. Educate for Adaptation and Change (Aina) ʻAʻohe pau ka ʻike i ka hâlau hoʻokahi (ʻÔlelo Noʻeau 203)**.** All knowledge is not taught in the same school.

Alignment of Natural Sciences Courses with Marianist & Hawaiian values of the University:
The Natural Sciences Division provides an *integral, quality education:* sophisticated integrative course content taught by experienced, dedicated, and well-educated instructors.

- We *educate in family spirit* – every classroom is an *Ohana* and you can expect to be respected yet challenged in an environment that is supportive, inclusively by instructors who take the time to personally get to know and care for you.
- We *educate for service, justice and peace*, since many of the most pressing global issues (climate change, health inequity, poverty, justice) are those which science and technology investigate, establish ethical parameters for, and offer solutions to.
- We *educate for adaptation and change*. In science and technology, the only constant is change. Data, techniques, technologies, questions, interpretations and ethical landscapes are constantly evolving, and we teach students to thrive on this dynamic uncertainty.

The study of science and technology can be formative, exploring human creativity and potential in the development of technologies and scientific solutions, the opportunity to engage in the stewardship of the natural world, and the opportunity to promote social justice. We provide opportunities to engage with the problems that face Hawai'i and the Pacific region through the Natural Sciences curriculum, in particular, those centered around severe challenges in health, poverty, environmental resilience, and erosion of traditional culture. The Marianist Educational Values relate to Native Hawaiian ideas of *mana, na'auao, ohana*, *aloha* and *aina*. We intend for our Natural Sciences programs to be culturally-sustaining, rooted in our Hawaiian place, and centered on core values of *Maiau,* be neat, prepared, careful in all we do; *Makawalu*, demonstrate foresight and planning; *`Ai,* sustain mind and body; *Pa`a Na`au*, learn deeply.

Learning Outcomes

This course satisfies the General Education Learning Outcome (Requirement) for Quantitative Reasoning: students will analyze and interpret quantitative data.

Environmental Studies Program **Learning Outcomes (PLO):**
Upon completion of the undergraduate B.S. program in Environmental Science, students will be able to:

1. 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.
2. Apply scientific reasoning and methodology to environmental problems.
3. Identify the major physical, chemical and biological components, interactions and cycles of earth systems and ecosystems.
4. Propose, design and participate in scientific research projects that document, describe and/or help solve environmental problems and foster sustainability.
5. Pursue throughout their education new scientific knowledge and techniques that prepare them for the adaptation and change essential to environmental problem solving.

Environmental Science Program **Learning Outcomes (PLO):**
Upon completion of the undergraduate B.S. program in Environmental Studies, students will be able to:

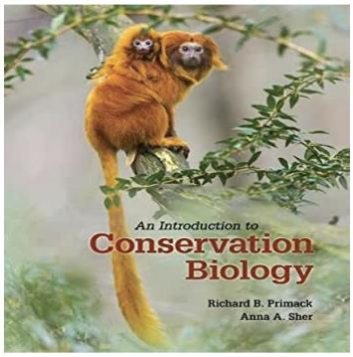
1. Authenticate their commitment to service, justice and peace through experiential project-based activities that enhance the condition of the integral ecology, care for creation and value all voices.
5. Pursue throughout their education the ever-changing knowledge and skills that prepare them for the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

Alignment of Learning Outcomes

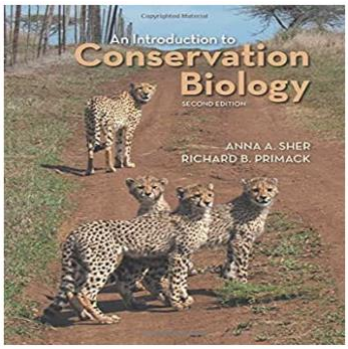
Lecture Course Outcome	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8
Know what science is and how scientific research is conducted and shared with others		X		X	X	X		
Understand the role of science in enabling us to understand and problem solve environmental phenomena		X			X	X		X
Understand the role of ethics in allowing us to define environmental problems	X					X		
Be able to describe the major physical causes of habitat/ecosystem degradation and destruction	X	X	X					
Be able to describe a number of potential solutions for global and Pacific Island habitat/ecosystem degradation and destruction	X				X			X
Know the basic structure and types of fresh water and terrestrial ecosystems			X			X		
Understand the generalized sorts of interactions between organisms and their environment			X					
Understand what a healthy ecosystem is and what sustainability means in general		X						
Understand why human population growth occurred and what its future implications are for ourselves and other species		X			X	X		
Demonstrate an understanding of the connections between academic work and real-life situations	X	X		X	X		X	X

Laboratory Course Outcome	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8
Understand the scientific method and how to apply it to real environmental issues		X			X		X	X
Understand what descriptive science is and how it is important in environmental biology		X				X		
Know the basic units used in making scientific measurements						X		
Know and understand the taxonomic hierarchy, systematic biology methodology and the species concept						X		
Know how to determine species abundance and distribution		X	X			X		
Know some of the measures used to determine ecological stress	X	X				X		
Know how to interpret and create graphs, tables, and maps		X			X	X		
Learn the importance of, and how to access and read, the primary scientific literature					X	X		
Know how to design a scientific experiment aimed at supporting or disproving a particular hypothesis		X		X			X	X
Know how to prepare a formal laboratory write-up				X		X		

Required Learning Materials



(First Edition book cover)



(Second Edition book cover)

An Introduction to Conservation Biology. 2016. [ISBN: 9781605354736] (Either 1st or 2nd edition is fine). Supplemental Materials: Many other articles, reports and exercises will come from other sources. All of them will be provided to you on your Canvas Portal for this course.

Tutoring and Writing 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 (https://chaminade.edu/advising/kokua-ike/) for the latest times, list of drop-in hours, and information on scheduling an appointment. Free online tutoring is also available via Smarthinking. Smarthinking can be accessed 24/7 from your Canvas account. Simply click Account – Notifications – Smarthinking. For more information, please contact Kōkua `Ike at tutoring@chaminade.edu or 808-739-8305.

Assessment

Grading & Assessment:

Lecture grading will be quantified as follows:

Exam I, II and Final Exam	(20% each)	60%
Class Project		20%
Quizzes on readings & miscellaneous assignments.		20%
		100%

Lab grading will be quantified as follows:

Lab assignments, worksheets, info shares	40%
Formal Lab Write-Up	20%
Hypothetical Experiment Write-Up	20%
Attendance	20%
	100%

Grading Procedure: Grades will reflect an overall understanding of topics covered in lecture or practical work in laboratory. Attendance, completion of assigned readings, and attentiveness in lecture and laboratory will ensure satisfactory performance in the class. Demonstrating a thorough understanding of course material and intelligent engagement in class discussions constitutes high achievement in the course. We will have in-class work to do to facilitate class discussion, which may range from group activities, reviews of current literature, media, articles, and class discussions. Group activities may consist of brief oral reports or short written reports. For written coursework, you will be graded on your ability not only to answer the question, but also in how effectively you can defend your answer/position using your knowledge of the subject & applying what you learned through the use of appropriate facts

and examples. The first two lecture exams will cover the material from the start of class up until the first exam and the material after the first exam up until the second exam, respectively. A cumulative lecture course final exam will be given at the end of the semester.

Grading Scale

Letter grades are given in all courses except those conducted on a credit/no credit basis. Grades are calculated from the student's daily work, class participation, quizzes, tests, term papers, reports and the final examination. They are interpreted as follows:

A (90% & above) Outstanding scholarship and an unusual degree of intellectual initiative
B (80 – 89%) Superior work done in a consistent and intellectual manner
C (70 – 79%) Average grade indicating a competent grasp of subject matter
D (60 – 69%) Inferior work of the lowest passing grade, not satisfactory for fulfillment of prerequisite course work
F (59% & below) Failed to grasp the minimum subject matter; no credit given

Course Policies

Late Work Policy

Assignments are expected on the due date. If you are unable to make the due date, a conversation must be had with me PRIOR to the due date for an extension. Unexcused late work will receive a reduced grade.

Grades of "Incomplete"

Students and instructors may negotiate an incomplete grade when there are specific justifying circumstances. When submitting a grade, the "I" will be accompanied by the alternative grade that will automatically be assigned after 90 days. These include IB, IC, ID, and IF. If only an "I" is submitted the default grade is F. The completion of the work, evaluation, and reporting of the final grade is due within 90 days after the end of the semester or term. This limit may not be extended.

Instructor and Student Communication

Questions for this course can be emailed to the instructor at [mindy.mcdermott@chaminade.edu]. Online, in-person, and phone conferences can be arranged. Response time will take place as soon as possible, usually within one day.

Cell phones, tablets, and laptops

Out of consideration for your classmates, please set your cell phone to silent mode during class. Students are encouraged to bring laptops or tablets to class as the instructor will assign online activities and readings that will require the use of a laptop or tablet. Laptops and tablets should not be misused, such as checking distracting websites. Use your best judgment and respect your classmates and instructor.

ADA Policy

Statement from the New 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@chamiande.edu for further information. Web: studentaffairs.chaminade.edu/counseling-center/counseling-services

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.

Attendance Policy
Students are expected to attend regularly all courses for which they are registered. Student should notify their instructors when illness or other extenuating circumstances prevents them from attending class and make arrangements to complete missed assignments. Notification may be done by emailing the instructor's Chaminade email address, or by leaving a message with the instructor's division office. It is the instructor's prerogative to modify deadlines of course requirements accordingly. Any student who stops attending a course without officially withdrawing may receive a failing grade. Unexcused absences equivalent to more than a week of classes may lead to a grade reduction for the course. Any unexcused absence of two consecutive weeks or more may result in being withdrawn from the course by the instructor, although the instructor is not required to withdraw students in that scenario. Repeated absences put students at risk of failing grades.

Students with disabilities who have obtained accommodations from the Chaminade University of Honolulu ADA Coordinator may be considered for an exception when the accommodation does not materially alter the attainment of the learning outcomes. Federal regulations require continued attendance for continuing payment of financial aid. When illness or personal reasons necessitate continued absence, the student should communicate first with the instructor to review the options. Anyone who stops attending a course without official withdrawal may receive a failing grade or be withdrawn by the instructor at the instructor's discretion.

Online class attendance: If you miss a tri/biweekly Zoom meeting your absence must be excused if it is not to *formally* effect your grade. Excused absences occur when you share a doctor's note, a funeral announcement for a family member, notice of participation in athletic events, etc. Unexcused absences occur when you were surfing, sleeping, cramming for an exam in another class, etc. I am a scientist; I require hard evidence if an absence is to be excused. If your car breaks down on the way to an exam or lab take a picture and make SURE I can verify the date and time of the breakdown and it will be an excused absence, however, no evidence; no excused absence.

Academic Conduct Policy
From the 2018-2019 Undergraduate Academic Catalog (p. 42):
Any community must have a set of rules and standards of conduct by which it operates. At Chaminade, these standards are outlined so as to reflect both the Catholic, Marianist values of the institution and to honor and respect students as responsible adults. All alleged violations of the community standards are handled through an established student conduct process, outlined in the Student Handbook, and operated within the guidelines set to honor both students' rights and campus values.

Students should conduct themselves in a manner that reflects the ideals of the University. This includes knowing and respecting the intent of rules, regulations, and/or policies presented in the Student Handbook, and realizing that students are subject to the University's jurisdiction from the time of their admission until their enrollment has been formally terminated. Please refer to the Student Handbook for more details. A copy of the Student Handbook is available on the Chaminade website.

For further information, please refer to the Student Handbook: https://chaminade.edu/wp-content/uploads/2019/08/NEW-STUDENT-HANDBOOK-19-20-Final-8.20.19.pdf

Schedule

Please refer to our ENV 201/L Weekly Agenda (Google Doc) posted on our Canvas site under Announcements.

***Note: This syllabus and course schedule are living documents: they are free to change**. I will adhere as closely as possible, but there may be times in which we will spend extra time on a particular topic or add/delete a topic to the course. I strive to keep our education current and relevant to the world in which we live.

Please remember that you are responsible for all of the information in this document: losing it or not reading it do not make you exempt from knowing what's in it!

I look forward to a fantastic semester with each of you!!!