People & Nature

Spring 2017 meeting days/times: MWF 1:30 – 2:20 AM, Henry Hall room 225 **Instructor**: Dr Mike Dohm, **Office**: Henry Hall, room 6; **Phone**: 808-739-8543

Office hours: Tuesday 9AM – 12PM; Other times may be possible, but by appointment only.

Phone: 739-8543 (x8543)

E-mail: mdohm@chaminade.edu

Required textbook: No required textbook, however, assigned readings will be provided by the instructor from *Environmental Science: Inquiry & Applications*, 6th ed. (2011), WP Cunningham and MA Cunningham

Recommended textbook: *Environmental Science for Dummies*, by Alecia Spooner (ISBN-13: 978-1118167144).

Course Description: This course is designed to introduce you to Environmental Science, a discipline that is devoted to the study of our relationship to the natural environment. We study the interactions among the biotic (animals, plants, etc.) and the abiotic (air, water, light, etc.) components of the environment. Environmental Science is also concerned with approaches to manage the natural environment. Thus, we will discuss ideas and information from both the natural sciences (e.g., biology, geology, physics, chemistry, etc.) and the social sciences (e.g., economics, politics, ethics, etc.) to try to gain an understanding of our present relationship with the environment, what historical events have brought us here, and what we must accomplish to continue our survival.

Program outcome: This course will introduce students to the foundational concepts of biodiversity, population-level processes, renewable and nonrenewable resources, and environmental economics. Students will enhance abilities to identify their environmental worldview and to discuss local and global aspects of sustainable environmental practices.

Student learning outcomes: On completion of this course, students will be able to

- 1. explain and apply the scientific method including designing and conducting experiments and testing hypotheses.
- 2. define and explain the processes of our natural environment.
- 3. recognize and define relationships among all living things and their non-living environment.
- 4. recognize and define our past and present relationship with the environment and the possible affects of these relationships on our future.
- 5. communicate our environmental problems to enable more informed political and economic decisions in oral and written form.
- 6. work as a team to evaluate and present a position on an important environmental issue.

Course assessment:

Grading for this course will be based on your scores from exams, quizzes, and from attendance and your participation.

<u>Exams</u>: There are three planned exams, each worth 70 points. Exams will include multiple choice, true/false, and short answer questions. The exams are closed book, but you will be permitted to bring and use one *hand-written* note page (8 ½ X 11 inches, one side only): this may contain anything you think will help you for the exam. You will turn in the "cheat-sheet"

along with your exam. Each exam covers several topics.

<u>What the exams cover</u>: Exams cover material from your readings, from any media presented, and from our lectures and discussions. Exam 2 and 3 are cumulative; concepts, definitions from previous chapters may be included.

<u>Presentations</u>: You will be randomly assigned to work in groups of 3 - 4. each group will be assigned a pro or con position on some environmental issue. After time for preparation and research, the teams will debate the issue. Grades for this group project will include peer assessment, self-assessment, and instructor assessment. Additional details about the group project will be provided during the semester.

<u>Worksheets & Quizzes</u>: We will have in-class work to do to facilitate class discussion. These "worksheets" may range from Internet searches, reviews of video, and group activities. Group activities may consist of brief oral reports and or short written reports. Worksheets do not receive separate grades but are included as part of evidence for your participation. There will be a total of six quizzes and or worksheets, each worth 10 points. Quizzes will be multiple choice and or true/false covering up to 3 chapters. Quizzes will be timed, and will be conducted in class.

<u>Participation</u> includes asking questions, bringing news items to our attention, and offering and discussing opinions about the material presented. **Attendance will be taken each time we meet.** You are expected to visit, comment on, and provide discussion on the Ask Dr Dohm forum. Positive and significant participation on the forum counts for participation.

The breakdown of assignments are as follows

| Exam 1 | 50 |
|--------------------------|----|
| Exam 2 | 50 |
| Exam 3 | 50 |
| Group Presentation | 50 |
| Quizzes & Worksheets | 60 |
| Attendance/Participation | 40 |

Your letter grade will be based on the following point distribution out of 300 points possible.

| Points earned | Percent of total | Letter grade | Interpretation (page 42, CUH 2016-17 catalog) | |
|---------------|------------------|-----------------|---|--|
| 270-300 | 90-100% | A | Outstanding scholarship and an unusual degree of intellectual initiative | |
| 240-269 | 80-89% | В | Superior work done in a consistent and intellectual manner | |
| 210-239 | 70-79% | С | Average grade indicating a competent grasp of subject matter | |
| 180-209 | 60-69% | D | Inferior work of the lowest passing grade, not satisfactory for fulfillment of prerequisite coursework. | |
| < 179 | < 60% | F | Failed to grasp the minimum subject matter; no credit given | |

Access to course website

BI 110 is a web-enhanced courses, i.e., instruction takes place in the classroom, and technology, including the website, are used to complement and support face-to-face instruction. All lecture

slides, course handouts, including this syllabus, will be made available to you at our web site. Quizzes typically will also be handled via the website, although other arrangements for taking quizzes may be available upon request. You may access the website via Chaminade's Canvas. You should already be enrolled. Select BI-110 -01-1. The Canvas site uses latest SSL security; your information is safe provided you use a decent password. Although Canvas provides a Grading feature, this feature is for you to monitor your progress only; your official grades for the course are maintained by Dr Dohm in his grade book in his office.

Use of Canvas for BI 110 is part of your participation in the course. For a satisfactory score on this element, you are expected to spend about an active hour each week on the site.

University Policy, Reminders, and notices:

- 1. Labs begin at 2:30PM please be on time. Chronic tardiness will be viewed as absence from class. If you miss or are tardy for class, please note that we will proceed without you and you will miss material; it is your responsibility to obtain missed lecture topics from your classmates who attended.
- 2. Lab ends each time at 5:20PM. Most days, we will need all of this time. Please do not get in the habit of asking, "How long are we going to be here today?"
- 3. You are expected to attend labs and to come prepared: read your text and any handout provided before the material is to be presented in lab; ask questions if you are unsure of material. Each lab will have a short write up due 1 week from date of assignment.
- 4. Please show respect to your fellow classmates: turn off cell phones and other electronic devices. No drink, but no food will be permitted during lectures.
- 5. Chaminade University abides by all aspects of the <u>Family Educational Rights and Privacy Act (FERPA)</u>. Details of Chaminade's implementation of FERPA are available in your Student Handbook (SH).
- 6. You are also expected to have read and to abide by the "Student Rules of Conduct" which are available in your copy of Chaminade University's Student Handbook (SH).
- 7. Success in this class is in your control. The more you do, the better the results will be for you. You are expected to attend class and to come prepared: read your text before the material is to be presented in class; preview the lecture slides available on the course web site; use the web site forum to ask questions and to discuss concepts; ask questions in class if you are unsure of material. I will suggest problems or questions from each chapter in your text or from the publisher's website for you to consider. If you have purchased access to online content that accompanies your text book, please do take advantage of this marvelous resource. Neither the suggested problem sets nor the work on Pearson's supplemental material will be graded, nor are they required. However, the more you do, the more practice and exposure you get to the material, the better you will do on my exams. Exams are based on the same concepts and problems that the text questions address.
- 8. Class begins and ends each time exactly on the scheduled start time. Regular attendance is expected and essential for your progress in this class. The goal of lecture and discussion will be to provide the needed context to remove barriers to your understanding of the material going it alone is not recommended.
- 9. It is university policy that any student who stops attending a course without officially

- withdrawing may receive a failing grade (SH, p. 34). Unexcused absences equivalent to more than a week of classes will lead to a grade reduction for the course.
- 10. No make up quiz, exam, or presentation time will be granted for unexcused absences. For excused absences, if a student cannot attend a class in which an exam or quiz has been scheduled, the student must provide written verification of the need to miss class at least one day prior to the scheduled due date. This includes any activities sponsored by Chaminade (athletics, etc.) it is the responsibility of the student to adhere to this policy. In the event of illness, a Doctor's note will be expected.
- 11. Please utilize my official office hours or make an appointment via the course website. You are encouraged to use the Ask Dr Dohm forum if you have a question, there is an excellent chance that others in the class have similar questions use of Ask Dr Dohm forum counts as participation.
- 12. Return of graded paper material will be within ten business days after you take the graded assignment.
- 13. Use of music devices and cell phones is prohibited during all Natural Science and Mathematics classes at Chaminade, *unless specifically permitted by your instructor* (see item 10 and 11). Use of cellphones and music devices in laboratories is a safety issue. In addition, use of cellphones and music devices in any class is discourteous and may lead to suspicion of academic misconduct. Students who cannot comply with this rule will be asked to leave class and may be subject to laboratory safety violation fines. Please refer any questions to the Dean of Natural Sciences and Mathematics.
- 14. You are encouraged to bring and use your laptops or tablets to genetics lecture and workshops. However, on exam days, calculators will be provided for your use; you may not use your smartphones, tablets, or laptops during exams.
- 15. You may not record audio, images, or video in the classroom without expressed permission of the instructor.
- 16. The University provides a Chaminade email address for all students. Official Chaminade communications will be sent to the students' Chaminade email address and instructors will use only this email to communicate with students. It is the responsibility of the student to check their email frequently. Report email-related problems to the Helpdesk at 808-735-4855 or helpdesk@chaminade.edu.
- 17. You are encouraged to work together; however, all graded material must be your own. Cheating in the form of plagiarism (offering of work of another as one's own, SH, p. 33), collusion, and deception will not be tolerated and will negatively affect your grade. Because the university is an academic community with high professional standards, its teaching function is seriously disrupted and subverted by academic dishonesty. Such dishonesty includes, but is not limited to, cheating, which includes giving/receiving unauthorized assistance during an examination; obtaining information about an examination before it is given, using inappropriate/prohibited sources of information during an examination; altering answers after an examination has been submitted; and altering the records on any grade. (Refer to the CUH 2016-17 catalog for further information).

- 18. Title IX Declaration: 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. Should you want to speak to a confidential source you may contact the following:
 - Chaminade Counseling Center 808 735-4845.
 - Any priest serving as a sacramental confessor or any ordained religious leader serving in the sacred confidence role.
- 19. Pursuant to several 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 basis of disability and are eligible for reasonable accommodations or modifications in the academic environment to enable them to enjoy 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 at 808-735-4845 for further information Students with special needs who meet criteria for the Americans with Disabilities Act (ADA) provisions must provide written documentation of the need for accommodations from CUH Counseling Center (Dr. June Yasuhara, 735-4845) by the end of the third week of classes. Failure to provide written documentation will prevent your instructor from making necessary accommodations.

Tentative BI110 lecture and exam schedule, subject to change by instructor

Check before you come to class each week for any changes; Exam dates will not be changed.

| Week | Days | Topics | Readings |
|------|----------------|--------------------------------|-------------------------------|
| 1 | Jan 16 - 20 | 1/16 MLK Day, No class | Chapter 1 Spooner (2012) plus |
| | | Course & Subject Introduction | readings from instructor |
| | | Environmental Problems: An | |
| | | Overview | |
| | | Quiz 0 = Pre-test | |
| 2 | Jan 23 - 27 | Ecology & Ecosytems | Chapter 2 & 3, Spooner (2012) |
| | | Evolution & Biodiversity | Part II Spooner (2012) |
| | | Quiz 1 * | plus readings from instructor |
| 3 | Jan 30 - Feb 3 | Climate & weather | Part II Spooner (2012) |
| | | | plus readings from instructor |
| 4 | Feb 6 - 10 | Sustaining Biodiversity | Part III Spooner (2012) |
| | | | plus readings from instructor |
| 5 | Feb 13 - 17 | Human population growth | Part III Spooner (2012) |
| | | Soil & Agriculture | plus readings from instructor |
| | | Quiz 2 * | |
| 6 | Feb 20 - 24 | 2/20 President's Day, No class | Part III Spooner (2012) |
| | | Exam 1 = Feb 22 | plus readings from instructor |
| | | Water Resources & Pollution | |
| | | Mineral Resources | |
| 7 | Feb 27 - Mar 3 | Energy, Environmental hazards | Part III Spooner (2012) |
| | | Air pollution | plus readings from instructor |
| | | Solid & Hazardous Waste | |
| | | Quiz 3 * | |
| 8 | Mar 6 - 10 | Energy, Environmental hazards | Part IV Spooner (2012) |
| | | Air pollution | plus readings from instructor |
| | | Solid & Hazardous Waste | |
| 9 | Mar 13 - 17 | Energy, Environmental hazards | Part IV & V Spooner (2012) |
| | | Air pollution | plus readings from instructor |
| | | Solid & Hazardous Waste | |
| | | Quiz 4 * | |

| Week | Days | Topics | Readings | |
|------|-------------|---------------------------------|-------------------------------|--|
| 10 | Mar 20 - 24 | Spring Break | | |
| | | | | |
| 11 | Mar 27 - 31 | 3/27 Prince Kuhio Day, No class | Part IV & V Spooner (2012) | |
| | | Exam 2: March 29 in class | plus readings from instructor | |
| | | Environmental Economics, | | |
| | | Politics, & worldviews | | |
| 12 | Apr 3 - 7 | Environmental Economics, | Part IV & V Spooner (2012) | |
| | | Politics, & worldviews | plus readings from instructor | |
| | | Quiz 5 * | | |
| 13 | Apr 10 - 14 | 4/14 Good Friday, No class | Part IV & V Spooner (2012) | |
| | | Environmental Economics, | plus readings from instructor | |
| | | Politics, & worldviews | | |
| 14 | Apr 17 - 21 | Environmental Economics, | Part IV & V Spooner (2012) | |
| | | Politics, & worldviews | plus readings from instructor | |
| | | Quiz 6 * | | |
| 15 | Apr 24 - 29 | Environmental Economics, | Part IV & V Spooner (2012) | |
| | | Politics, & worldviews | plus readings from instructor | |
| 16 | May 1 - 5 | Presentations | | |
| 17 | May 9 | Final exam: 11AM - 1PM | | |

^{*} Note on dates of Quizzes/Worksheets: the quiz may be administered in class any time during the assigned week.