Welcome to ES 1: Introduction to Environmental Studies! This course is the first part of a three-quarter series to introduce you to Environmental Studies (ES)—an interdisciplinary field that examines the relationship between people and their environments. The ES Program at UCSB aims to train leaders, develop new knowledge, and devise solutions that will restore and sustain the health of our planet. Over the next six weeks, we will study how all environments—from the microscopic world of your digestive tract to the global-scale of the atmosphere—are shaped by both natural and cultural forces. Although the environmental challenges we face today are incredibly complex, we will not focus on the doom-and-gloom. To that end, this course is divided into three parts—processes, challenges, and strategies—to encourage you to develop both critical thinking skills and hands-on problem-solving skills. In fact, you will begin to recognize how deeply intertwined both sets of skills really are.

ES 1 has three themes:

1) what counts as knowing the environment has deep disciplinary roots—in history, in the arts, in the physical and social sciences, and in the law—that shape how people think about the environment’s problems and solutions;
2) the boundaries that we draw between nature and culture are products of specific times and places;
3) and, finally, issues of power are deeply intertwined with how some people speak for their particular visions of the environment and what constitutes appropriate activity there.

To make these themes as concrete as possible, we will employ a variety of learning methods using an interdisciplinary skill set: gather evidence, look for patterns or discontinuities, develop explanations about context, causes, and consequences, write and revise our ideas, engage others, and refine our arguments—although not necessarily in that order. These steps frequently overlap, as we will learn. One of this course’s main goals is for you to develop and practice these skills by participating in class and completing the required readings and assignments. At the end of the course, you should walk out of the classroom ready to explain how environmental problems develop and how to design, implement, and evaluate strategies to tackle those problems.

Objectives: The course goals include:

1) recognize the range of disciplinary methods, insights, and genres of evidence that will help us understand the environment;
2) develop a broad understanding of the dynamics between people and the environment over time;
3) practice critical thinking and problem-solving skills—reading, writing, talking, listening, reflecting, problem-solving, seeing through other people’s eyes, leading, and working in a community;
4) recognize the complexity of environmental problems. Be aware of simple stories and their claims;
5) design and assess strategies to deal with environmental problems. Be aware of simple fixes.
Readings: You should complete all of the assigned readings before each class meeting. Please bring that day’s reading and notes (either digital or hard copy is fine) to class, so that we can discuss the text together. I have limited the reading assignments to one book and approximately one article per class meeting. All articles are available on GauchoSpace in an effort to reduce costs for students.

Michael Pollan, *The Omnivore’s Dilemma: A Natural History of Four Meals* (New York: Penguin, 2006). *The Omnivore’s Dilemma* is available on reserve at the Davidson Library, at the ES library, and for sale at the UCSB Bookstore.

Assignments and Grades

Grade Breakdown

In-class participation and informal writings: 25%
Reflection essay on the ecological footprint exercise: 10%
Bioregional evidence-gathering exercise: 5%
Essay on *Omnivore’s Dilemma*: 25%
Take-home exam: 35%

***For every 24 hours that any assignment is late, the grade will drop by one letter. That means, for example, an A paper turned in 30 hours late will become a C paper.***

In-class, informal writing and other participation: The success of this course depends on your good-faith participation. This means coming to every class prepared to contribute. Most classes will have a mixture of lectures, discussions, informal in-class writings, and other exercises, so there will be a number of different ways for you to participate. Participation can mean something as simple as asking or emailing a question! Almost everyday we will ask for short, informal written responses about that day’s readings in order to encourage you to keep up with the readings and to evaluate how well you understand the course’s content and themes. If you need to miss a class for a personal, medical, or religious reason, you must notify the TA in advance. Neither exemptions nor extensions will be granted after the fact. Please check your email regularly. Please do not use your electronic devices during class for any reason except for note-taking. The TA will notice if you are using Facebook or online shopping, and you will receive a zero for that day’s in-class participation.

Reflection essay on the ecological footprint exercise: The ecological footprint is a concept developed in the 1990s to measure how much of the planet’s biologically-productive land and water a person, a city, or a nation uses for its resource consumption. For this assignment, you will calculate your own ecological footprint and reflect on what you have learned.

Go to [www.myfootprint.org](http://www.myfootprint.org) and complete the ecological footprint survey. This survey now requires a small fee of one dollar for unlimited daily use. You are free to join up with one or more friends in the class. You may not know the exact answers to some of these questions, but that’s OK—just do your best. You may take the perspective of your current living situation, your home situation, or your imagined future situation. For question 8 of the survey about renewable energy, you can look on your energy bill or use the California state total of 13 percent.

Your ecological footprint essay should be include one paragraph-length (at least six sentences) answer for each of the following five prompts: 1) How would you summarize the results of the survey? Remember to include a description of your living arrangements. Were you surprised? Why? What do you think your results mean? 2) Scroll down to the graph that shows your footprint in “in global acres by consumption category.” In which category do you consume the most? Do you think you live a sustainable lifestyle? Why or why not? What concrete steps...
could you take to improve your level of sustainability? 3) Open a new window. Review the following page from the Global Footprint Network at http://www.footprintnetwork.org/en/index.php/GFN/page/footprint_for_nations. Then view the dynamic map of ecological creditors and debtors nations at http://storymaps.esri.com/globalfootprint/. Hit the play button to see change over time. How does your ecological footprint compare with someone who lives in South America, Africa, or Asia? Remember to include the name of whatever specific nation you used for the comparison in your answer. What additional information, resources, and evidence do you need to explain the differences or similarities? How could you figure out what life might be like for someone who lives in that specific nation? 4) Go back to myfootprint.org and click on “About the Quiz,” then “FAQ.” This page provides some important background information about the survey and its methodology. Read it. Do you think that sustainability is more related to individual choices or collective action? Explain your answer, giving at least two specific examples. 5) What questions about the ecological footprint concept or quiz would you like to ask your classmates, friends, or family? Would you recommend the quiz? Why or why not?

Each question prompt should have a paragraph-length answer worth 3 points and 1% of your final grade. Please print out your typed, 12-point font, double-spaced answers and bring them to class on Thursday, June 23.

Bioregional evidence-gathering exercise: We will break into small groups of 2-3 people on Thursday, June 30 to answer a series of questions in what we are calling a bioregional quiz. You can review a sample of questions at (http://connectedbynature.com/2010/01/happy-2010-where-you-at-a-bioregional-quiz/). Your group will not answer all of these questions; your group will answer only 2-3 of the questions! In the first part of class you will venture outside the classroom to collect “evidence” (that is, a photograph or a series of photographs taken on a smartphone or other electronic device, with a sentence caption) to help “illustrate” the answer. For example, if your question is “How many days till the moon is full?” you can run to the IV Co-op to buy and photograph little cheese wedges in red wax packaging to illustrate the number of days until the full moon. But you don’t need to spend any money! Rather this exercise is designed to get you thinking creatively about information gathering and the representation of evidence.

In the second part of the class, we will reconvene to review the “evidence” together and create an online exhibit. We will provide more details during week 2. All members of the group will receive the same grade based on the June 30 in-class photos.

Essay on Omnivore’s Dilemma: In his book, Omnivore’s Dilemma, Michael Pollan uses a variety of sources to explore the question, “What should we have for dinner?” He read a lot of material—books and articles and reports—and spoke to a lot of people—experts, friends, and his family. He also uses his own experiences as evidence to reflect on the question. You will follow in Pollan’s footsteps. Imagine that you are writing an email to Pollan in which you discuss his question, “What should we have for dinner?” Since he is a writer, you want to impress him with your ideas, your creativity, your thoughtfulness, and your prose. Your reply will have three parts: a personal reflection, an evaluation, and a source reflection. Each part will be about two pages, six pages minimum, double-spaced, 12-point font with polished prose.

First, you will describe how Omnivore’s Dilemma changed you personally. Tell Pollan about one experience you had about food—with a particular meal, supermarket, restaurant, fishing trip, bbq, or garden. Use your imagination to reflect on something concrete in the real world. Be specific and descriptive. Give him a sense of what it felt like for you to live through that experience. Remember to narrate the beginning, middle, and end of the experience. Think about taboos, rituals, recipes, manners, and cultural traditions. How has reading Omnivore’s Dilemma changed how you think about your chosen food experience?

Second, you will tell him how well he answered the question. In other words, you will
review the book. A well-written review is not the same thing as a book report. A good review not only summarizes what the author wrote, but a good review evaluates how well the author accomplished his goals AND explains whether the book matters in some kind of larger sense. Name two things that Pollan does well and two things that he might have done differently. What did he do less well and how might he have done those things differently? To get a sense of a good review, you can read Florence Williams’s review of David Quammen’s *Spillover* in the *New York Review of Books* at nybooks.com/articles/archives/2013/apr/25/how-animals-may-cause-next-big-one/.

Third, you will tell Pollan specifically about his use of sources. Choose ONE of the sources listed in the section in pages 417-435 and review that source as well. Reflect on how Pollan used his sources to make an argument that answers his question. How does Pollan move between synthesizing his source and reflecting on its implication for one his four meals? We will discuss finding and evaluating sources in greater detail in lecture.

Don’t forget to include a conclusion that brings together all three parts. Please print out your typed, 12-point font, double-spaced essay (six pages maximum) to class on Monday, July 11.

**Take-home exam:** The take-home exam has three parts: 1) 6 short answer definitions (5 points each, 5-6 sentences in length) that explain the meaning of the term and why that term is important to understand contemporary environmental problem-solving; 2) 3 reading-specific questions (10 points each, 2 paragraphs in length) that ask you to draw connections across multiple readings; and 3) 1 longer essay (40 points, at least 5 paragraphs in length) that enable you to synthesize the course materials and demonstrate some of the analytical skills you have acquired. The take-home exam should be double-spaced, with page numbers and polished prose.

Each student will post an electronic copy of the exam to GauchoSpace AND turn in a hard copy. We will be happy to discuss and review drafts. Please print out your typed, 12-point font, double-spaced answers and deliver them by Saturday, July 30, 12:30 pm, to 4011 Bren or 4010 Bren. You may turn in the take-home exam earlier as long as you physically hand over a hard copy to a real person—no sliding a copy under an office door or into a mailbox.

**Other policies**

**Crashing:** If you are not yet registered, then during week one you should sign the TA’s waiting list at the end of each class. You must complete the first assignment due on Thursday, June 23. Zoe will notify you if there is space by the beginning of week two.

**Equal Access for All Students:** If you have any learning or medical condition that requires accommodation to complete the course work, please ensure that the Disabled Students Program (DSP) is aware of your disability and that you are familiar with your DSP responsibilities. See http://dsp.sa.ucsb.edu/Index.aspx. Zoe and I will work with you and DSP to find the appropriate accommodation.

**Gender and Sex Discrimination Policy and Student Support:** Under Title IX, university students are protected from harassment and discrimination based on gender and sex. If a student feels uncomfortable or in need of support at any time related to their gender, sex, and/or sexual orientation, please contact your TA and/or course instructor immediately. UCSB’s Resource Center for Sexual and Gender Diversity is also available to advocate and support students.

**Plagiarism:** UCSB takes plagiarism and other academic misconduct very seriously. If you turn in any work that fails to acknowledge the contributions of others, it may result in failure of the assignment or the course itself. If you are unsure what constitutes plagiarism, please ask us. We will discuss plagiarism in detail.
Grade Appeals: If you have a dispute with your TA over a grade you received, you have the right to request a review by the professor. Please keep in mind, however, that an appeal will invoke a review of the full assignment and could result in a lower grade.

Incomplete Grades: Incompletes will not be given for this class, except in the most extreme circumstances, such as a debilitating illness or death in the immediate family.

Copyright: All of the materials you receive through this course are subject to federal copyright laws and university policies. Distribution of these materials, such as posting them online or selling them to third party businesses, are strictly prohibited.

Schedule:

PART I: PROCESSES

WEEK 1
Monday, June 20, Introductions
   No readings.

Tuesday, June 21, How do we define what is natural?

Wednesday, June 22, What is the relationship between the commons and inequality?

Thursday, June 23, How do we understand our impacts on the natural world?
   Ecological Footprint Reflection Essay Due

WEEK 2
Monday, June 27, Why do we think of the earth as a “system”?
   No readings.

Tuesday, June 28, Are humans the most successful species?

Wednesday, June 29, Can altered environments be restored?

Thursday, June 30, How do we recognize evidence when we see it? How do we represent evidence? Bioregional evidence-gathering exercise; Or, Going On An ES Scavenger Hunt
   No readings, but you should start reading Omnivore’s Dilemma now.
Part 2: CHALLENGES

WEEK 3
Monday, July 4 Holiday: UCSB closed

Tuesday, July 5, Where should we get our energy?

Wednesday, July 6, Who exactly is the predator? And who is the prey?

Thursday, July 7, Are microorganisms harmful to humans? Or, where should you put your toothbrush in the bathroom?

WEEK 4
Monday, July 11, Food, What’s for dinner?
Reading: Finish Omnivore’s Dilemma

Omnivore’s Dilemma Essay Due

Tuesday, July 12, Are there too many people? And where should they live?

Wednesday, July 13, What should we do about climate?

Thursday, July 14, Does biological diversity matter?

WEEK 5
Monday, July 18, Has pollution increased over time?
Reading: 1. Selection from Indra Sinh’s Animal’s People (p. 1-10, 14, 29-32). Available on GS.
Part 3: STRATEGIES

Tuesday, July 19, Zoe Welch, What is ailing the world’s oceans?

Wednesday, July 20, How can we promote sustainability?

Thursday, July 21, How can we promote awareness?
   Reading: 1. Cesar Chavez, Address on the “Perils of Pesticides” to Pacific Lutheran University, March 1989-Tacoma, Washington. Accessible at chavezfoundation.org under the about Cesar tab, then under the Speeches & Writings tab.

WEEK 6
Monday, July 25, How can we design projects and build organizations? How can we get real-world experiences and how should we learn from them?
   No readings.

Tuesday, July 26, Are technology and/or markets viable long-term strategies?

Wednesday, July 27, How can we look toward the future?

Thursday, July 28, Conclusions and Take-home Exam Questions Distributed
   No readings.

Due Saturday, July 30, 12:30 pm, 4011 Bren or 4010 Bren. You may turn in the take-home exam earlier as long as you physically hand over a hard copy to a real person—no sliding a copy under an office door or into a mailbox!