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 relationships between people and their environments. ES 1 is an introduction to the subject and major. ES 2 focuses on the biophysical environment, and ES 3 explores social science and humanities approaches to environmental issues.

As one of the nation’s oldest and most well-respected programs in ES, the 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 ten 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 two parts—concepts and challenges—to encourage you to develop both critical thinking skills and hands-on problem solving skills.** As a result, we will focus much more on concepts than on content.

If you learn only one thing from this course, let it be that the environmental problems we face today are extraordinarily complex. There are no easy explanations for how they emerged, or simple solutions for how to fix them. In most cases, there are more than one—and often several—legitimate ideas about what to do in response. This does not mean that they are unsolvable, but it does mean that fixing them will take a lot of hard work. 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 evidence, methods, and insights that will help us understand the environment;
2. 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;
3. recognize the complexity of environmental problems. Be aware of simple stories;
4. assess strategies to deal with environmental problems. Be aware of simple fixes.

**Structure:** This course is divided into two parts. In part one, we introduce key concepts essential for understanding changes in the environment, and the ways people make individual and collective decisions about how to deal with such changes. This includes understanding basic ecological patterns and processes, evaluating evidence about environmental changes, assessing the importance of such changes, and developing policy responses. In part two, we turn our attention to a selection of big-picture environmental problems, some case studies that illustrate them, and debates about how best to solve them.

**Lectures:** Class will meet on Tuesdays and Thursdays from 12:30 to 1:45 PM. You are expected to attend lectures. Each day’s slide presentation will be posted on GS after the lecture. The exams and short writing exercises will be based on the lectures and readings.

**Readings:** You will have about two readings per week. The readings are intended to help you understand the material covered in lectures, and give you additional information and insights to deepen your knowledge. You should complete the readings by Monday on the week for which they are assigned. You will have opportunities to ask questions about the readings in your discussion sections. Material covered in the readings will appear on your exams and short writing exercises. All articles are available on GS in an effort to reduce costs for students.

**Exams:** 40% of the final grade. You will have two multiple-choice exams. They are not cumulative. You will take them during the regular lecture periods on October 25 and November 29. On each of these days, you should bring half-page Parscore bubble sheets, which you can purchase at any campus store. In your discussion sections during
those same weeks, you will have review sessions.

*Short Writing Exercises*: 02 % of the final grade. Two times during the quarter, you will complete a short (eight-minute) exercise in lecture worth one point on your final grade. To receive credit, you must provide specific, coherent, and legible responses that draw from the lectures and/or readings. The dates of the short writing exercises will not be announced ahead of time.

*Term Paper*: 50 % of the final grade. During the quarter, you will write a 5-to-7-page term paper. Detailed instructions are posted to GS. You TA will lead you through the process.

*Discussion Sections*: 08 % of your final grade. There are no discussion sections during weeks zero and 8. Because it is important that you learn how to demonstrate engagement in college, your TA will determine this grade based on your contributions during discussion sections. For each section meeting, your TA will grade your participation on the following scale. If you are absent, you will receive zero points. If you are in attendance but neither engaged nor prepared, you will receive .5 points. If you are actively involved and prepared, you will receive one point.

You must attend your discussion section on week 1, or you will be dropped from the course. On weeks with assignments due as part of the term paper, you will spend most of that section completing the collaborative portion of the assignment. You will then have time to discuss the course material and ask questions to prepare for any upcoming assignments. On weeks with exams, you will spend your discussion sections reviewing. **Sections are mandatory; if you fail to attend on a week with an assignment, you will receive a zero for that assignment.** If you attend and participate enthusiastically in section, you may gain up to a third of a letter on your final grade. The TAs have full discretion in this matter.
# Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Week</th>
<th>Class</th>
<th>Topic</th>
<th>Assignment</th>
<th>Section</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/27 (R)</td>
<td>0</td>
<td>0</td>
<td>What is “the environment”?</td>
<td>--</td>
<td>No Sections</td>
<td>0</td>
</tr>
<tr>
<td>10/2 (T)</td>
<td>i</td>
<td>1</td>
<td>Why do environments change?</td>
<td>--</td>
<td>Intro. &amp; Logistics</td>
<td>0</td>
</tr>
<tr>
<td>10/4 (R)</td>
<td>ii</td>
<td>2</td>
<td>How can we know if an environment is changing?</td>
<td>Warm-up</td>
<td>Term Paper Warm-up</td>
<td>3</td>
</tr>
<tr>
<td>10/9 (T)</td>
<td>iii</td>
<td>3</td>
<td>How do humans shape environmental change?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/11 (R)</td>
<td>iv</td>
<td>4</td>
<td>What is the environment worth?</td>
<td>Warm-up</td>
<td>Term Paper Warm-up</td>
<td>3</td>
</tr>
<tr>
<td>10/16 (T)</td>
<td>v</td>
<td>5</td>
<td>Who cares about the environment?</td>
<td>Term Paper Step 1: Proposal</td>
<td>Step 1 Activity</td>
<td>7</td>
</tr>
<tr>
<td>10/18 (R)</td>
<td>vi</td>
<td>6</td>
<td>How do we make environmental policy decisions?</td>
<td>Exam</td>
<td>Exam review</td>
<td>20</td>
</tr>
<tr>
<td>10/23 (T)</td>
<td>vii</td>
<td>7</td>
<td>How do we manage the environment?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/25 (R)</td>
<td>viii</td>
<td>8</td>
<td>Exam One.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10/30 (T)</td>
<td>v</td>
<td>9</td>
<td>Has pollution increased or decreased over time?</td>
<td>Term Paper Step 2: Research and Outline</td>
<td>Step 2 Activity</td>
<td>10</td>
</tr>
<tr>
<td>11/1 (R)</td>
<td>vi</td>
<td>10</td>
<td>Why do oceans matter?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/6 (T)</td>
<td>vii</td>
<td>11</td>
<td>Do species extinctions matter?</td>
<td>--</td>
<td>--</td>
<td>0</td>
</tr>
<tr>
<td>11/8 (R)</td>
<td></td>
<td>12</td>
<td>What should we eat?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/13 (T)</td>
<td></td>
<td>13</td>
<td>Are we running out of water?</td>
<td>Term Paper Step 3: Draft</td>
<td>Step 3 Activity</td>
<td>15</td>
</tr>
<tr>
<td>11/15 (R)</td>
<td></td>
<td>14</td>
<td>Where should we get our energy?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/20 (T)</td>
<td></td>
<td>15</td>
<td>Class cancelled.</td>
<td>No Sections</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>11/22 (R)</td>
<td></td>
<td>16</td>
<td>Thanksgiving Day.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11/27 (T)</td>
<td></td>
<td>17</td>
<td>What should we do about climate?</td>
<td>Exam</td>
<td>Exam review</td>
<td>20</td>
</tr>
<tr>
<td>11/29 (R)</td>
<td></td>
<td>18</td>
<td>Exam Two.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12/4 (T)</td>
<td></td>
<td>19</td>
<td>What have we done in ES 1?</td>
<td>Extra Credit due in section</td>
<td>Wrap-up</td>
<td>0</td>
</tr>
<tr>
<td>12/6 (R)</td>
<td></td>
<td>20</td>
<td>Where do we go from here?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Two unannounced short writing exercises, worth one point each.

Section grade as determined by your Teaching Assistant.

Extra credit assignment on food and agriculture, due in section on week 10.

**Total** 102
**Other policies**

*Crashing:* If you are not yet registered, during week 1 you should attend the discussion section—or sections—that best fits in your schedule. The TA will maintain a waiting list and notify you if there is space by the beginning of week 2. Seniors, ES majors, and students on the pre-quarter waiting list will receive priority. You must sign up for one section and stick with this section for the entire quarter.

*Attendance:* You must make arrangements with your TA ahead of time if you need to miss class for personal, health, or religious reasons. TAs will not grant exemptions or extensions after the fact, or for reasons other than these three.

*Holidays:* We have one holiday this quarter: Thanksgiving (November 22). During Thanksgiving week, all ES 1 classes and sections will be cancelled so that you can enjoy your vacation and prepare for the last couple weeks of the quarter.

*Extra Credit:* There will be one extra credit assignment, worth two points on the final grade, due in your discussion section on week 10. For more information, refer to the assignment description at the end of the syllabus.

*Electronic Devices:* Please silence all of your electronic devices before entering class! Electronic devices are permitted in this class during lectures, but only for use in course-related tasks, such as note taking. Use of devices for non-course-related activities is prohibited. If your TA notices that your activities are not course-related, you will be notified over email that one point will be deducted from your final grade. Devices are prohibited during the short writing exercises and exams.

*My Email:* I welcome all of your questions, comments, and suggestions, but email is impersonal. I would much rather to talk with you in person—especially after class, or in my office hours. For questions or emergencies, please contact your TA.

*Your Email:* Please make sure that your email is accurate and up-to-date in the university’s records, and check it daily throughout the quarter. We strongly recommend that if you need to communicate via email that you use your UCSB address, because email from non-UCSB accounts often gets flagged as spam. From time to time, I will send out important announcements—you don’t want to miss them.

*Disabled Students Program (DSP):* 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 condition and that you are familiar with your DSP responsibilities. See http://dsp.sa.ucsb.edu/Index.aspx. If you are a registered DSP student and you intend to request an accommodation, you should inform your TA within the first two weeks of the quarter. You should also submit your accommodation request no less than two weeks before the scheduled exam, so that we can plan for any arrangements. If you fail to show up for your DSP-arranged exam, you will receive a zero. We will not meet retroactive requests.

*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 gender, sex, and/or sexual orientation, please contact your TA or me immediately. UCSB's Resource Center for Sexual and Gender Diversity is an excellent resource to advocate for and support students.

*Academic Misconduct:* UCSB takes plagiarism and other academic misconduct very seriously. If you turn in any work that fails to acknowledge the contributions of others, it will 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 class.

*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.

Safety and Comfort: Our lectures meet in a large, densely-packed auditorium with no center aisle. For the safety and comfort of others: (1) if you arrive early, take a seat in the center of a row, (2) if you have a skateboard or scooter, place it under the seat in front of you or on the side of the nearest aisle safely out of the way, (3) if we have an emergency or drill, exit the building in a calm and orderly fashion, and finally (4) please do not start packing up your belongings before the class is finished—it is annoying and disruptive to your neighbors!

Staff
The instructor, Jen Martin, designs the course, gives the lectures, selects the readings, creates the assignments, holds office hours, and supervises the TAs.

The teaching assistants, listed below, lead the discussion sections, hold office hours, and do all the grading. (Legend: M=Monday, T=Tuesday, W=Wednesday, R=Thursday; a = a.m., p = p.m.).

Zoe Welch (Lead), zoe.welch@lifesci.ucsb.edu, Sections: T2p, T4p
Elliott Finn, efinn@bren.ucsb.edu, Sections: M8a, T8a, W8a
Elizabeth Hiroyasu, ehroyasu@bren.ucsb.edu, Sections: T5p, T6p, W8a
Shellby Johnson, shellby@ucsb.edu, Sections: M6p, T8a, T8a
Karly Marie Miller, karly.marie.miller@gmail.com, Sections: M9a, M12p, M5p
Vienna Saccamanno, vsaccomanno@bren.ucsb.edu, Sections: T7p, W6p, W7p
Brian Tyrrell, tyrrell@ucsb.edu, Sections: W5p, W6p, R8a

Schedule:

PART I: ENVIRONMENTAL CONCEPTS

Week zero
Thurs., What is the environment?
No reading.
No section meetings this week.

Week one
Tues., Why do environments change?
Thurs., How can we know if an environment is changing?
Readings:

Week two
Tues., How do humans shape environmental change?
Thurs., What is the environment worth?
Readings:
Week three
Tues., Who cares about the environment?
Thurs., How do we make environmental policy decisions?

Readings:

Week Four
Tues., How do we manage the environment?
Thurs., EXAM ONE
No reading.

PART II: ENVIRONMENTAL CHALLENGES

Week Five
Tues., Has pollution increased over time?
Thurs., Why do oceans matter?

Readings:
2. Finding and reading the sources for your term paper. This may take you up to 8 hours to complete.

Week Six
Tues., Do species extinctions matter?
Thurs., What should we eat?

Readings:

Week Seven
Tues., Are we running out of water?
Thurs., Where should we get our energy?

Readings:

Week Eight
Tues., Lecture cancelled
Thurs., Thanksgiving

Readings:
1. Watch the 1960 Harvest of Shame documentary.

No section meetings this week.

Week Nine
Tues., What should we do about climate change?
Thurs. EXAM TWO

Readings:
Week Ten
Tues., What have we done in ES 1?
Thurs., Where do we go from here?

Readings:

Extra Credit Assignment: Food on Film

Instructions
This assignment is meant to be completed during the Thanksgiving break. Answer the five questions below, and bring your complete typed and printed responses to discussion section on week ten. Unless stated otherwise, each of your responses should be one to two paragraphs and written as complete sentences in polished prose. By completing this assignment in full, you can gain up to two extra points on your final grade.

Assignment
In recent years, popular interest in food and agriculture has skyrocketed, as seen through books, magazines, and broadcast media—including films. For this assignment, you will watch one of the documentary films listed below on the topic of food and agriculture. Select whichever one is most interesting to you. All of these are available streaming or as DVD rentals from one of the major internet platforms, such as Netflix, Hulu, Itunes, or Amazon. After watching, answer the questions below.

Food, Inc.
Fresh
Killer At Large
The Future of Food
Food Chains
Dirt!
King Corn
The Garden
Farmageddon
Food Choices

1. What is the film’s primary goal? If there is more than one main objective, then describe them each in turn.
2. Does the film attempt to answer a question or set of questions? What is its thesis?
3. Describe the film’s narrative structure and evidence. Do the structure and evidence enable the film-maker to achieve his or her goals? What kinds of sources does the film-maker use as evidence to build the argument?
4. Does the film contain a normative message (an argument about how things should be or how to fix a certain problem)? If so, is this message implicit or explicit? What is it?
5. Compare your film with the 1960 documentary called Harvest of Shame. Has anything changed since 1960? If so, in what ways?