Welcome to ES 106! In this class we will cover three aspects of critical thinking about environmental problems and solutions. First we will learn about environmental problems and how they’ve been presented and distorted in the past. Then we will take a look at how to utilize basic systems thinking principles to understand environmental problems and solutions today. Finally, we’ll investigate some of the underlying psychological impediments to clear thinking about climate change communication and other environmental problems. It is our hope that you will gain knowledge and develop your analytic insight when engaging environmental problems throughout the rest of your academic, professional, and personal development.
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<th>Course Goals</th>
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<td>1. Learn how people have been misled on environmental issues, who some major players are, and what tactics have been (and continue to be) used to distort the science behind environmental issues for political, ideological, or commercial interests</td>
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<td>2. Develop systems thinking insights and methods into analysis of environmental problems and solutions, incorporating concepts such as dynamic equilibrium, feedback, oscillation, and resilience</td>
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<td>3. Understand how to effectively communicate information about environmental problems and solutions, and how the psychological mechanisms that underlie environmental skepticism/denial operate, particularly on climate change</td>
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| Lectures       | Tuesday/Thursday 2:00-3:15  
Buchanan 1920               |
|----------------|-----------------------------|
| Instructor     | Quentin Gee, PhD  
gee@ucsb.edu  
Bren 4005  
Wednesday 11:00-1:00 |
| Course Website | All major course information will be posted on Gauchospace. This includes key slides from lectures, any online readings, review guides, and contact information for your TA’s.  
https://gauchospace.ucsb.edu/ |
| Readings       | Naomi Oreskes and Erik M. Conway (2010), Merchants of Doubt (Bloomsbury Press)  
Donella Meadows (2008), Thinking in Systems (Chelsea Green Publishing)  
+ Other Readings Posted on GS |
<table>
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<tr>
<th>Teaching Assistants</th>
<th>Justin Breck</th>
<th><a href="mailto:jlbreck@umail.ucsb.edu">jlbreck@umail.ucsb.edu</a></th>
<th>Bren 4010</th>
<th>Thursday 12-2</th>
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<tr>
<td></td>
<td>Max Stiefel</td>
<td><a href="mailto:stiefel@geog.ucsb.edu">stiefel@geog.ucsb.edu</a></td>
<td>Bren 4008</td>
<td>Tuesday 4-5, Thursday 10-11</td>
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i>Clickers will be used to take attendance as well as enhance student participation and comprehension of key issues. Here are key policies and factors to keep in mind regarding i>Clickers:

• It is your responsibility to have an i>Clicker and use it regularly
• Leaving lecture early or arriving late may affect your i>Clicker score, as there is no guarantee of how many i>Clicker polls there will be, or at what time the polls will occur during lecture
• ONCE (1) during the quarter if you arrived a bit late, forgot your clicker, or otherwise were unable to participate in all of the polls, you may come up to me at the end of class and check-in to earn complete i>Clicker activity for the current day
• IN ADDITION to your one-time check-in credit, I will drop your two (2) lowest days of i>Clicker activity, including zeroes (e.g., absences)

Plan the next ten weeks of your lives in awareness of this policy.

And, DO NOT ASK FOR ADDITIONAL EXCEPTIONS
Grading

8%  i>Clicker
12%  Section Score
25%  Paper 1
30%  Paper 2
25%  Final Exam

Grades are assigned generally along the lines of the standard grading (93%+ = A; 90-92.9% = A-; 87-89.9% = B+; etc.), however, I may alter grade cutoffs such that it is easier to earn a higher letter grade assignment than standard grading.

In addition, your TA has the ability to recommend grade bumps in borderline cases based on section attendance and participation. See your TA for more information on their particular section policy.

**Final exam**

Tuesday 12 December 2017, 4-7 PM
in the same room as lectures
We treat you as adults who are honorable people. If special problems come up, see your TA, ASAP.

Academic dishonesty assaults the basic integrity and meaning of a University. Cheating, plagiarism, and collusion are serious acts that erode the University’s educational role and debase the learning experience not only for perpetrators, but also for the entire community. It is my expectation that students in this course will understand and subscribe to the ideal of academic integrity and that they will bear individual responsibility for their work. Materials (written or otherwise) submitted to fulfill academic requirements must represent a student’s own efforts. Any act of academic dishonesty attempted by any UCSB student is unacceptable and will not be tolerated. This does not mean you can’t talk about your work with other students and brainstorm, etc., but when it comes to doing your work, it must be your own. We encourage Students, TAs and Faculty to interact as much as possible on academic subjects of mutual interests.