



## **CIEE Global Institute - Santiago, Chile**

<b>Course name:</b>	Sustainability and the Anthropocene
<b>Course number:</b>	(GI) ENVI 2002 STCH
<b>Programs offering course:</b>	Santiago Chile Open Campus
<b>Open Campus Track:</b>	Sustainability and Environmental Sciences Track
<b>Language of instruction:</b>	English
<b>U.S. semester credits:</b>	3
<b>Contact hours:</b>	45
<b>Term:</b>	Fall 2019

### **Course Description**

This course explores changes to our global environment in the Anthropocene and what to do about it. It poses questions of current sustainability and global system failure. Can we design a society and economy that is sustainable, democratic, and prosperous? This course uses a broad interdisciplinary approach to understand central issues of sustainability. We study sustainability through the lens of culture and societal change, political conflict, ecological economics, global environmental issues, globalization and development and ecological design.

### **Learning Objectives**

By completing this course, students will:

- Define the Anthropocene, Holocene, the Great Acceleration and its impact on the Environment
- Describe the basic elements of sustainability
- Use critical thinking to critique how environmental problems relate to human well-being
- Critique historical attempts at sustainability
- Understand how local sustainability scales to regional and global Sustainability
- Comprehend the intersection of human activity, culture, resource use and sustainability
- Articulate a map to a more sustainable global future

### **Methods of Instruction**



This course is taught through lecture, guest lecture, discussions and small group or individual assignments. Audiovisual material and site visits will augment the in-class learning experience. The student may at any time seek additional guidance in office hours (TBD) or by scheduling an appointment with the instructor via Canvas.

### **Assessment and Final Grade**

- Participation 20%
- Short Answer Written Assignment (2) 15%
- Long Answer Written Assignment 15%
- Midterm 25%
- Final exam 25%

### **Course Requirements**

#### **Short Answer Written Assignment (essays)**

Students are expected to write two 700-word essays answering questions about the weekly subjects. Essays should present, discuss, analyze, and develop the topics with references to the readings, visits, lectures, discussions, and other sources when applicable. The essays should use Chicago citation style in referencing sources.

#### **Long Answer Written Assignment**

Students are expected to write one 1500 word essay on a teacher-approved topic discussed in class. The essay should present, discuss, analyze, and develop the topic with references to the readings, visits, lectures, discussions, and other sources when applicable. The essays should use Chicago citation style in referencing sources.

#### **Midterm Exam**

The midterm exam will be take-home, open-book, short-response answers (up to 6 questions). Each answer should be between 75 and 150 words (and no more than 250 words). Exams will be made available via Canvas one class session before they are due and must be submitted in Canvas by the due date.

#### **Final Exam**

The final exam will be take-home, open-book, short-response answers (up to 6 questions). Each answer should be between 75 and 150 words (and no more than 250 words). Exams will be made



available via Canvas one class session before they are due and must be submitted in Canvas by the due date.

### **Participation**

Participation is valued as meaningful contribution in the digital and tangible classroom, utilizing the resources and materials presented to students as part of the course. Meaningful contribution requires students to be prepared in advance of each class session and to have regular attendance. Students must clearly demonstrate they have engaged with the materials as directed, for example, through classroom discussions, online discussion boards, peer-to-peer feedback (after presentations), interaction with guest speakers, and attentiveness on co-curricular and outside-of-classroom activities.

### **Attendance Policy**

Regular class attendance is required throughout the program, and all unexcused absences will result in a lower participation grade for any affected CIEE course. Due to the intensive schedules for Open Campus and Short Term programs, unexcused absences that constitute more than 10% of the total course will result in a written warning.

Students who transfer from one CIEE class to another during the add/drop period will not be considered absent from the first session(s) of their new class, provided they were marked present for the first session(s) of their original class. Otherwise, the absence(s) from the original class carry over to the new class and count against the grade in that class.

For CIEE classes, excessively tardy (over 15 minutes late) students must be marked absent. Attendance policies also apply to any required co-curricular class excursion or event, as well as to Internship, Service Learning, or required field placement. Students, who miss class for personal travel, including unforeseen delays that arise because of personal travel, will be marked as absent and unexcused. No make-up or re-sit opportunity will be provided.

Attendance policies also apply to any required class excursion, with the exception that some class excursions cannot accommodate any tardiness, and students risk being marked as absent if they fail to be present at the appointed time.

Unexcused absences will lead to the following penalties:



<i>Percentage of Total Course Hours Missed</i>	<i>Equivalent Number of Open Campus Semester classes</i>	<i>Minimum Penalty</i>
Up to 10%	1 content classes, or up to 2 language classes	Participation graded as per class requirements
10 – 20%	2 content classes, or 3-4 language classes	Participation graded as per class requirements; <b>written warning</b>
More than 20%	3 content classes, or 5 language classes	Automatic <b>course failure</b> , and possible expulsion

### **Classroom**

The 2.5 hour sessions will be most productive and enjoyable if every member of the class is prepared and engaged. Please be on time. Even though this is a course on food, please do not eat in class. In order to create an atmosphere that facilitates conversation and discussion, we will restrict computer use to certain times during the class when we need access to the internet for specific tasks. Please plan on taking notes by hand during lectures.

### **Class Schedule**

The schedule below gives you a preliminary overview of topics and readings we will cover. ***For up-to-date information and detailed assignments you need to check our Canvas site every day!*** You will be asked to submit a discussion question or brief responses to the readings before each session. These assignments will be submitted via Canvas and will be due at 1 pm on the day for which they are assigned.

### **Week 1 Orientation Week**



**Class 1:1 Introduction to class: Sustainability and our Future**

The discussion will be around the following questions: What is Sustainability? Our Earth and the Sustainability Crisis? Why is Sustainability Important? What role does individual or collective human behavior play? What got us into this mess? How bad is it?

**Excursion:** Students will go on an excursion and visit Sanctuary of Cajón del Maipo in south Santiago..

**Week 2**

**Class 2:1 Science of Sustainability: The Challenges of Sustainability**

Students will discuss are Humans Destroying the Planet? Entering the Anthropocene.

Required Readings:

1. Required Reading: Orr pp. 13-20; pp. 66-72
2. Schwagerl Chapters 1, 2, 3 & 4
3. Wheeler, Stephen M., et al. Chapter 12;
4. Adger et al. (2009)

**Excursion:** Visit Parque Aguas de Ramón. La Reina, Santiago.

**Short Answer Written Assignment 1, due:**

How and why does your Ecological Footprint differ from those in Santiago de Chile?  
Drivers of Global Environmental Change

**Class 2:2 Global Changes to Natural Ecosystems and Human Environments**

This class will discuss: How much of the Earth do Humans Use? What are Global Tipping Points and Planetary Boundaries?

Students will also be introduced to synergisms in drivers and impacts.

Required Readings:



Vitousek et al. (1997)  
Röckstrom et al. (2009)  
Brown et al. 2013

### Week 3

#### **Class 3:1 Human – Environment Interactions: Ecosystem Services. Imagining an Unsustainable Future**

Discussion: Does nature have value beyond what it offers humans? Nature conservation as social exclusion

Required Reading:

Orr, pp. 57-65; Turner et al. (2003)

**Short Answer Written Assignment 2, due:**

Choose one Planetary Boundary and write an essay on its ultimate, proximate drivers and suggestions for what do about it

#### **Class 3.2 Creating a Restorative Economy. Challenging our Cultural Assumptions**

Discussion: Rethinking our culture of consumption. What if everyone lived like a person from the USA?

Required Reading:

1.Schwagerl Chapter 6

2.Schwagerl Chapter 7

3.<https://www.survivalinternational.org/tribes/brazilian>

[http://wwf.panda.org/what we do/where we work/amazon/amazon threats/other threat s/illegal wildlife trade amazon/](http://wwf.panda.org/what_we_do/where_we_work/amazon/amazon_threats/other_threats/illegal_wildlife_trade_amazon/)

### Week 4

#### **Class 4:1 Human Population Growth on a Finite Planet. Addicted to Growth**



Discussion: Was Malthus right, after all? What happens if human population levels off? Students will also be introduced to the Great Disruption and changing Human Behavior and Systems: Is the Great Disruption inevitable? How willing are you to change your environmentally harmful behaviors?

Required Reading:

1. Gilding pp. 1-75
2. Gilding 76-183

### **Midterm exam**

#### **Class 4:2 Poverty and Inequality in the Anthropocene**

Discussion: What are the roots of poverty and economic inequality?

Required Reading:

1. Gilding 184-235
2. [https://en.wikipedia.org/wiki/Bento\\_Rodrigues\\_dam\\_disaster](https://en.wikipedia.org/wiki/Bento_Rodrigues_dam_disaster)

**Excursion with Speaker:** Upper Mapocho river in Santiago.

### **Week 5**

#### **Class 5:1 Working Together for a Sustainable Future: Animal Ethics and Industry**

Discussion: Who will take charge?

Required Reading:

1. Gilding 236-263

**Excursion** to Buin Zoo (south Santiago): ethical practices of maintaining wild animals in captivity, international trade of animals, international laws on animal trades.

#### **Class 5.2 Establishing Priorities for a Sustainable Future**



Discussion: How much priority do we give non-human species?

Required Reading:

1. Orr 324-332
2. Ferreira [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0100-736X2016001300046](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0100-736X2016001300046)

**Long Answer Written Assignment due.**

### Week 6

#### **Class 6:1 Challenges to Creating a Green Economy**

Discussion: Human standard of living vs. environmental well-being

Required Reading:

Orr 180-185

#### **Class 6.2 Blueprint for a Sustainable Future**

Discussion: How our choices will determine our future.

Required Reading:

Orr 316-323

**Final Exam due in class**

#### **Readings**

Adger, W. Neil, Hallie Eakin, and Alexandra Winkels. "Nested and teleconnected vulnerabilities to environmental change." *Frontiers in Ecology and the Environment* 7.3 (2009): 150-157.

Gilding, Paul. (2011). *The great disruption: How the climate crisis will transform the global economy*.





Orr, D. W. (2011). *Hope is an Imperative: The Essential David Orr*. Island Press.

Rockström, Johan, et al. "Planetary boundaries: exploring the safe operating space for humanity." (2009).

Schwagerl, C. (2014). *The Anthropocene: The Human Era and How It Shapes our Planet*. Synergistic Press.

Turner, R. Kerry, et al. "Valuing nature: lessons learned and future research directions." *Ecological economics* 46.3 (2003): 493-510.

Vitousek, Peter M., et al. "Human domination of Earth's ecosystems." *Science* 277.5325 (1997): 494-499.

Wheeler, Stephen M., et al. *Sustainable Urban Development Reader* (2104). chapter 12

Whitmore, T.C. (1998). *An Introduction to Tropical Rain Forests*, chapter 11: Tropical rain forests at the cusp of the new millennium.

### **Online Readings**

Ferreira, O. A. (2016) "Animal-assisted therapy in early childhood schools in São Paulo, Brazil": [http://www.scielo.br/scielo.php?script=sci\\_arttext&pid=S0100-736X2016001300046](http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0100-736X2016001300046)

<https://www.theguardian.com/world/2016/jun/22/jaguar-brazil-killing-animal-welfare-groups-olympic>

<https://www.nytimes.com/2017/03/17/world/americas/brazil-food-companies-bribe-scandal-salmonella.html?mcubz=0>

<https://www.crueltyfreeinternational.org/what-we-do/blog/brazil-committee-votes-ban-cruel-cosmetics>