



## **CIEE Global Institute – Cape Town**

<b>Course name:</b>	Sustainability and the Anthropocene
<b>Course number:</b>	(GI) ENVI 2002 CTSA
<b>Programs offering course:</b>	Cape Town Open Campus
<b>Open Campus track:</b>	STEM and Society
<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 be able to:

- Define the Anthropocene, Holocene, the Great Acceleration and its impact on the Environment
- Understand the central elements of sustainability and critique historical attempts at sustainability
- Understand the complex interaction between the human- and the environmental- sphere; use critical thinking to discuss how environmental problems relate to human well-being
- Understand how local sustainability scales to regional and global sustainability
- Comprehend the intersection of human activity, culture, resource use and sustainability, and articulate strategies for achieving a more sustainable global future

### **Course Prerequisites**

None

### **Methods of Instruction**



The course will be highly interactive between the instructor and the students. There will be introductory lectures using various methods as Power Points and short film clips. During the lectures the students will be given short individual- and group- assignments to solve in the class or as homework. The students will have to write a paper on individually selected topics, finalised by an individual presentation. Students are expected to do the required readings before class so they can discuss the material among themselves and with the instructor. Guest speakers will share expert knowledge in the form of presentations of various subjects within sustainability. There will be two excursions in Copenhagen.

### **Assessment and Final Grade**

1. Short Assignments / Homework (4)	20%
2. Essay	20%
3. Midterm	25%
4. Presentation	15%
5. Participation	20%
TOTAL:	100%

### **Course Requirements**

#### **Short Assignments / Homework**

During the lectures the students will be given short individual assignments to solve in the class or as homework. The assignments will pose an essential question that the students are expected to solve with a written answer. The assignment will be graded by how comprehensive and critically it covers the question. Students will be assigned 4 questions throughout the course, each worth 5% with a word count of 450 per submission.

#### **Essay**

At the end of Week 2, students will select a subject from the syllabus, and write a 2000-word essay. The essay will consist of an introduction, an analysis of the subject, a discussion and a conclusion, a literature list and an abstract. The essay will be submitted at the end of Week 4.



### **Midterm**

At the end of Week 3, students will provide a written response to five essential questions related to the course topics. The assignment will be graded by how comprehensive and critically it covers the question. This will be an open book, time limited take home exam conducted through our LMS, Canvas.

### **Presentation**

Each student will have 10 minutes to present their paper in front of the class. The presentation will be graded on how well the student presents their subject to the class, in a manner so everyone not being familiar with the subject will understand it. The presenter should be prepared to answer questions about the paper, to the best of their ability.

### **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 as a result 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; written warning
More than 20%	3 content classes, or 5 language classes	Automatic course failure, and possible expulsion



## Weekly Schedule

NOTE: this schedule is subject to change at the discretion of the instructor to take advantage of current experiential learning opportunities.

Week 1                      Orientation

Class 1.1                    Sustainability and our Future

The syllabus will be reviewed in detail. The objectives of the course and the core concepts relating to environment and ethics will be presented and discussed.

Week 2

Class 2.1                    Earth and the Sustainability Crisis

This class seeks to examine a range of fundamental questions relating to sustainability: Do we have a sustainability crisis? Why is sustainability important? How has humankind contributed to a sustainability crisis? What systems and methods are used to measure and report our planet's current sustainability status?

Reading:

Orr pp. 13-20; Schwagerl Chapter 1; Orr pp. 66-72; Schwagerl Chapters 2 and 3

Class 2.2                    The Challenges of Sustainability

This session examines current predominant challenges facing humankind and the development and management of sustainable systems. This class will look specifically at the role of humankind in degrading sustainability.

Reading:

Schwagerl Chapter 4

❖ Essay topic due

Class 2.3                    Sustainability Audits

Guided walking tour of Cape Town to conduct a Sustainability Audit.

Reading: Schwagerl Chapter 5

Week 3

Class 3.1                    Planetary Boundaries - Drivers of Global Environmental Change



The vulnerability of distant peoples and places to global change in environment and society is nested and teleconnected. Here, we question that such vulnerabilities are linked through environmental change process feedbacks, economic market linkages, and flows of resources, people, and information.

Reading:

Adger et al. (2009); Vitousek et al. (1997)

Class 3.2

Global Changes to Human Environments. Synergisms in Drivers and Impacts

What are Global tipping points and planetary boundaries? More than the sum of the parts: interaction effects. Guest lecturer TBD

Reading:

Röckstrom et al. (2009); Brown et al. 2013

❖ Take Home Midterm exam

Week 4

Class 4.1

Human-Environment Interactions and Ecosystem Services

Does nature have value beyond what it offers humans?

Reading:

Turner et al. (2003)

Imagining an Unsustainable Future and Creating a Restorative Economy

Nature conservation as social exclusion. Rethinking our culture of consumption.

Class 4.2

Challenging our Cultural Assumptions

What if everyone lived like a person from the USA? Guest lecture from the Cradle to Cradle Products Innovation Institute (TBC).

Reading:

Schwagerl Chapter 7

Week 5

Class 5.1

Human Population Growth on a Finite Planet: Addicted to Growth

This session evaluates Malthus position, and questions what happens if human population levels off?



Reading:  
Gilding pp. 1-29; Gilding pp. 30-75

Class 5.2                    The Great Disruption: Changing Human Behavior and Systems

Is the Great Disruption inevitable? How willing are you to change your environmentally harmful behaviors?

Reading:  
Gilding 76-114; Gilding 115-183

Class 5.3                    Poverty and Inequality in the Anthropocene

What are the roots of poverty and economic inequality? Students will engage with a guest lecturer.

Reading:  
Gilding 184-235

Week 6

Class 6.1                    Animal Ethics and Industry: Establishing Priorities for a Sustainable Future

Who will take charge? How much priority do we give non-human species?

Reading:  
Gilding 236-263; Orr 324-332

Class 6.2                    Challenges to Creating a Green Economy: Blueprint for a Sustainable Future

Human standard of living vs. environmental well-being. How our choices will determine our future.

Readings:  
Orr 180-185; Orr 316-323

❖ Presentations due

Class 6.3                    Conclusion

Students will review the concepts presented in the course, discuss takeaways, and outline next steps for living a sustainable lifestyle.



## **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*. A&C Black.

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.