

PHILOSOPHY AND THE ENVIRONMENT

Overview

We are living in what scientists are calling the ‘Anthropocene’, an age where humans are affecting the environment at an unprecedented level. The consequences of our actions, such as the reduction of biodiversity, species extinctions and climate change, are overwhelmingly negative, and we do not yet know their full extent. What is the best way to approach these environmental problems? In this course, we will investigate key epistemic and ethical questions in environmental philosophy. In the first part of the course, we will focus on the topic of biodiversity, from various perspectives, including: (a) what is biodiversity and how can it be measured? (b) what affects biodiversity in actual communities, (c) what are the best arguments for defending biodiversity? In the second part of the course, we will delve deeper into a real-world application of these issues: biological invasions. We will examine two difficulties scientists face while studying bioinvasions, one epistemic and one ethical: (a) how to predict where/when an invasion will succeed, and (b) how to evaluate and compare the positive and negative effects of bioinvasions.

Information & Policies

I. Seminars

- Seminars will be held once a week, on Fridays from 12.15 to 1.45.
- The first class is on November 6th.
- All seminars will be held on Zoom
- The Zoom link will be open from 12pm
- The seminars will start with 20-30 mins lecture, followed by discussion. Students are required to participate in the discussion.

II. Attendance

- Students are required to attend all seminars.
- Please be on time! Link will be open 15 mins before the start of the seminar

III. Reading

- The syllabus has ‘required’ and ‘recommended’ readings.
- Students are *required* to read the required readings *before* the seminar
- Discussion will be based on the readings, so if you don’t do the reading you won’t have anything to contribute!
- You do not have to read the recommended readings, but it is a good idea to do so, especially if you choose that topic for your final essay.
- Many of the readings are from
 - i. Garson, J., Plutynski, A., & Sarkar, S. (Eds.). (2016). *The Routledge handbook of philosophy of biodiversity*. Taylor & Francis, and
 - ii. Newman, J. A., Varner, G., & Linquist, S. (2017). *Defending biodiversity: environmental science and ethics*. Cambridge University Press.
- You can purchase the books if you wish, but **all readings will be posted on the course website.**

IV. Participation

- Attending the seminar on zoom is required.
- Active participation is also required. This means participating in the discussion.

V. Short Assignments

- The course has two types of short assignments
 - Study questions:** these are questions to help structure your reading. Write a short paragraph or two answering the question after you have completed a reading. Have your paragraph near you so that you can refer to it during discussion. The study questions will be posted each week on Lernraum.
 - Short papers:** These are 3 short papers (1-2 pages), answering a particular question. It is especially important to complete them if you are going to take the exam, so that you receive feedback before you embark on the longer essay.

VI. Exam

- The exam will take the form of a longer essay (3000-4000 words)
- Topic. Students can either pick one of the set topics or write about a topic of their choosing. **If you choose the second option, you must have the question and title approved by me!**
- The provisional deadline for the exam is March 21st

VII. Office Hours

- By appointment over zoom. Please email me if you would like to meet.

Syllabus

Date	Part	Topic	Readings
6/11	Introduction	<ul style="list-style-type: none"> • What is Environmental Philosophy and why should we care about it? 	Required: 1. HB ch. 20. Plutynski & Fujita-Lagerqvist – <i>Putting Biodiversity Conservation into Practice</i> Recommended: 1. Soulé – What is Conservation Biology?
13/11	Part 1. Biodiversity	<ul style="list-style-type: none"> • What is Biodiversity? 	Required: 1. HB ch. 3. Sarkar - <i>Approaches to Biodiversity</i> 2. HB ch. 4. Maclaurin – Is Biodiversity a natural quality? Recommended: 1. Faith – <i>Biodiversity (Stanford Encyclopedia of Philosophy)</i>
20/11		<ul style="list-style-type: none"> • How do we measure Biodiversity? 	Required: 1. HB ch 16. Wilson et al. – <i>Biodiversity indicators need to be fit for purpose</i> 2. HB ch 19. Haila – <i>Estimating biodiversity loss</i>

			<u>Recommended:</u> 1. Simberloff & Wilson – Experimental zoogeography of islands: the colonization of empty islands
27/11		<ul style="list-style-type: none"> How do we measure Biodiversity? (Practicum) 	<u>Required:</u> 1. Biointeractive.org materials
4/12		<ul style="list-style-type: none"> What should be protected? 	<u>Required:</u> 1. HB ch 6. Santana – <i>Biodiversity Eliminativism</i> 2. HB ch 8. Lean & Sterelny – <i>Ecological Hierarchy and Biodiversity</i> <u>Recommended</u> 1. Troudet et al. – <i>Taxonomic bias in biodiversity data and societal preferences</i>
11/12		<ul style="list-style-type: none"> Why should we protect Biodiversity? (Part 1, intrinsic value) 	<u>Required:</u> 1. HB ch. 11. McShane – <i>Is biodiversity intrinsically valuable? (And what might that mean?)</i> 2. DB ch. 12. – <i>How far do Intrinsic Value Defenses get Environmentalists?</i> <u>Recommended:</u> 1. DB section 1.6 (pp. 22-39) - <i>Environmental Ethics and Intrinsic Value</i> 2. Millstein - <i>Defending a Leopoldian basis for biodiversity: a response to Newman, Varner, and Linquist</i>
18/12		<ul style="list-style-type: none"> Why should we protect Biodiversity? (Part 2, instrumental value) 	<u>Required:</u> 1. HB ch 14. Odenbaugh – <i>Protecting biodiversity and moral psychology; or why philosophers are asking the wrong questions</i> 2. Justus et al. – <i>Buying into conservation: intrinsic versus instrumental value</i> <u>Recommended:</u> 1. HB ch 13. Heinzerling – <i>Economizing on Nature’s Bounty</i> 2. DB ch. 6 – <i>How far do Instrumental Value Defenses get Environmentalists?</i>
23/12 - 3/01	Winter Break		
8/1	Part 2. Invasive Species	<ul style="list-style-type: none"> What is an ‘Invasive Species’? 	<u>Required:</u> 1. Colautti & MacIsaac – <i>A neutral Terminology to define ‘invasive species’</i> <u>Recommended:</u> 1. Catford et al. - <i>Disentangling the four demographic dimensions of species invasiveness</i>
15/1		<ul style="list-style-type: none"> What are the mechanisms of Bioinvasion? 	<u>Required:</u> 1. Moles et al. – <i>Invasions: the trail behind, the path ahead, and a test of a disturbing idea</i> <u>Recommended:</u> 1. Hulme – <i>Climate change and biological invasions: evidence, expectations, and response options</i>

22/1		<ul style="list-style-type: none"> Case Study: Zebra Mussels 	<p><u>Required:</u></p> <ol style="list-style-type: none"> Ozgo et al. – <i>Invasive zebra mussel (Dreissena polymorpha) threatens an exceptionally large population of the depressed river mussel ...</i> <p><u>Recommended:</u></p> <ol style="list-style-type: none"> Strayer - <i>Twenty years of zebra mussels: lessons from the mollusk that made headlines</i>
29/1		<ul style="list-style-type: none"> Methodological difficulties in Invasion Biology 	<p><u>Required:</u></p> <ol style="list-style-type: none"> Elliott-Graves – <i>The problem of Prediction in Invasion Biology</i> <p><u>Recommended:</u></p> <ol style="list-style-type: none"> Jeschke et al. - <i>Support for major hypotheses in invasion biology is uneven and declining</i>
5/2		<ul style="list-style-type: none"> Can Invasive Species be defended? 	<p><u>Required:</u></p> <ol style="list-style-type: none"> Sagoff - <i>Do Non-Native Species Threaten The Natural Environment?</i> Simberloff - <i>Non-Native Species Do Threaten The Natural Environment!</i> <p><u>Recommended:</u></p> <ol style="list-style-type: none"> Sotka & Byers - <i>Not so fast: promoting invasive species to enhance multifunctionality in a native ecosystem requires strong(er) scrutiny</i>
11/2	Revision	<ul style="list-style-type: none"> Writing Papers in Philosophy 	N/A