

BEHAVIOURAL ENVIRONMENTAL ECONOMICS

COURSE OUTLINE SUMMER 2018

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CONTENT

In this module, students will become acquainted with the intercept of behavioural economics (BE) and environmental economics (EE). The lecture covers standard environmental economics' topics that fit well within the classical concepts of market failure, like pollution control via market-based instruments (e.g., emissions trading and taxes). In addition, more *behavioural* tools like information policy, nudging and eco-labelling will be introduced and discussed, for which the relevance of psychological factors conflicting with the standard model of economic actor are especially relevant.

The students will learn how one may represent a given environmental problem and possible solution mechanisms in formal models, in principle. The emphasis is not on advanced mathematical analysis though. The students will learn what limits exist to standard theory and how so-called *modern* behavioural economics allows to advance the standard models in such a way that well-known decisions biases that are highly relevant in economics' context can be considered (Prospect Theory). However, there also exists another (preceding) approach to behavioural economics, emphasising theories of process and the relevance of the decision context/environment. The students will learn about the differences of these two approaches and how the latter may be implemented in simulation models, in principle.

It is obvious that the module cannot cover all topics of environmental behavioural economics in depth. Therefore, the focus will be laid upon four topics: common-pool resources, (eco-)labelling, policies targeting the so-called energy efficiency gap and emissions trading schemes.

LECTURE CONCEPT

The lectures and tutorials are not strictly separated. Instead, both time-slots (Tuesdays and Thursdays, 8.30-10.00, each) will serve as **blended lecture and tutorial**. The course material will be distributed in form of pdf-slides. Still, it is highly recommended to be present at the sessions.

Active part-taking of the students is not only encouraged, but a central scheme of the lectures. Each week, there will be a number of articles or book-chapters the students should read in advance. Some of these articles shall be presented in groups of two. These presentations are rewarded with up to 10 bonus points for the exam (comprising 10% of the total points possible).

Another part of the tutorials will focus on discussing and reworking the lecture talks, including (whenever necessary) more detailed explanation of some aspects covered, like the formal models. Again, it will be encouraged that students present these models (ad hoc). I will serve as moderator and intercept whenever necessary. To structure these interactive sessions, each tutorial will focus on a few key questions. The students are expected to prepare the topics and follow-up on the lectures, on their own.

One part of the course (11. to 24. of June) will be taught in an asynchronous, self-organised learning setting. Instead of regular lectures and tutorials in the classroom there will be screencast and materials

for self-organised learning in small groups. However, the stuff of these lectures will be recapitulated in a regular session afterwards, using an “inverted classroom” model.

MODULE OBJECTIVES

- You will enhance your abilities to follow lectures and discussions in English.
- You will enhance your abilities to discuss in English (also written English, using Slack).
- You will enhance your abilities to read, understand, summarise and present original research articles (in English).
- You will learn what kind of policy instruments exist to manage environmental problems.
- You will be able to categorise these models in different respects, as well as how (in principle) to analyse them.

With a focus on environmental problems and institutions dealing with environmental problems:

- You will learn (to some extent) when and how economic actors’ decisions deviate from what the standard economic model of rational choice predicts.
- You will learn how amendments to the standard model allow representing some of this *deviant* behaviour.
- You will get to know alternative concepts of rationality (procedural/ecological rationality) that allow behaviour not satisfying the assumptions of standard economic rationality (even if amended as above).
- You will learn how procedural simulation models can represent such alternative concepts of rationality.
- You will become more critical regarding standard assumptions and learn to formulate articulate hypotheses (“educated guesses”) about the consequences of applying non-behavioural (standard) models to real world problems when these assumptions do not hold.

PREREQUISITES

You will need good skills in reading, listening and writing English. You need to be willing to read original research articles and present a summary of such an article (with slides) in the class. You need to be willing to work in small groups.

Sound skills in intermediate microeconomics are useful. In specific: market failure due to negative externalities and asymmetric information, decision under risk/uncertainty and basic game theory. However, all relevant concepts will be introduced (briefly) in the lecture and/or repeated within the tutorial interceptions.

You need to organise yourself with your fellow students to discuss and recapture the content of the lectures within the classes and also outside the class hours, although an online environment to do so will be provided (slack & trello)

ORGANISATION

This module consists of **blended lectures and tutorials** as spelled out above, not all of which will take place as regular sessions. Instead, at least one part of the lecture will be “on demand”, by means of vodcasts. There is a compulsory reading list. The articles will be supplied in advance to the sessions, but not all at once.

If you cannot manage to attend both, lectures and tutorials, make sure to stay updated by your peers and also to read the papers discussed and the lecture/tutorial notes. However, it is highly recommended to be bodily present.

In difference to the last time, there will not be a moodle course. Instead, we will use trello.com and slack.com for all materials, communication and also feedback. In addition, interactive feedback will be gathered during the lectures, using mentimeter.com. Other (online)resources may be added, all of which can be accessed by a central trello board. Registration to the trello boards and slack is upon invitation only and restricted to course participants.

The number of participants is limited to at most 40.

Participants: A maximum of 40 students

Registration: Only during the first three lecture weeks (latest: April-26), by personal inscription. Until the limit of 40 students is reached, everybody that applies is inscribed. If at any single event (lecture or tutorial) the combined number of already inscribed students and new applications is above 40, random selection takes place. For example, in the first lecture, 30 students apply and are inscribed. In the following first tutorial 15 additional students apply. Of these 15, 10 will be chosen randomly for inscription.

Assessment: **Exam (100%, 100 points)**

A final exam of 90 minutes. There will be two questions to answer (50 points each) to be chosen from four candidate questions. The four topics covered by the candidate questions will be communicated in advance, during the lecture. I will not grade you down for bad spelling or grammar as long as everything is comprehensible and written in English.

Bonus points (10 points, up to 10%)

You can get up to 10 bonus points for presenting a research paper together with a peer student.

Time and place: Tuesday & Thursday, 8.30-10.00h, GC 03/42 (Blended Lecture & Tutorial)

Start: April 10, 2018

End: latest July 19, 2018

Examination: July 26, 12.00-12.30, location tba