“Sustainability, Behavior & Environmental Policy“

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The new Major in the UOS MSc program in Economics

Presentation by Prof. Dr. Stefanie Engel

Outline

- Motivation and aim
- Content and uniqueness
- Career perspectives
- Rules and courses offered

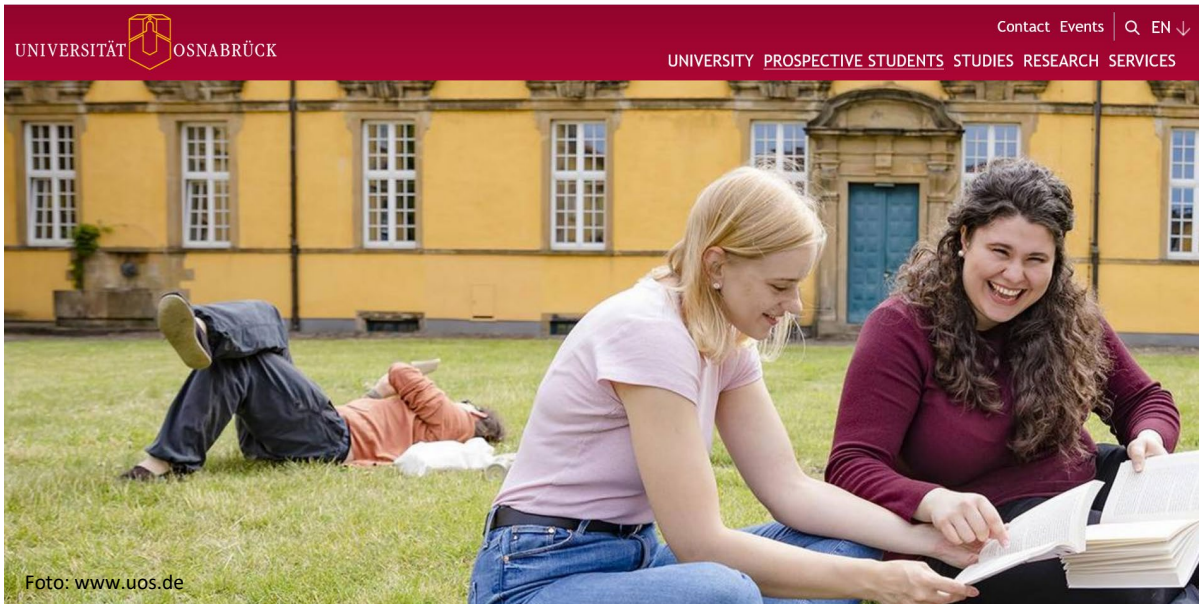

Foto: www.uos.de

Motivation

- Climate crisis, biodiversity crisis, water pollution, soil degradation – **humanity is facing major environmental challenges**, which are seriously threatening our welfare.

> New survey shows society is concerned about climate change and its impact on children
>
> *Young people are most concerned and are more motivated to act* Unicef, 02-03.2022

- It has become clear that we cannot go on like this.
- By now clear that a **transformation to sustainable development requires far-reaching changes in behaviors**
    - from individual consumption patterns, to corporate production and investment practices, to supporting fundamental structural changes in the orientation of our economic system (e.g. EU Green Deal, new welfare measures).

Motivation

- We largely know **how** behavior needs to change.
- Yet, there is a **lack of implementation** of this knowledge. Why is this, and how can it be changed?


Project Syndicate

Opinion: Why is humanity so reluctant to save itself from climate change?

Published: Feb. 25, 2020 at 3:24 p.m. ET

By Willem E. Buiter

MarketWatch.com, 25.02.2020

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The biggest challenge in keeping Earth from overheating isn't technical, it's political

- How can sustainable behavior be better motivated among consumers, in companies and in politics?
- Are sustainability and economic interests really in conflict, and if so, (how) can this conflict be resolved?

Motivation

- **Understanding economics is important** for understanding major sources of the problem AND for developing solutions.
- For example:
    - Common welfare measures like GDP foster unsustainable development. Alternative welfare measures can help promote sustainable development.
    - Markets can induce unsustainable behavior, but putting a price on environmental damages can promote sustainable behavior.
    - As individuals we do not always behave in a way that maximizes our own future well-being, and advertisements can make things worse. But knowledge of such behavioral biases could also be used to nudge us towards better outcomes.

Aim of the Major

The Major ‘Sustainability, Behavior & Environmental Policy’ aims to qualify young professionals who

- understand the role of economics in sustainability transformation, and
- want to use this knowledge to **actively shape a societal transformation towards a more sustainable economy**, and
- can competently apply their disciplinary knowledge in an interdisciplinary environment.

Figure: www.un.org

Content of the Major

In-depth understanding of the

barriers and solution approaches

for a sustainability transformation

from an economic perspective

Methods:

econometrics,

economic experiments,

policy impact evaluation

Opportunity to gain some

fundamental knowledge in

other sustainability-related disciplines

(e. g. psychology, human geography, systems sciences)

What makes this Major unique?

- **Unique combination of environmental economics + behavioral economics**

Environmental Economics

- Focus on **use of natural resources and provision of environmental quality**
- Gap between actual and optimal use/provision
- **Design of environmental policy**
- **Welfare measures**

Behavioral Economics

- Focus on **human behavior**
- Beyond homo oeconomicus: Broader perspective on human beings at the **interface with psychology**
- **Behaviorally-informed policy**

Career perspectives

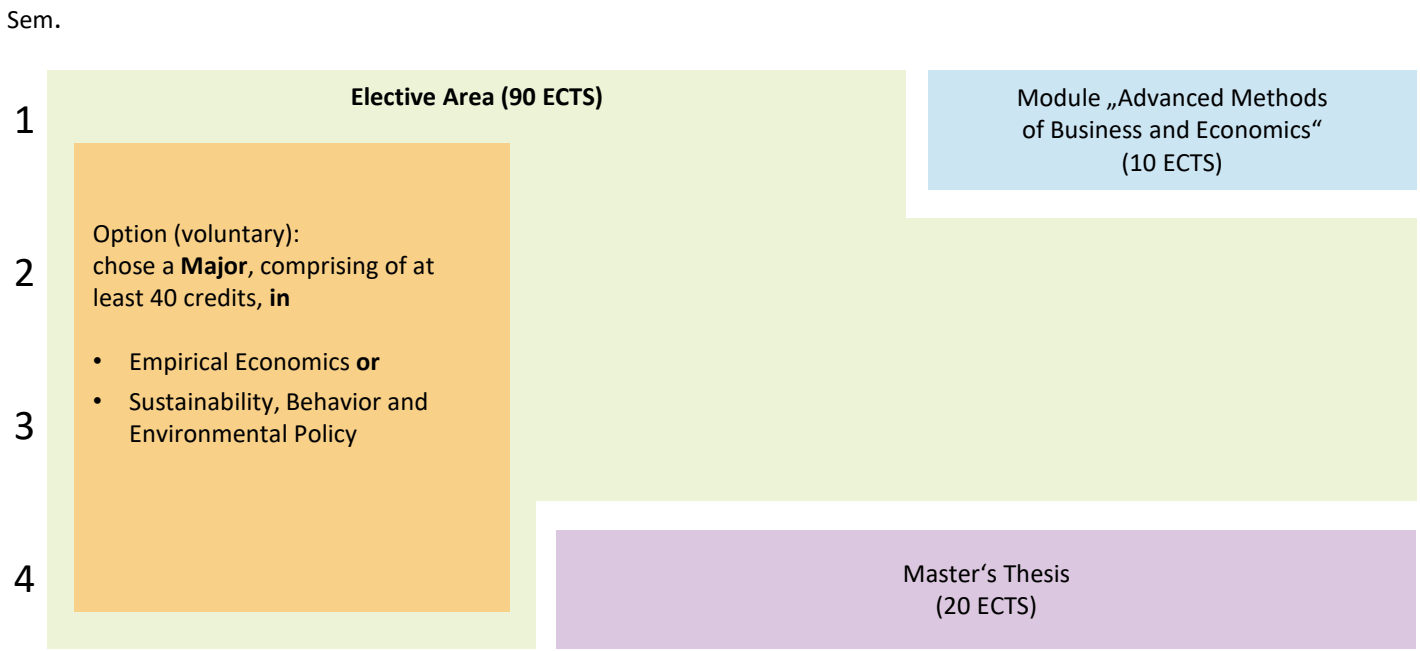
A strong and growing field, for ex. **job market opportunities** in

- **public agencies** shaping environmental policy (local, national, international)
- companies/organizations involved in **policy consulting**
- **sustainability departments of companies** (incl. also Big 5 management consultancies)
- environmental departments of **economic research institutes**
- **environmental research institutes** (e.g. Wuppertal institute, Helmholtz Centre for Environmental Research)
- **academia** (research & teaching)
- **environmental NGOs**


Foto: www.uos.de

The Major within the overall program

Structure of the MSc in Economics (120 ECTS in 4 semesters)



General rules for the elective area in MSc Economics

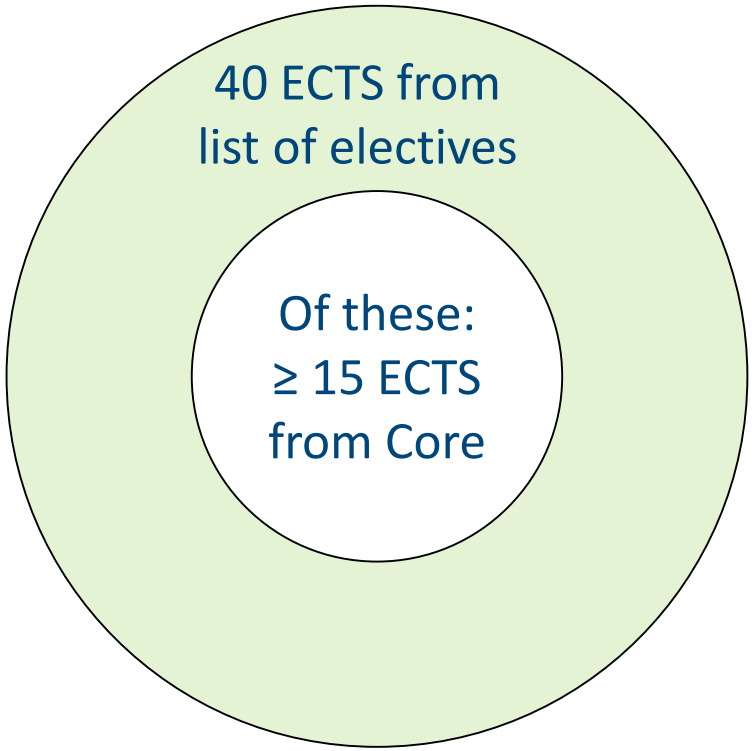
Elective area (90 ECTS) needs to satisfy the following rules

- At least 60 ECTS in economics/methods
- At least 10 ECTS in business administration (waivable upon request for students with non-German highschool and BSc degrees)
- At least 30 ECTS in lectures
- At least 10 ECTS in seminars
- One bachelor course (10 ECTS) can be accounted for in the Master

- **If chosing to specialize in a Major:** 40 ECTS from a specified list of courses (more is of course possible as long as the above rules are satisfied)

Components of the Major

The major „Sustainability, Behavior & Environmental Policy“



If not taken during the bachelor, it is recommended to start with

- Bachelor Module **‚Environmental and Behavioral Economics‘** (WIWI 28100)
- Sets the basis and can be counted for the Master degree

Components of the Major

Core courses (at least 15 ECTS need to be taken from these)

- Economics of Environmental Behavior and Policy (WIWI-28500, 10)

Sustainability/Env Policy

- Advanced Seminar in Environmental Economics A (WIWI-28005, 5)
- Advanced Seminar in Environmental Economics B* (WIWI-28006, 5)
- Seminar Applied Topics in Environmental and Behavioral Economics (WIWI-28007, 5)

Behavior

- Microeconomics I: Experimental and Behavioral Economics (WIWI-20500, 5)
- Advanced Seminar in Microeconomics (WIWI-20005, 5)

In parentheses: Course identifiers, ECTS of the course; *Currently not yet part of the core, but it is planned to add it soon, so better check with Prüfungsamt.

Additional electives counting for the 40 ECTS of the Major

Sustainability/Env Policy

- Nachhaltiges Management (WIWI-24520, G)
- Sustainability Economics (WIWI-28520)

Behavior

- Bachelor Module ‚Environmental and Behavioral Economics' *
  (WIWI-28100; highly recommended if not taken during Bachelor!!!)
- Interdisciplinary Module Sustainability, Behavior and Env Policy
  (WIWI-034; more on this later)
- Seminar Selected Topics in Environmental and Behavioral Economics
  (WIWI-28008)
- Organizational Behavior (WIWI-24540)

Color code: not regularly offered; from business administration; interdisciplinary; G=German
*Currently not yet part of the electives for the Major, but it is planned to add it soon, so better doublecheck with Prüfungsamt.

Additional electives counting for the 40 ECTS of the Major (continued)

Methods

- Advanced Econometrics & Statistics (WIWI-21500)
- Projektseminar Economics (WIWI-02200)

Related Econ background

- Advanced Seminar in Public Economics (WIWI-13005)
- International Taxation (WIWI-13500)
- Social Insurance & Income Maintenance (WIWI-13520)
- International Economic Policy III und IV (WIWI-16500/16520)
- Advanced Macroeconomics (WIWI-17500)

Related business/IT background

- Wirtschaftsethik (WIWI-11900, G)
- Wirtschaftskybernetik (WIWI-18120, G)
- Fortgeschr. Seminar Wirtschaftsinformatik (WIWI-27005, G)
- Data Driven Service Innovation (WIWI-27500, G)

Color code: from business administration; G=German

The interdisciplinary module

Example options within the interdisciplinary module (5 - max. 10 ECTS in total; pls check with Elena Romanenchuk before taking the module)

Sustainability

- Einführung Systemwissenschaft
- Gesellschaft-Umwelt-Beziehungen
- Seminar Nachhaltigkeit
- Seminar Umweltkommunikation
- Seminar Nachhaltigkeit im Tier- und Umweltschutz
- Seminar Ethik und der Klimawandel
- Forschungsseminar Systemwissenschaft (E)

Behavior

- Introduction to Cognitive (Neuro-)Psychology (E)
- Einführung in die Sozialpsychologie
- Einführung in die Organisationspsychologie

Policy

- Einführung in die Politikwissenschaft

Methods

- Methoden der empirischen Sozialforschung

E = in English (others are in German)

Supporting structures at UOS

- Laboratory for Economics Research
- Interdisciplinary Research Center “Institute of Environmental Systems Research”

If you have any further questions,
feel free to contact me
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or our degree program supervisor,
Elena Romanenchuk at
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