

Course and Examination Fact Sheet: Autumn Semester 2024

5,258: Introduction to Environmental Economics

ECTS credits: 3

Overview examination/s

(binding regulations see below)

decentral - Written examination, Analog, Individual work individual grade (70%, 90 mins.)

Examination time: Term time

decentral - Presentation, Digital, Group work group grade (30%)

Examination time: Term time

Attached courses

Timetable -- Language -- Lecturer

5,258,1.00 Introduction to Environmental Economics -- English -- Eisenbarth Sabrina

Course information

Course prerequisites

A very good command of microeconomics (Microeconomomics II) is highly recommended.

Learning objectives

After this course, you should be able to. . .

- Apply analytical tools of microeconomics to describe market failures for environmental goods.
- Identify and compare solutions to market failures for environmental goods
- Employ analytical and empirical reasoning of microeconomics to address environmental issues.
- · Understand contemporary issues in environmental economics and public policy concerning industrial pollution.

Course content

Content includes:

- Markets, Property Rights and Market Failure
- · Regulation of Environmental Pollution
- Measuring Environmental Costs and Benefits
- Time permitting: Introduction to resource economics

This course looks at a range of environmental problems. It uses tools from economics to understand why environmental problems arise (i.e. why markets fail to provide efficient levels of pollution) and how environmental problems can be solved. We will discuss how much pollution is desirable and how regulators should choose pollution targets. Furthermore, we will evaluate a range of regulatory tools that can be used to address a variety of environmental problems. Amongst others, we will learn how pollution taxes, subsidies and emission trading schemes create incentives to reduce pollution.

Furthermore, we will learn to apply the techniques of social cost-benefit analysis, including non-market valuation, to appraise projects and environmental policies.

Time permitting, the last part of the course will introduce you to resource economics. We will use economic tools to understand why renewable resources, such as fisheries, are overexploited and examine policy options to counteract overfishing. We might also look at the optimal extraction of forests or non-renewable resources such as oil.



Course structure and indications of the learning and teaching design

This course consists of two lectures per week. Students will work on problem sets and case studies in their spare time. We will use several hours of lecture time to discuss these problem sets and case studies.

Course literature

The course is based on selected chapters of the following textbooks:

- Perman, R., Ma, Y., Common, M., Maddison, D., & McGilvray, J. (2011). *Natural Resources and Environmental Economics* (4th ed.). Harlow, England: Pearson Education Limited.
- Tietenberg, T., & Lewis, L. (2018). Environmental and Natural Resource Economics (11th ed.). New York: Routledge.
- Kolstad, C. D. (2011). Intermediate Environmental Economics (2nd ed.). New York, Oxford: Oxford University Press.

Moreover, we will read selected journal and newspaper articles, which will be available on Canvas.

Additional course information

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Examination information

Examination sub part/s

1. Examination sub part (1/2)

Examination modalities

Examination type Written examination

Responsible for organisation decentral
Examination form Written exam
Examination mode Analog
Time of examination Term time
Examination execution Synchronous
Examination location On Campus

Grading type Individual work individual grade

Weighting 70% Duration 90 mins.

Examination languages Question language: English Answer language: English

Remark

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Examination-aid rule

Closed Book

The use of aids is prohibited as a matter of principle, with the exception of pocket calculator models of the Texas Instruments TI-30 series and, in case of non-language exams, bilingual dictionaries without any handwritten notes. Any other aids that are admissible must be explicitly listed by faculty members in the paragraph entitled "Supplementary aids" of the course and examination fact sheet; this list is exhaustive.

Procuring any aids, as well as ensuring their working order, is the exclusive responsibility of students.

Supplementary aids

None

2. Examination sub part (2/2)

Examination modalities

Examination type Presentation Responsible for organisation decentral

Examination form Oral examination

Examination mode Digital
Time of examination Term time
Examination execution Asynchronous
Examination location Off Campus

Grading type Group work group grade

Weighting 30% Duration --

Examination languages Question language: English Answer language: English

Remark

Narrated PowerPoint Presentation

Examination-aid rule Free aids provision

Basically, students are free to choose aids. Any restrictions are defined by the faculty members in charge of the examination under supplementary aids.

Supplementary aids

Course material, research articles and newspaper articles relevant to the topic of the presentation.

Students should search for additional research articles and newspaper articles relevant to the topic of the presentation. Those articles should by cited using APA - style referencing.

Examination content

- All material covered in class, i.e. any lecture slides, lecture notes, problem sets, solutions to problem sets and case studies.
- Textbook chapters and additional reading, as indicated on Canvas.
- This includes topics such as:
 - o Markets, Property Rights and Market Failure
 - $\circ \qquad \text{Regulation of Environmental Pollution} \\$
 - Measuring Environmental Costs and Benefits
 - o Time permitting: resource economics
- For the presentation, students should search for additional research articles and newspaper articles relevant to the
 presentation topic. Those articles should be cited using APA referencing.

Examination relevant literature

Lecture content (slides, lecture notes, case studies, problem sets and solutions)



Selected textbook chapters from the following two textbooks, as indicated on Canvas.

- Perman, R., Ma, Y., Common, M., Maddison, D., & McGilvray, J. (2011). Natural Resources and Environmental Economics (4th ed.). Harlow, England: Pearson Education Limited.
- Tietenberg, T., & Lewis, L. (2018). Environmental and Natural Resource Economics (11th ed.). New York: Routledge.
- Kolstad, C. D. (2011). Intermediate Environmental Economics (2nd ed.). New York, Oxford: Oxford University Press.

Selected journal or newspaper articles, as indicated on Canvas.

All material will be listed on Canvas before the final week of the lecture period.

For the presentation, students should search for additional research articles and newspaper articles relevant to the presentation topic. Those articles should be cited using APA referencing.

Please note

Please note that only this fact sheet and the examination schedule published at the time of bidding are binding and takes precedence over other information, such as information on StudyNet (Canvas), on lecturers' websites and information in lectures etc.

Any references and links to third-party content within the fact sheet are only of a supplementary, informative nature and lie outside the area of responsibility of the University of St.Gallen.

Documents and materials are only relevant for central examinations if they are available by the end of the lecture period (CW51) at the latest. In the case of centrally organised mid-term examinations, the documents and materials up to CW 42 are relevant for testing.

Binding nature of the fact sheets:

- Course information as well as examination date (organised centrally/decentrally) and form of examination: from bidding start in CW 34 (Thursday, 22nd August 2024);
- Examination information (supplementary aids, examination contents, examination literature) for decentralised examinations: in CW 12 (Monday, 18 March 2024);
- Examination information (supplementary aids, examination contents, examination literature) for centrally organised mid-term examinations: in CW 42 (Monday, 14 October 2024);
- Examination information (regulations on aids, examination contents, examination literature) for centrally
 organised examinations: two weeks before ending with de-registration period in CW 45 (Monday, 04
 November 2024).