

Environmental Economics

Course title – Intitulé du cours	Environmental Economics
Level / Semester – Niveau /semestre	M1/S1
School – Composante	Ecole d'Economie de Toulouse
Teacher – Enseignant responsable	Stefan Lamp
Lecture Hours – Volume Horaire CM	15
Course Language – Langue du cours	English

Teaching staff contacts – Coordonnées de l'équipe pédagogique :

Stefan Lamp Office T.313 Email : <u>stefan.lamp@tse-fr.eu</u> Office hours : by email appointment

Course Objectives – Objectifs du cours :

This course introduces students to the field of environmental economics. It covers the basic principles of environmental economics and discusses environmental problems and how they can be addressed through policy instruments. We will use both theoretical and empirical tools that have been applied in several areas, with a particular focus on climate change and energy markets.

Prerequisites – Pré requis :

Good understanding of intermediate microeconomics. Intermediate knowledge of applied econometrics.

Practical information about the sessions - Modalités pratiques de gestion du cours :

Use of laptops, tables, cell phones, etc., is welcome if used for course purposes only.

Grading system – Modalités d'évaluation :

There will be a problem set and a final report. Students are expected to attend all lectures. More details on the grading will be provided on the course page.

- Individual problem set (50%)
- Group report (50%)

Bibliography/references – Bibliographie/références :

The first part of the course follows standard textbooks in environmental economics. Students can choose any textbook on the topic. A few examples of textbooks are:

- Nick Hanley, N., Shogren, J., and White, B., Introduction to Environmental Economics, Oxford University Press, 2nd edition, 2013.
- Kolstad, C.D., "Intermediate Environmental Economics", Oxford University Press, International edition, 2nd edition, 2011.
- Phaneuf, D.J. and T. Requate, "A Course in Environmental Economics Theory, Policy, and Practice", Cambridge University Press, 2017.

The second part of the course will be based on published research articles and policy reports.

Mandatory readings will be made available through the Moodle course page together with lecture notes, and any exercises.

Distance learning – Enseignement à distance :

Additional materials will be provided on the Moodle course website.

Session planning - Planification des séances :

Introduction and Key Concepts:

- 1. What is environmental economics?
- 2. Decision-making and environmental protection (societal choice)
- 3. Benefit-Cost Analysis and demand for environmental goods
 - a) Hedonic price models
 - b) Travel cost and introduction to discrete choice
- 4. Environmental policy instruments

Applications:

- 5. Introduction to energy and electricity markets
- 5.1 Electricity market analysis and challenges
- 5.2 Climate Change policies
- 5.3 Renewable Energy Sources

Research highlights:

- 6. Carbon leakage mitigation policies (Antonia Pacelli)
- 7. Technology adoption and spatial externalities (Anouch Missirian)