Advanced Environmental Economics

Course title - Intitulé du cours	Advanced Environmental Economics
Level / Semester - Niveau /semestre	M2 / S2
School - Composante	Ecole d'Economie de Toulouse
Teacher - Enseignant responsable	REYNAERT Mathias – MISSIRIAN Anouch
Lecture Hours - Volume Horaire CM	30
TA Hours - Volume horaire TD	0
TP Hours - Volume horaire TP	0
Course Language - Langue du cours	Anglais
TA and/or TP Language - Langue des TD et/ou TP	

Teaching staff contacts - Coordonnées de l'équipe pédagogique :

Mathias Reynaert Mathias.reynaert@tse-fr.eu, office T.690
Anouch Missirian anouch.missirian@tse-fr.eu, office T.325

Learning objectives - Objectifs du cours :

Over the last two centuries, the development of the world economies, and the associated demographic changes, have led to profound impacts to the environment: resources are affected, in quantity and in quality, to such an extent that the whole functioning of our climate and of our ecosystems is changing, with important consequences for our health and our way-of-life. Environmental Economics is the branch of Public Economics that studies such phenomena. The aim of this class is to introduce PhD students to the research frontier in environmental economics. The class will cover the set of problems that environmental policies are trying to solve (market failures, asymmetric information, policy design), the theoretical properties of regulations (tax, quotas, standards, subsidies, nudges, ...); and the empirical tools that economists use in order to empirically evaluate the extent of the market failures and the effects of policies. On each of these topics, we present the 'state-of-art'. With the active participation of students, we discuss papers that are at the frontier of the literature. We also discuss the remaining unanswered questions that could make nice topics for PhD dissertations in environmental economics. At the end of the class, students should be able to formulate a research project at the frontier of the literature in environmental economics and to write a referee report on a paper submitted to a scientific journal in environmental and resource economics.

Prerequisites - Pré requis :

Good knowledge of intermediate microeconomics, standard econometric methods, and basic mathematics for economists.

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

Students will be expected to read the papers discussed in class in advance and to actively participate in the discussions.

Grading system - Modalités d'évaluation :

The grade for this course will have three components:

- Two referee reports (30%): Each week one paper will be proposed for a referee report (due weeks 2, 4, etc., or 3, 5, etc.). Students are expected to critically evaluate the paper refereed, and write a 2-page long report. In the off-weeks, a précis (short subjective summary) of the paper is asked instead, not evaluated but still required.
- Replication/extension of two of the papers discussed in class (30%), one for each 5-week segment.
- Final exam (40%): 1-hour closed-book evaluation.

Bibliography/references - Bibliographie/références :

Lecture notes and papers will be posted on Moodle.

Session planning - Planification des séances :

Part 1, Anouch Missirian:

Introduction. Economics of biodiversity and ecosystem change.

Trade and the environment.

Distributional effect and environmental justice.

Policy instruments: nudges and information.

Liability; Policies that failed.

Part 2, Mathias Reynaert:

Econometrics of climate change

Econometrics of pollution

Environmental policy and market equilibrium

Enforcement

Land use and spatial models

Distance learning – Enseignement à distance :

Interactive virtual classrooms when face-to-face is not allowed