

- Faculté des sciences économiques
- www.unine.ch/seco

Energy Economics (5ER2032)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en sciences économiques, orientation politique économique	Cours: 2 ph	cont. continu	3

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

Période d'enseignement:

- Semestre Printemps

Equipe enseignante:

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Objectifs:

This course provides students with an introduction to the principles of energy economics and related policy applications. The main objective is to learn how to apply Microeconomic concepts and Econometric methods to various energy issues. Through these applications, the course will also introduce students to how analytical and empirical models can be drawn from theory. Emphasis will be given to empirical applications as well as policy-oriented analyses. Conceptual frameworks in energy demand and supply, the economics of energy efficiency and the economics of exhaustible resources will be covered. The rationales for policy intervention and regulation of energy markets and the role of economic analysis in designing such policies will be explored.

Contenu:

The course consists of a diverse range of topics revolving around the following lines:

- Energy innovations, history and policy challenges
- Economic models of energy demand and supply
- Economics of exhaustible resources
- Markets for oil, natural gas and electricity
- Economics of energy efficiency
- Empirical modeling of energy demand

Forme de l'évaluation:

2h written midterm exam (30%)
2h written exam during the last lecture of the semester (70%).
Retake (August-September): 2-hour written exam (100%).

Documentation:

There is no single required textbook. The course draws on selected readings from the following books and a series of journal articles that will be made available during the semester.

- International Energy Markets: Understanding Pricing, Policies and Profits. Dahl, C.A. 2004.
- International Handbook on the Economics of Energy. Hunt, L. and Evans, J. (editors). 2008.
- The Structure of World Energy Demand, Pindyck, R.S., 2003.
- Resource and Environmental Economics, Fisher, A.C., 1981.
- Energy Efficiency: Towards the End of Demand Growth, Sioshansi, F.P (editor). 2013.

Forme de l'enseignement:

Lecture: 2 hours per week
Office hours: on request by e-mail