



## RESSOURCES, ÉNERGIE, CLIMAT, SOCIÉTÉS

## RESSOURCES, ENERGY, CLIMATE, SOCIETIES

Lecturers: **Pietro SALIZZONI, Jean-Pierre CLOAREC, Mathieu CREYSSELS**

| Lecturers : 16 | TC : 0.0 | PW : 0.0 | Autonomy : 0.0 | Study : 12 | Project : 0.0 | Language : FR

### Objectives

The objective of this course is to provide basic knowledge to enable students to understand 1) the distribution, availability and exploitation of natural resources, and the impact of the use of natural resources on the biosphere and the quality of life; 2) a basic culture and examples of tools and methods on energy & climate issues

**Keywords :** Natural resources, environment, climate, energy, economic growth

### Programme

#### Lectures

- 1- Historical perspective on resources, energy and climate issues (Pietro Salizzoni)
- 2- Mitigation of climate change impacts (Jean-Pierre Cloarec)
- 3- Energy and natural resources (Mathieu Creyssels)
- 4- Renewable energy: legislative aspects (Isabelle Michalet, Lyon 3)
- 5- Current natural resources and conflicts (Alberto Christina, Doctors Without Borders)

#### BE

3 BE sessions: Energy – Climate negotiation simulations (Jean-Pierre Cloarec)

### Learning outcomes

- Familiarize with the major classes of natural resources and their distribution on Earth
- Be aware of the impact of resource development on the environment and society
- Develop a basic understanding of the links between resource development and the growth or collapse of society.
- Become familiar with the complexity of solutions to climate issues and their social and economic acceptance.

### Independent study

Objectifs :

Méthodes :

### Core texts

J. Diamond, *GUNS GERMS AND STEEL*, WW Norton, 1997  
V. Smil *ENERGY AND CIVILIZATION: A HISTORY*, The MIT Press, 2018  
D. MacKay *SUSTAINABLE ENERGY – WITHOUT THE HOT AIR*, UIT Cambridge, 2008

### Assessment

Mark = 50% knowledge + 50% know-how  
Knowledge mark = 100% terminal exam  
Know-how mark = 100% terminal exam