

## Natural resources economics (60h – 9CFU)

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### Course learning objectives and skill acquisition

The course deals with the economic and environmental implications of natural resource management. The course covers conceptual and methodological topics, as well as natural resource allocation problems. It introduces students to the principles, reasoning, and techniques required to analyze actual economic policy instruments.

### Assessment

The course assessment is based on an oral exam. Students attending the class will have the possibility to present to their colleagues some of the articles from the reading list.

### Course general schedule

#### *Section 1: Analytical techniques and modeling*

- Modeling, definitions
- Basic concepts
- Solving numerical allocation problems
- Optimal control theory

#### *Section 2: Principles of natural resource economics and policy*

- Non-renewable resources and stock pollutants: dynamics and regulation
- Fundamentals of renewable resource economics
- Fisheries and forests: optimal harvesting, stock recovery, and assessing extinction risk
- Decision making under uncertainty and option value

#### *Section 3: Case studies and special topics*

- The case studies change from year to year depending on current issues and on student interest

### Teaching material

Lecture slides and other teaching material will be downloadable from the course website.

#### *Textbooks*

M. Conrad, Resource Economics, 2nd Edition 2010, Cambridge University Press, Paperback  
ISBN: 9780521697675, Chapters: 1 – 3 – 4 – 5.

#### *Additional readings*

The reading list will be provided during the class.