

# Course Specifications

From the academic year 2016-2017 up to and including the

## Environmental and Energy Policy (F000679)

Course size (nominal values; actual values may depend on programme)

Credits 6.0 Study time 180 h Contact hrs 45.0 h

Course offerings and teaching methods in academic year 2018-2019

B (semester 1)	English	lecture	30.0 h
		group work	15.0 h

Lecturers in academic year 2018-2019

Albrecht, Johan	EB21	lecturer-in-charge
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Offered in the following programmes in 2018-2019

	crdts	offering
<a href="#">Master of Science in Complementary Studies in Economics</a>	6	B
<a href="#">Master of Science in Economics</a>	6	B
<a href="#">Master of Science in Economics</a>	6	B
<a href="#">Exchange programme in Economics and Business Administration</a>	6	B

Teaching languages

English

Keywords

Energy policy, climate policy, energy transition, electricity markets, renewable energy, electricity markets, sustainability, European Union

Position of the course

This course develops an economic analysis of environmental and energy policy goals. The concept of economic efficiency is central in this course and relates to the optimal use of scarce resources (cost-efficiency, cost-effectiveness, information problems). The impact of policy instruments is assessed from a good understanding of the supporting markets. The analysis of climate and renewable energy targets is based on the prevailing dynamics on European electricity markets in the EU.

After a general introduction on economic instruments in environmental and energy policy, an institutional analysis of the energy transition concept is elaborated. In the analysis, the emphasis is on the interactions between policy choices and technological dynamics (applied on renewable energy technologies). The presented framework makes it possible to explain some current paradoxes such as the increase of CO<sub>2</sub> emissions from electricity generation despite massive investments in renewable technologies.

After a series of lectures, the students write and present a short paper on the topics discussed.

Contents

- 1 economic efficiency as a policy concept ; policy instruments and markets
- 2 some paradoxes of environmental and energy policy
- 3 institutional analysis of the interactions between policy instruments and technological innovation, applied to recent European climate and energy policies (EU 20/20/20, Emissions Trading Scheme, ...)

Initial competences

Introduction to economics.

Final competences

- 1 Explaining the relevance of economic efficiency in the policy process policy instruments with respect to specific goals

- 2 Disentangling complex cases to a set of basic interactions evaluating
- 3 To evaluate different policy instruments for different policy objectives
- 4 Applying theoretical concepts in actual cases of policy evaluation

#### Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

#### Conditions for exam contract

This course unit cannot be taken via an exam contract

#### Teaching methods

Group work, lecture

#### Extra information on the teaching methods

Ex cathedra teaching for the theoretical introduction.

#### Learning materials and price

A bundle of material (handouts, background documents, papers,...) will be available at the Minerva platform.

#### References

Thomas Sterner and Jessica Coria (2012). Policy Instruments for Environmental and Natural Resource Management, Second Edition (RFF Press, New York, London)  
Dieter Helm (2012). The Carbon Crunch: How We're Getting Climate Change Wrong - and How to Fix it (Yale University Press)

#### Course content-related study coaching

Students will receive introductory materials for the paper, as well as guidance by an assistant. The course material mainly consists of policy reports by the European Commission and the International Energy Agency (IEA, OECD). All the material is available for free on Minerva. Students can order a paper copy of the course material at the price of approx. 8 Euro.

#### Evaluation methods

end-of-term evaluation and continuous assessment

#### Examination methods in case of periodic evaluation during the first examination period

Written examination

#### Examination methods in case of periodic evaluation during the second examination period

Written examination

#### Examination methods in case of permanent evaluation

Assignment

#### Possibilities of retake in case of permanent evaluation

examination during the second examination period is possible

#### Extra information on the examination methods

Written exam (closed book) to assess the ability of the student to present an environmental policy evaluation.

#### Calculation of the examination mark

End-of-term evaluation for the theoretical part (60%) and ongoing evaluation for the paper (40%).