# **COURSE DETAIL**

# ECONOMICS OF THE ENVIRONMENT, NATURAL RESOURCES, AND CLIMATE CHANGE

## **Country**

Denmark

#### **Host Institution**

University of Copenhagen

# Program(s)

University of Copenhagen

## **UCEAP Course Level**

**Upper Division** 

# **UCEAP Subject Area(s)**

**Economics** 

#### **UCEAP Course Number**

155

#### **UCEAP Course Suffix**

#### **UCEAP Official Title**

ECONOMICS OF THE ENVIRONMENT, NATURAL RESOURCES, AND CLIMATE CHANGE

## **UCEAP Transcript Title**

**ECON ENV NATR RESRC** 

## **UCEAP Quarter Units**

6.00

#### **UCEAP Semester Units**

4.00

### **Course Description**

Using theories and analytical tools from microeconomics and macroeconomics, this course introduces the basic economic concepts relevant for analyzing problems and policies relating to the environment, natural resources, and climate change. Students learn concepts related to the central economic services provided by the environment, the basic theory of optimal management of natural resources, the distinction between weak and strong sustainability, the basic principles for valuation of environmental goods and services, the theory of the environment as a public good, and more. Students apply the standard mathematical method for static optimization subject to constraints to analyze environmental policy problems such as the determination of the optimal level of pollution abatement and the optimal environmental tax rates. This course also covers the application of optimal control theory to solve dynamic optimization problems subject to constraints such as the determination of the optimal extraction of natural resources and the optimal pace of reduction of greenhouse gas emissions. Students explain and present central parts of economic theories and models of the environment, natural resources, and climate change, and apply the theoretical and empirical insights from the course in a critical analysis and discussion of important real-world problems of environmental and climate policy.

# Language(s) of Instruction

English

## **Host Institution Course Number**

AØKA08227U

#### **Host Institution Course Title**

ECONOMICS OF THE ENVIRONMENT, NATURAL RESOURCES, AND CLIMATE CHANGE

# **Host Institution Campus**

Social Sciences

**Host Institution Faculty** 

**Host Institution Degree** 

**Host Institution Department** 

**Economics** 

<u>Print</u>