



Irkutsk State University

Environmental Economics

Academic Year 2016

Pre-experience Undergraduate Program

Instructor: Vladimir Otrachshenko

Profile

Vladimir Otrachshenko holds a PhD in Economics from NOVA School of Business and Economics, Lisbon, Portugal. Currently he is a research fellow at NOVA School of Business and Economics in Lisbon, Portugal. Previously he was working at the Fondazione Eni Enrico Mattei in Venice, Italy. Research interests include Economic Valuation of Public Goods, Health Economics, Environmental Economics, Tourism Economics, quality of life, applied microeconomics, and microeconomic analysis. He was also teaching in Venice International University, Italy, and University of Regensburg, Germany, at undergraduate, master, and PhD levels. He has published in peer-reviewed journals such as Environmental and Resource Economics, Land Economics, Journal of Socio-Economics, European Journal of Political Economy, and Tourism Economics.

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Course Aims and Objectives

This course introduces major concepts in the field of environmental economics. It is designed to help students understand theories related to natural resources and make use of microeconomic and statistical analysis. This course will also focus on valuation techniques for environmental goods used in the real world by analyst and policy makers. There is a growing demand in economics and public sectors for people with quantitative skills who are able to understand and apply these techniques, analyze results, and elaborate reports. By the end of this course, students should be able to analyze economic problems related to environmental goods using rigorous valuation techniques.

This course starts in October 24, 2016 and ends in November 19 from Monday to Friday. This course contains mix of lectures and practical exercises. The practical exercises will be solved in groups. The expected number of students is up to 50.

Learning Outcomes

Upon completion of the course unit, students will be able to discuss and demonstrate an understanding of key concepts in environmental economics and the economic issues related to a wide range of environmental problems



in terms of knowledge and understanding

- use economic theory to study environmental issues
- analyze environmental issues
- demonstrate understanding of verbal and statistical representation of economic ideas and analysis, including the relationship between them

in terms of subject-specific skills

- become familiar with main concepts of environmental economics
- become familiar with valuation techniques of environmental commodities

in terms of general skills

- apply Microeconomics and basic Statistics within the environmental economics context

Course Content

The proposed programme consists of several separate lectures and practical sessions:

- 1) Introduction to Environmental Economics
 - Fundamental issues in the economic approach to environmental issues
 - Economy-environment interdependency
 - Drivers of environmental impact
 - Poverty and inequality
 - Sustainable development: Definition and concept
- 2) Welfare economics and the environment
 - Efficiency and optimality
 - Allocation in a market economy
 - Market failure and public policy
- 3) Economic valuation techniques
 - Stated preference techniques
 - Revealed preference techniques
 - Benefit transfers
 - Life satisfaction approach
- 4) Environmental pollution
 - Pollution control
 - Air and water pollution
 - Waste management
- 5) Cost benefit analysis and the environment



6) Climate Change

- Climate change and health

Lectures

- *One 90 minute lectures*

While lectures cover the core material, it is important that students supplement classroom time with pre-class preparation, through independent study. Background reading is expected.

Assessment

Students will be assessed on attendance (45%) , and final exam (55%). The final grade for this course is "Passed/Failed". To pass this course at least 50% is required.

Office hours are by an appointment in Bulvar Gagarina, 20, room #322.

Requirements

It is expected that students are familiar with the basic level (undergraduate) of Microeconomics and Statistics.

Bibliography

I.J. Bateman, R.T. Carson, B. Day, M. Hanemann, N. Hanley, T. Hett, m. Jones-Lee, G. Loomes, S. Mourato, E. Ozdemiroglu, D. W. Pearce OBE, R. Sudgen and J. Swanson (2002), *Economic Valuation with Stated Preference Techniques*, Edward Elgar, Cheltenham.

T.C. Haab, K. E. McConnel (2002), *Valuing Environmental and Natural Resources*, Edward Elgar, UK.

R. C. Mitchell, T.C. Carson (1989), *Using Surveys to Value Public Goods: the Contingent Valuation Method*. Resources for the Future, Washington

^aR. Perman, Y. Ma, M. Common, D. Maddison, and J. McGilvray (2011). *Natural Resource and Environmental Economics*, 4th edition, Pearson Education Limited.

^aT. Tietenberg and L. Lewis (2010). *Environmental Economics and Policy*, 6th edition, Pearson Education, Inc.

V. Otrachshenko, O. Popova, and P.Solomin (2016). *Health Consequences of the Russian Weather*, mimeo.



^a *This book is a mandatory book.*



Resources

Lecture presentation slides will be available.