

PhD course:

Economic Valuation of Environmental Change (February-April 2016)

Estimating the economic value of changes in the environment is an increasingly policy-relevant issue because of more interest from agencies such as the Swedish EPA and new requirements because of laws according to the EU Water Framework Directive. The purpose of this course is to provide an understanding for how such valuation can and should be carried out.

The course will:

1. Give an introduction to the economic theory of environmental valuation.
2. Present valuation methods and explain how they are based in economic theory and how they can be used in economic evaluations of projects, e.g. in cost-benefit analysis and cost-effectiveness analysis.
3. Let the students carry out projects (preferably 2 students per project) in which they develop detailed suggestions on how a valuation method can be applied to some real-world environmental issue. For example, this suggestion may include the development of a draft questionnaire to be used for obtaining information on people's willingness to pay for an environmental improvement. The topic for the project is selected in consultation with the teacher(s). Examples of possible projects include:
  - What do property value changes say about the benefits of a soil remediation project?
  - The economic value of developing a former industrial site into a recreational area
  - What are the benefits of improved water protection and increased safety?

The course starts with two 3-hour lectures that cover issues 1 and 2 above and thus provide a basis for the projects. After this, two 3-hour seminars are held in which students are presenting how their projects are progressing. The seminars also provide an opportunity for students to ask questions and for teachers to give feedback and to talk about topics related to the methods that students have selected for their projects. The course ends with a 3-hour seminar at which students are presenting their projects.

*Examination*

A student passes if her/his project is approved and if she/he:

- is present at lectures
- presents project progress at seminars 1 and 2
- presents the project at seminar 3
- discusses another student's project at seminar 3

When completed, the course will give 5 doctoral course credits (points).

*Examiner*

Lars Rosén, Division of GeoEngineering, Dept of Civil and Environmental Engineering, Chalmers.

*Teachers*

Tore Söderqvist (Associate Prof. of Economics, [tore@enveco.se](mailto:tore@enveco.se)).

Lars Rosén, (Prof, Chalmers)

Possibly also other environmental economists from Enveco Miljöekonomi AB (Mats Ivarsson MSc, Åsa Soutukorva MSc).

*Literature:*

Hanley, N., Barbier, E.B. 2009. Pricing Nature: Cost-Benefit Analysis and Environmental Policy. Edward Elgar Publishing Ltd. Cheltenham, UK.

Söderqvist, T. 2016. Lecture notes.