



LUND UNIVERSITY  
Faculty of Science

## SYLLABUS

Date  
25 November 2016

Reg. No.  
U 2016/624

### **Syllabus for the course Risk, uncertainty and decision making, NAMV002**

*Swedish title: Risk, osäkerhet och beslutsfattande*

The course syllabus was confirmed by the Faculty board for graduate studies 25 November 2016. The course is in the third cycle and amounts to 7.5 credits.  
*The course syllabus is formally approved in Swedish. This is a translation.*

#### **Learning outcomes**

On completion of the course, participants shall be able to:

##### *Knowledge and understanding*

- Explain and compare theoretical perspectives and methods used in research on risk within different disciplines.
- Demonstrate an understanding of common descriptive and normative decision theories, theories for risk assessment and management of uncertainty, as well as principles for precaution.
- Define scientific principles for quantitative risk analysis, and rational and robust decision making.

##### *Skills and abilities*

- Be able to account for common scientific methods to describe, understand, and manage risks.

##### *Judgement and approach*

- Show insight into the interdisciplinary character of risk.

#### **Course content**

We make a number of decisions every day. These decisions are based on conscious or unconscious analysis, as well as assessments of risks and uncertainties. We are often unaware of how we make these decisions, and how we compare alternatives. Individuals, as well as society, sometimes make decisions to be on the safe side, whereas in other cases chose to take a risk. The course focuses on a number of issues: How can risk be assessed? Can risk be quantified? How do risk assessments affect decision and policy making? What role does risk communication and media play? How do individuals perceive risks and risk management? Risk, uncertainty, and decision analysis implies systematic efforts to understand the consequences of decisions.

The aim of the course is to give the participants a deeper understanding of theoretical perspectives and methods within risk research in different disciplines, as well as tools for interdisciplinary risk research. The course contains both lectures and seminars. The lectures will provide rich accounts of different disciplinary perspectives. In seminars,

participants will cooperate around certain issues, which demand an interdisciplinary approach.

**Teaching**

The course consists of two physical meetings, a reading assignment, as well as a written assignment. The first meeting will provide an introduction to theory and method. The second meeting will expand this knowledge and focus on interdisciplinary issues. At the end of the course the participant writes a scientific paper with discussions of how a number of the course themes are related to the topic of his/her dissertation.

**Assessment**

Assessment is based on attendance at the physical meetings and on the written assignment.

**Grading scale**

Possible grades are Pass and Fail. To pass the course, the student must attend both meetings and pass the written assignment.

**Language of instruction**

The course is given in English.

**Entry requirements****Additional information**

The course is intended for PhD students from all faculties.