



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PNG0040 Environmental Impact Assessment (EIA) for Natural Scientists, 3.0 credits

Syllabus approved

2012-04-02

Subjects

Environmental Communication

Education cycle

Third cycle

Grading scale

Pass / Failed

The requirements for attaining different grades are described in the course assessment criteria which are contained in a supplement to the course syllabus. Current information on assessment criteria shall be made available at the start of the course.

Language

English

Prior knowledge

The target group are PhD students and young researchers (i.e. post docs) active in natural science and with interest in Environmental Impact Assessment (EIA). Priority will be given to PhD students and post docs who are members of the graduate school FoSW, but others, also senior researchers, are welcome to participate if space is available. The general lectures about EIA will be open and announced to everyone. No prerequisites.

Objective, including learning outcomes

The objectives of the course are to provide insight into:

- Basic definitions, the different aims, laws and rules for Environmental Impact Assessment (EIA), Strategic Environmental Assessment (SEA), Social Impact Assessment (SIA), Health Impact Assessment (HIA), Risk Assessment and Life Cycle Analysis(LCA)
- How aims might differ among different categories of stakeholder aims (for example the decision maker, the developer, the public, the expert) involved in an EIA process
- The role of the expert, and to understand what responsibilities are associated with this role
- Differences in how social and natural scientists communicate with one another and with non-expert stakeholders
- Cutting-edge science – latest developments in methods in EIA
- Assessment and communication of uncertainty
- Philosophical/ethical aspects of an EIA

Content

The course is divided into five parts (total 3 ECTS) with an optional sixth part (individual project 1.5 ECTS): (1) Basic lectures – (2) literature studies – (3) workshop I dealing with case studies (specific lectures with invited experts) and the knowledge of 1 & 2 – (4) group work – (5) workshop II dealing with the group work & role playing, final discussion; (6) optional own project.

Requirements for examination

A PhD student gets full credit (3 ECTS) for the first three parts if she/he

- participated in the introduction lecture, alternatively via videolink if not possible otherwise
- read and reviewed the course literature
- participated in the entire workshop and was active in the discussions
- formulated and handed in in time five "taking home messages" of the course in written form (one sentence each) in the form of an home exam dealing with the questions regarding strengths and challenges of an EIA, and how the student might get involved sometimes and what to remember then
- participated in the final role play and here showed convincingly that she/he understood the mechanisms of an Environmental Impact Assessment (EIA), the role different actors/stakeholders play in an EIA, especially the role an expert in natural science plays
- showed in the home exam and the role play that she/he can define the basic

principles in and around an EIA such as

- o important steps in the EIA process

- o important steps in environmental communication

- o risk assessment and life cycle analysis (and where they come in in an EIA)

- o significant environmental impact (certain definition within an EIA)

To get the optional additional 1,5 ECTS, the students must have put her/his own research subject in the context of an EIA: How might he/she get involved as an expert and what challenges are to be met? Written project to be supervised and examined by Ulf Sandström. The project length is approx. one week.

Additional information

The course is organized by the Graduate School Focus on Soils and Water (FoSW). Course will be given in the following form: one introduction day with lectures, literature studies, followed by two two-day intensive workshops with group work in between (dates to be followed).

Responsible department

Department of Aquatic Sciences and Assessment