



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PNS0045 Biogeochemical cycles at different scales, 3.0 credits

Syllabus approved

2009-05-19

Subjects

Soil Science

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

PhD student with a natural science degree in either soil science, geosciences, biology or technology.

Objective, including learning outcomes

After the course the students should

- have broadened their knowledge in biogeochemical cycling

- have insights into “hot topics” in biogeochemical cycling
- be able to place their own research in a broader context of biogeochemical cycling
- have strengthened the contacts and cooperation with other PhD students.

Content

The main part of the course is a workshop with four main themes:

- Element transport between soil, water and atmosphere
- Organic matter cycling
- Effects on acidification and eutrophication on biogeochemical cycles
- Redox chemistry and biogeochemistry of peatlands

The students should read the literature provided before the workshop. The literature consists of recent publications connected to the lectures.

Course participants should give an oral presentation (10-15 minutes) or a poster presentation of their own research. The presentation should not present details about experiments, but instead put the students own research in the context of other current research in biogeochemical cycles and explain how the research is relevant to important general scientific questions.

Requirements for examination

Approved oral presentation and active participation in the workshop discussions.

Additional information

Responsible department

Department of Soil and Environment