Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PAS0019 The Properties of Humic Matter - A literature course, 7.5 credits

Syllabus approved

2003-04-29

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 students with 60 credits (90 ECTS credits) in Soil Science (graduate level) or equivalent.

Objective, including learning outcomes

- To give the students an introduction to modern concepts in humus chemistry.
- To illustrate the role of microorganisms and soil fauna in the turnover of soil

organic matter.
- To relate chemical properties of organic matter to turnover and availability of elements such as nitrogen, phosphorus, sulphur and micronutrients.

Content

The course is based on the following book: Piccolo, A. (Ed.) 1996. Humic Substances in Terrestrial Ecosystems. Elsevier, Amsterdam. ISBN 0-444-81516-3.

A number of current scientific articles are also studied. The choice of articles is determined by the special interests of the participating PhD students. The students and the course leader meet on a regular basis to discuss separte items. At each meeting, one of the students is responsible for a general presentation of "today´s item".

Requirements for examination

By the end of the course each student should give a seminar on a specific subject related to his/her own research work. The seminar should be based on a suitable mix of the contents of the book and current scientific papers. Alternatively, the student could write a literature review on his/her specific subject.

Additional information

Responsible department

Department of Soil and Environment