Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PFS0092 Nordic Dendrochronological Fieldweek, 5.0 credits

Syllabus approved

2013-01-08

Subjects

Biology

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

Master in forestry, biology, geography, environmental sciences, and related fields. The participants should be admitted as PhD or Licentiate student in a relevant subject.

Objective, including learning outcomes

The main objective of the course is to help students master a range of practical skills, which should allow them to independently collect and analyze tree-ring datasets

for the studies in forestry, forest ecology, climatology, environmental monitoring, and archeology.

Content

The use of tree-rings is strongly increasing in ecological and enviromental sciences, especially in ecology and forestry. Disturbance history, climate reconstructions and analysis of human impact on forest ecosystems are areas where methods of tree research can add new and unique information. With the course we would like to give a broad overview of dendroecology, concentrating on field and lab techniques, to provide a solid starting point for a wider use of tree-ring based methods. The pedagogical method used during the course will be oriented towards creating a stimulating learning environment for students with diverse background in environmental sciences. The teaching will be based on a combination of lectures, field excersizes and running a series of mini-projects where participants will be responsible for the whole range of steps typically present in a research project (data collection, lab analysis, statistical analysis, interpretation and presentation). The main pedagogical approach of the dendroweek will be "learning by doing", allowing the participants to obtain first-hand experience with dendrochronological methods.

Interactive elements of the course will include (1) lectures in the format which allow unrestricted communication between the teachers and the students, (2) work in a mini-groups (3-5 participants) during project assignments with one of the teachers supervising work on assignment (the major interactive moment), and (3) direct assess to the teachers during the whole length of the of the course, facilitating further knowledge transfer.

Requirements for examination

Examination is based (1) submission of the project report based on a mini-project carried out during the course, (2) evaluation of post-couse assignmenlement. Scale: Fail/Pass/Pass with honours.

Additional information

Teachers: Docent Igor Drobyshev, Inst. för sydsvensk skogsvetenskap, Alnarp
Docent Mats Niklasson, Inst. för sydsvensk skogsvetenskap, Alnarp
Ph.D. Olafur Eggertsson, Lecturer, The Agricultural University of Iceland, Iceland
Ass. Prof. Tuomas Aakala, University of Helsinki, Finland
Ph.D. Shawn Fraver; a senior researcher at the US Forest Service, Northern Research Station, Minessota US

Responsible department

Department of Southern Swedish Forest Research Centre