Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PFS0146 Ecophysiological concepts and applications in managed forests, 9.0 credits

Syllabus approved

2018-01-18

Subjects

Forest Management

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

Admission to a PhD program

Objective, including learning outcomes

The aim of the course is to introduce and give basic knowledge of eco-physiological and biometrical concepts important for forest growth. After the course, students

should be familiar with common measurement techniques and corresponding analysis of data. An additional aim of the course is to demonstrate how eco-physiological variables may be used in modeling of forest growth.

Content

The course is divided into seven topic areas that will be covered in 4 time sections. Completion of all four sections corresponds to six weeks of full-time studies or 9 ECTS. The topics are: biometry, soil, nitrogen, water, climate, photosynthesis and modeling. Each topic will be represented by several papers for the literature study and at least one field-day during the intensive field-weeks.
The first section is a literature study. Before the field-week, each student should read selected papers relating to the above-mentioned topic areas. The second section is intensive field weeks in the north of Sweden when students and teachers meet for almost two weeks with field-work and indoor classes. The third section is a home-assignment that is done in groups and the fourth section is reporting of the assignment in a written report and in a web-seminar. During the field-weeks, indoor classes will be complemented by out-door practical exercises and assignments followed by analysis of the various variables. The intensive field-classes will be for 2 weeks. Most of the teachers will be available on-site during the whole period. After the field-weeks, the students will do one larger assignment within one of the above areas. The assignment will be in the form of a group-work and will be reported in a written report as well as in a web-seminar.

Requirements for examination

Reading course literature, participation in intensive field weeks and completed home assignements

Additional information

The total cost for students outside SLU (accommodation, meals and travel to excursion sites during the field weeks and printed material) is $1100. All students need to arrange their own travel to Umeå for the intensive field week. Transportation from Umeå to the excursion sites will be arranged by the course. Application to the course should be sent to Nils Henriksson (nils.henriksson@slu.se) before March 15. The application should, beside name, department and major professor, shortly describe your thesis project and a motivation why you are interested in the course.

Responsible department

Department of Southern Swedish Forest Research Centre