



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PFS0067 Forest Restoration in Theory and in Practice, 4.0 credits

Syllabus approved

2010-12-17

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

The participants should be admitted as PhD or Licentiate student.

Objective, including learning outcomes

The course will offer an introduction to the theoretical approaches and practical applications of boreal, temperate and tropical forest restoration. The purpose of the course is to provide a deeper knowledge of different restoration approaches

and what factors are determining the success of restoration measures. Specifically the course is intended to: familiarize the participants with the rationales, concepts and perspectives of restoration and describe and analyze different approaches of restoration of forest ecosystems. It will also give them an insight into research opportunities in disturbed forest ecosystem and to explore the challenges of restoration in light of carbon offset proposals.

Upon completion of the course, the participant is expected to be able to:

- Describe the principles of ecological restoration;
- Identify what factors are determinant for the success of forest restoration;
- Discuss and analyze the different approaches of restoration;
- Evaluate the possibilities and limitations of different restoration perspectives;
- Explore the trade-offs in approaches for biodiversity protection, timber production and carbon sequestration
- Develop an understanding of the ecological, economic and logistical processes involved in forest restoration.
- Gain hands-on experience in restoration design and implementation
- Reflect on how different restoration approaches could be used to increase forest cover for meeting the requirements associated with efforts to reduce carbon emissions.

Content

The course will comprise two modules Forest Restoration in Theory and Forest Restoration in Practice. The theoretical part will consist of lectures, literature studies and group discussion. The practical phase will consist of field excursion on restoration sites, lectures from invited speakers and project work where each participant will present their own project and criticize others work within the context of forest restoration.

Syllabus & topics:

Introduction to restoration ecology

Ecological Principles in forest restoration

Factors limiting restoration

Approach to forest restoration

Restoration perspectives: forest restoration in the tropical and boreal forests

Ethics, Planning, Assessment

Requirements for examination

Examination will be based on attendance, active participation in discussions, accomplishment of exercises, as well as the implementation and quality of the individual oral presentations. All elements must be passed to obtain 4 HEC.

Additional information

The course is organized as a NOVA course. Teachers on the course are: Magnus LÖf (Sweden), Palle Madsen (Denmark), Patrice Savadogo (Sweden), Kalev Jogiste (Estonia), Timo Kuuluvainen (Finland), Andreas Bolte (Germany), Per-Christer Odén (Sweden), John Parotta (USA), John Stanturf (USA), Muluaem Tigabu (Sweden).

Responsible department

Department of Southern Swedish Forest Research Centre