



SWEDISH UNIVERSITY OF AGRICULTURAL SCIENCES

Department of Ecology

Syllabus

Forest Conservation Science ***Skoglig naturvårdsvetenskap***

15.0 Credits

Code: B11462

Finalized by: Ordföranden för programnämnden för utbildning inom skog (PN-S), 2023-12-22

Valid from: Autumn semester 2025 (2025-09-01)

Level within study regulation: Second cycle

Grading scale: TH Four-grade scale, digits

Main field of study with advanced study: SBV Forestry Science - A1N Second cycle, has only first-cycle course/s as entry requirements

BIA Biology - A1N Second cycle, has only first-cycle course/s as entry requirements

Language

English

Biology specialisation

Ecology

Entry requirements

Knowledge equivalent to 120 credits at basic level, including

- 60 credits in Biology or
- 60 credits in Forest Science or
- 60 credits in Forest Management or
- 60 credits in Environmental Sciences or
- 60 credits in Landscape Architecture or
- 60 credits in Agricultural Sciences or
- 60 credits in Natural Resource Management or

- 60 credits in Forestry and Wood Technology or
- and
- 15 credits in ecology

and

- English 6.

Objectives

The aim of this course is to provide students with advanced knowledge in the field of biodiversity conservation science with a specific focus on applications in forested landscapes. Students will be able to increase their depth of subject knowledge and ability to work independently and get a stronger understanding of how this knowledge could be applied by stakeholders.

Upon successful completion of the course, students will be able to:

- Explain how ecological theories and concepts can be applied for conservation of biodiversity in forest landscapes;
- Critically assess methods and approaches to measure and analyse biodiversity in forest ecosystems;
- Explain how biodiversity in north European forest landscapes is shaped by natural processes and anthropogenic disturbances;
- Propose appropriate measures to conserve and restore biodiversity in different types of forests, and analyse their advantages and disadvantages;
- Analyse potential trade-offs and synergies between biodiversity conservation and other societal goals;
- Critically analyse, and discuss scientific literature within the field of conservation science

Content

Subject-related content:

This course provides advanced knowledge of the field of conservation science with a specific focus on applications in forested landscapes. Whereas we prioritize conservation actions within the Fennoscandian region, we set these issues within the larger theoretical and international context of global change. The course contents include the following themes, knowledge of which is central to achieving sustainable development goals:

- reasons for biodiversity conservation
- population and community ecology for biodiversity conservation
- natural and anthropogenic disturbance regimes, and their effects on biodiversity
- forest biodiversity and its assessment
- conservation measures in forests
- global change
- the societal context of nature conservation

Teaching formats

To further student learning and promote discussion, a variety of methods are used:

- Lectures
- Seminars
- Assignments
- Excursions
- Exercises

The course focuses on the following generic competencies:

- Critical thinking
- Written communication

- Oral communication
- Reading, interpreting and appraising primary scientific literature

The following course components are compulsory:

- Literature seminars
- Oral presentations and discussions
- Excursions

Collaboration with the surrounding community takes place through seminars with representatives from different actors in society that work with forest biodiversity conservation.

Examination formats

- Passed written examination
- Approved written assignments
- Approved participation in compulsory components