UNIVERSITY OF SKÖVDE

TRANSLATION FROM SWEDISH

COURSE SYLLABUS

Molecular Ecology in Conservation Biology A1N

7.5 credits

Course code: BV715A
Version number: 3
Valid from: 1 July 2026
Ratified by: Curriculum Committee for Bioscience
Date of ratification: 25 September 2025

1. General information about the course

The course is provided by the University of Skövde and is named Molecular Ecology in Conservation Biology A1N (Molekylär ekologi inom bevarandebiologi A1N). It comprises 7.5 credits and is a second-cycle course. The level of progression is A1N.

The course is a part of the main field of study in Bioscience. The disciplinary domain of the course is Natural Sciences.

2. Entry requirements

The prerequisites for this course are 150 higher education credits passed, of which at least 90 higher education credits must be courses within molecular biology, ecology, biochemistry, or microbiology. Among these higher education credits, at least 15 must be on G2F-level or higher (or the equivalent).

An additional requirement is proof of skills in English equivalent of studies at upper secondary level in Sweden, known as the Swedish course English 6 or English level 2. This is normally demonstrated by means of an internationally recognized language test, e.g. IELTS or TOEFL or the equivalent.

3. Course content

The course addresses ecological, conservation biological, population genetic, and evolutionary questions where molecular biological methods are particularly suitable. Biodiversity, ecological, and evolutionary processes at various organizational levels are studied by examining the identification of individuals and species using molecular methods. The course focuses on applications of molecular ecology in conservation biology and environmental monitoring. Ethical issues related to molecular ecology are also addressed.

4. Objectives

After completion of the course, the student shall be able to:

- in detail explain theories, applications, and scientific methods within the field of molecular ecology,
- critically evaluate results from molecular ecological methods/analyses,
- discuss ethical issues related to the content of the course, and
- plan, conduct, analyse and scientifically present and discuss the results of a project within molecular ecology.

5. Examination

The course is graded A (Excellent), B (Very good), C (Good), D (Satisfactory), E (Sufficient) or F (Fail).

A final grade of the course is only issued when all the examination parts have been passed.

The examinations of the course consist of the following modes of assessment:

- **Project work**
  3 credits, grades: G/U
- **Seminar assignment**
  1 credit, grades: G/U
- **Supervised written examination**
  3.5 credits, grades: A/B/C/D/E/F (determines the final grade)

Students with a permanent disability who have been approved for directed educational support may be offered adapted modes of assessment.

6. Types of instruction and language of instruction

The teaching is comprised of lectures, seminars and presentations.

The teaching is conducted in English.

7. Course literature and other educational materials

Freeland, J. (2019). *Molecular ecology* (3rd ed.). Wiley Blackwell. ISBN 9781119426158.

Scientific articles.

8. Student influence

Student influence in the course is ensured by means of course evaluation. The students are informed about the results of the evaluation and potential measures that have been taken or are planned, based on the course evaluation.

9. Additional information

Further information about the course, as well as national and local governing documents for higher education, is available on the website of the University of Skövde.