UNIVERSITY OF SKÖVDE

TRANSLATION FROM SWEDISH

COURSE SYLLABUS

Library Preparation and Sequencing Technologies A1N

7.5 credits

Course code: BV713A
Version number: 4
Valid from: 1 July 2026
Ratified by: Curriculum Committee for Bioscience
Date of ratification: 14 August 2025

1. General information about the course

The course is provided by the University of Skövde and is named Library Preparation and Sequencing Technologies A1N (Bibliotekstillverkning och sekvenseringstekniker 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 biology or medicine. Among these higher education credits, at least 15 must be on G2E-level or higher (or the equivalent).

A further 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 test, e.g. IELTS or TOEFL or the equivalent.

3. Course content

The aim of the course is to provide theoretical foundations and practical experience in the laboratory associated with the preparation of sequencing libraries and sequencing.

4. Objectives

After completed course the student should be able to:

- compare the most common sequencing technologies,
- describe methods for sample quality control and sequencing library preparation,
- in an independent way prepare sequencing libraries and perform sequencing experiments, and
- in a critical and correct way analyze experimental results obtained and present them in a scientific way.

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:

- **Written examination in computer lab**
  4 credits, grades: A/B/C/D/E/F (determines the final grade)
- **Laboratory assignment 1**
  1 credit, grades: G/U
- **Laboratory assignment 2**
  1 credit, grades: G/U
- **Laboratory assignment 3**
  1 credit, grades: G/U
- **Laboratory assignment 4**
  0.5 credit, grades: G/U

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 supervision, seminars/group discussions, laboratory sessions and lectures.

The teaching is conducted in English.

7. Course literature and other educational materials

Scientific articles and laboratory manuals.

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.