



# CB2080 Proteomics 7.5 credits

## Proteomik

This is a translation of the Swedish, legally binding, course syllabus.

## Establishment

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

Second cycle

## Main field of study

Biotechnology

## Specific prerequisites

A bachelor's degree, corresponding to at least 180 ECTS credits, including at least a total of 20 ECTS in life sciences, 20 ECTS in chemistry, 15 ECTS in mathematics and 5 ECTS in programming.

## Intended learning outcomes

The course will introduce students to current methods, challenges, and applications in the field of proteomics. After completion of the course, the student is able to

1. describe currently applied proteomics technologies
2. compare different proteomics technologies

3. suggest suitable approaches for biomedical applications
4. engage in and contribute to scientific discussions
5. critically evaluate scientific results

## Course contents

The objective of the course is to present current trends for large-scale protein analysis. The course will provide an overview of typical proteomics applications used today, including principles, needs and challenges. The content covers both experimental methods as well as data analysis strategies with a focus on biomarker discovery and precision medicine.

## Examination

- ÖVN1 - Exercise, 1.0 credits, grading scale: P, F
- ÖVN2 - Exercise, 1.0 credits, grading scale: P, F
- TEN2 - Oral exam, 5.5 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

If the course is discontinued, students may request to be examined during the following two academic years.

## Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.