



CORE FACILITIES

SC00005 Cell culture, 2.5 credits

Cellodling, 2,5 högskolepoäng

Third-cycle level / Forskarnivå

Confirmation

This syllabus was confirmed by the Council for PhD Education at Sahlgrenska Academy on 2018-12-11, and is valid from Autumn semester 2015.

Responsible Department

Core Facilities, Sahlgrenska Academy

Entry requirements

Admitted to postgraduate education.

A basic understanding of cell biology and biomedicine.

The course is an elective course within the third cycle at Sahlgrenska Academy.

Learning outcomes

After completing the course the student is expected to be able to:

Knowledge and understanding

- describe differences between cell lines and primary cells
- describe what is needed to culture cells in the laboratory
- describe different types of contaminations that can appear in cell cultures
- explain what stem cells are

Competence and skills

- culture cell lines and perform a transfection of cells
- choose different ways of culture depending on cell type and purpose
- plan a research experiment using mammalian cells

Judgement and approach

- choose a suitable cell system to perform different kinds of experiments.

Course content

Theoretical and practical introduction to the culture of different types of human and animal cells in the laboratory and how these cells can be transfected to over-express or turn off the expression of different genes.

Types of instruction

Lectures, laboratory experiments

Language of instruction

The course is given in Swedish but can be given in English if necessary.

Grades

The grade Pass (G) or Fail (U) is given in this course.

Types of assessment

The examination will take place in the form of a written home exam. A mandatory literature task will also be performed. An attendance rate above 80% is also required.

A doctoral student who has failed a test twice has the right to change examiners, if it is possible. A written application should be sent to the Institute.

Course evaluation

A written evaluation will be performed and the results of the evaluation will function as a guide for the development of the course.

Other information

The syllabus was confirmed by the Council for Postgraduate Education on 2015-03-03 to be valid from autumn semester 2015.