

# Syllabus

for course at first level

**Cellular Processes and Structures**  
**Cellulära processer och strukturer**

**15.0 Higher Education**  
**Credits**  
**15.0 ECTS credits**

|                          |                                 |
|--------------------------|---------------------------------|
| <b>Course code:</b>      | BL4006                          |
| <b>Valid from:</b>       | Autumn 2007                     |
| <b>Date of approval:</b> | 2006-09-11                      |
| <b>Department</b>        | Department of Biology Education |
| <b>Subject</b>           | Biology                         |

## Decision

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University.

## Prerequisites and special admittance requirements

Admittance to the course requires knowledge equivalent to 30 credits in Chemistry, including a minimum of 7,5 credits in Biochemistry, and Cell and Molecular Biology 30 credits, alternatively, Cell and Molecular Biology 15 credits and Physiology 15 credits. (Three credits corresponds to approximately two weeks full-time studies).

## Course structure

| Examination code | Name                         | Higher Education Credits |
|------------------|------------------------------|--------------------------|
| 4A06             | Theory and Group Discussions | 10.5                     |
| 4B06             | Laboratory Exercises         | 4.5                      |

## Course content

The course covers topics related to the organisation of eukaryotic cells, with a focus on membrane systems and processes connected to membrane systems. The material will be approached by a comprehensive perspective on both animal and plant cells. The course includes the following elements; theory and group discussions 10.5 hp, Laboratory exercises 4.5 hp.

## Learning outcomes

It is expected that the student after taking the course will be able to:

- describe the synthesis, construction, and dynamics of membrane structures in eukaryote cells.
- know and account for processes connected to membrane systems.
- know differences and similarities between animal and plant cells
- practically work with questions concerning the organisation of the eukaryotic cell.

## Education

The education consists of lectures, group discussions and laboratory exercises.

Participation in group discussions, laboratory exercises and group education associated with this is compulsory. An examiner may rule that a student is not obliged to participate in certain compulsory education if there are special grounds for this after consultation with the relevant teacher.

## Forms of examination

a. Examination for the course is in the following manner: measurement of knowledge takes place through:

Written and/or oral examination

b. Grading is carried out according to a 7-point scale related to learning objectives:

A = Excellent  
B = Very Good  
C = Good  
D = Satisfactory  
E = Sufficient  
Fx = Fail  
F = Fail

c. Grading criteria for the course will be distributed at the start of the course.

d. A minimum grade of E is required to pass the course, together with:

- approved laboratory exercises
- participation in all compulsory education.

e. Students who fail to achieve a pass grade in an ordinary examination have the right to take at least further four examinations, as long as the course is given. The term “examination” here is used to denote also other compulsory elements of the course. Students who have achieved a pass grade on an examination may not retake this examination in order to attempt to achieve a higher grade. Students who have failed to reach a pass grade on two occasions have the right to request that a different teacher be appointed to set the grade of the course. A request for such appointment must be sent to the departmental board.

#### **Interim**

Students may request that the examination is carried out in accordance with this syllabus even after it has ceased to apply. This right is limited, however, to a maximum of three occasions during a two-year-period after the end of giving the course. A request for such examination must be sent to the departmental board.

#### **Misc**

The course is a component of the Bachelor's Programmes in Biology and Molecular Biology, and it can also be taken as an individual course.

#### **Required reading**

Course literature is decided by the departmental board and is described in an appendix to the syllabus.