



Faculty of Health, Science and Technology  
Biology

# Syllabus

## Biology Preparatory B

<b>Course Code:</b>	BIBX23
<b>Course Title:</b>	Biology Preparatory B <i>Biologi Bas B</i>
<b>Credits:</b>	7.5
<b>Degree Level:</b>	Preparatory
<b>Progressive Specialisation:</b>	()

**Major Field of Study:**

### Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology 2019-09-11, and is valid from the Spring semester 2020 at Karlstad University.

### Prerequisites

General admission requirements plus upper secondary level Mathematics 2a, 2b, or 2c, and registration on Biology Preparatory A, or equivalent

### Learning Outcomes

Upon completion of the course, students should be able to:

1. describe the functions of cells, especially in relation to the processes photosynthesis, metabolism, and membrane transport,
2. give an account of the physiology of animals with a special focus on humans, give an overview of the structure and function of the immune system, and describe microorganisms and viruses,
3. give an account of the basic physiology of plants and fungi, and give examples of their life cycles, and
4. use physiological methods of investigation in laboratory sessions.

**Content**

Instruction is in the form of lectures, exercises, and laboratory sessions.

The course covers basic cell biology, and includes elementary human physiology, organ systems and their structure, function, and interaction, and the regulatory mechanisms of the hormonal and nervous systems. The structure and function of the immune system, viruses, and microorganisms are treated and discussed from perspectives such as for instance infectivity, infection, and use of antibiotics. The physiology of plants and fungi is described and explained, including examples of their life cycles.

### **Reading List**

See separate document.

### **Examination**

Learning outcomes 1-3 are assessed based on an individual written exam.

Learning outcome 4 is assessed based on laboratory work and a written report.

If students have a decision from Karlstad University entitling them to special pedagogical support due to a documented disability, the examiner has the right to give such students an adapted examination or to examine them in a different manner.

### **Grades**

One of the grades Fail (U) or Pass (G) is awarded in the examination of the course (Dnr C2018/824).

### **Quality Assurance**

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

### **Course Certificate**

A course certificate will be provided upon request.

### **Additional information**

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.

The course corresponds to parts of Biology 2 in the upper secondary level science and technology programmes.