

DEPARTMENT OF BIOLOGICAL AND ENVIRONMENTAL SCIENCES

BIO232 Human Physiology, 15 credits

Humanfysiologi, 15 högskolepoäng *First Cycle*

Confirmation

This course syllabus was confirmed by Department of Biological and Environmental Sciences on 2014-01-25 and was last revised on 2024-03-14 to be valid from 2024-03-14, spring semester of 2024.

Field of education: Science 100% *Department:* Department of Biological and Environmental Sciences

Position in the educational system

The course is an elective continuation course within the bachelor programs in biology and molecular biology. The course can also be included in the bachelor's programs in marine science and environmental science with natural science specialization. The course is also offered as a free standing course.

The course can be part of the following programmes: 1) Bachelor's Programme in Biology (N1BIO) and 2) Bachelor's Programme in Molecular Biology (N1MB1)

Main field of studies	Specialization
Marine Sciences	G2F, First cycle, has at least 60 credits in first-cycle course/s as entry requirements
Biology	G2F, First cycle, has at least 60 credits in first-cycle course/s as entry requirements
Environmental Science	G2F, First cycle, has at least 60 credits in first-cycle course/s as entry requirements
Molecular Biology	G2F, First cycle, has at least 60 credits in first-cycle course/s as entry requirements

Entry requirements

1) Basic courses in biology encompassing 60 credits and including the areas cell biology,

molecular genetics, evolution, botanical and zoological physiology, ecology, and biodiversity and systematics, or the equivalent. At least 30 credits must be passed.

2) Approved courses within the first year of the bachelor program in environmental sciences and BIO911 Botanical and Zoological Physiology, basic course, 12 credits or equivalent. At least 60 of the 75 credits must be passed.

3) Approved courses within the first and second year of the bachelor program in marine sciences, or the equivalent. At least 90 of the 120 credits must be passed.

Learning outcomes

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

- Describe the basic principles, concepts, and terminology within anatomy and physiology
- Describe the basic functional anatomy of primarily mammals with a focus on humans
- Explain the basic physiological mechanisms and regulatory systems in mammals with a focus on humans
- Assess the importance of biological knowledge for societal development and have gained an increased ability to distinguish between biological science and pseudoscience in the field
- Present scientific material orally and in writing
- Master the principles, concepts, and terminology within the field of human biology
- Demonstrate basic laboratory skills for studying the form and function of organisms
- Write literature assignments based on scientific literature search and compilation
- Analyze, compile, and evaluate selected physiological problem settings from a basic perspective

Course content

The course deals with human physiology, the structure and function of the different organ systems and the function and the interaction between them; the central, autonomic and peripheral nervous system, the sensory organs, the muscular systems, the heart and blood circulation, the body's hormonal regulation system regulatory system, the gastrointestinal tract, the kidneys, the respiratory system and physiology of exercise.

Form of teaching

The course consists of lectures, seminars, exercises and labs.

Language of instruction: English

Assessment

Compulsory parts of the course, in addition to the exam, are laboratory sessions, study visits and other group exercises as stated in the course schedule.

For students who have been given the grade "failed" at the regular exam, additional exams are offered.

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The student is entitled to a change of examiner, if practically possible, after having been failed twice on the same examination. Such a request is made to the department and must be in writing.

In cases where the course has been discontinued or undergone major changes, the student should normally be normally be guaranteed access to at least three examination opportunities (including the regular examinations) over a period of at least one year, based on the previous structure of the course. organization of the course.

Grades

The grading scale comprises: Pass with Distinction (VG), Pass (G) and Fail (U). The final grade requires attendance and active participation in compulsory parts and that the written examination is awarded at least grade G.

(60% of the maximum number of assessment points). The grade VG is assessed based on the written examination where the individual student's total sum must be at least 85%.

Course evaluation

Opportunity to submit a written course evaluation is given at the end of the course. A summary of the results is presented on the Canvas page for the course, as well as to the participants of the next course.

Additional information

The course is part of the international course offering and is given in English.

The course involves animal testing.