

Department of Biosciences and Nutrition

Syllabus

for course at first level

Human Physiology and Energy Metabolism Humanfysiologi och energiomsättning

15.0 Higher Education Credits
15.0 ECTS credits

 Course code:
 NU3003

 Valid from:
 Autumn 2014

 Date of approval:
 2007-08-28

 Changed:
 2014-03-10

Department Department of Biosciences and Nutrition

Main field: Nutrition

Specialisation: G1N - First cycle, has only upper-secondary level entry requirements

Decision

This syllabus has been approved by the Board of the Faculty of Science at Stockholm University 2007-08-28 and was revised 2010-11-15 and 2014-03-10.

Prerequisites and special admittance requirements

To be qualified for applying to this course you must have completed at least 60 hp in natural science, including 15 hp chemistry (including 7,5 hp biochemistry) and 4 hp anatomy and histology (equivalent to the course The human Body, Health and Disease 7.5 hp).

Course structure

Examination code	Name	Higher Education Credits
MOM1	Human Physiology Part 1	7.5
MOM2	Human Physiology Part 2	7.5

Course content

- a. The course covers the physiology and energy metabolism of the human body.
- b. The course consist of the following two elements:
- 1. Human physiology part 1, 7.5 hp/ECTS

This element includes the physiology of the nervous-, muscle-, circulation-, respiration-, kidney and musculosceletal system, salt and fluid balance, acid-base balance, energy metabolism, temperature regulation and immunology.

2. Human physiology part 2, 7.5 hp/ECTS

This element includes digestion, endocrinology, hunger and satiation regulation, energy metabolism and exercise physiology. This element includes a laboration and also a project work where the students study in depth a chosen area.

The above mentioned knowledge provides a basis for further studies on the Bachelor's Programme of Nutrition, and also in other education in areas related to diet or health.

Learning outcomes

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

- explain how organ systems of the human body function and co-operate under normal conditions and under stress
- discuss and explain changes of physiological processes and their effects.
- estimate and evaluate effects of physiological changes.
- give an overview of the background to the ethical regulation of research and characterize what is meant by ethical research.

Education

The education consists of lectures, practical laboratory work and group excercises. Participation in group excersises and practical laboratory work 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 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.
- f. Ability to supplement Fx up to a passing grade is not given in this course.

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.

Limitations

The course may not be included in a degree together with the courses Human Physiology 10p (NÄ1040) (element Human Physiologi 7p), Medical Chemistry and Human Physiology 20p (NÄ1020) (element Human Physiology 10p), or the equivalents.

Misc

The course is included in the Bachelor's Programme of Nutrition at Stockholm University, but can also be taken as an independent course.

Required reading

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