



Course syllabus

Faculty of Social Sciences

Department of Sport Science

1IV217 Människans rörelsefysiologi, 7,5 högskolepoäng

1IV217 Human movement physiology, 7.5 credits

Subject Group

Sport Science

Level of classification

First Level

Progression

G1N

Date of Ratification

Approved by Faculty of Social Sciences 2023-04-17

The course syllabus is valid from spring semester 2024

Prerequisites

General entry requirements for university studies.

Objectives

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

- describe the work done by the muscles, from sensory stimulation to voluntary and involuntary muscular contraction,
- describe the factors impacting power, speed, effect and endurance at muscular contraction,
- explain catabolic and anabolic processes in the human body,
- describe general principles of respiration, cardiovascular and endocrine functions.

Content

Human movement physiology concerns how the human body functions during movement and physical activities. It is a complex area involving several systems and organs in the body, including muscles, the nervous system, the cardiovascular system and the respiratory organs. The course also discusses physiological processes controlling the absorption of oxygen, metabolism, and work done by the muscles. Physiological adaptation to exercise is also looked into, as a process where the body adapts to increased physical activity by improving the function of its systems and organs. This adaptation takes place at several levels in the body, from the level of the cells in the muscles to the cardiovascular system and the respiratory organs.

Type of Instruction

Teaching takes place in the form of lectures and laboratory sessions.

Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

Examination of the course objectives takes place by means of one written exam, one written laboratory report performed in groups, and four individual minor written exams.

In order to receive a grade of Pass in the course, all examination assignments require at least the grade of Pass.

For a grade of Pass with Distinction, it is required that the student receives the grade of Pass with Distinction for the written exam and the grade of Pass for the other examination assignments.

A retake of the examination is provided in accordance with the Local Regulations for First-Cycle and Second-Cycle Courses and Examination at Linnaeus University.

Should the university determine that a student is entitled to special educational support due to impairment, the examiner may provide the student with an adapted test or the student may carry out the examination in an alternative way.

Course Evaluation

A course evaluation is carried out either during or at the end of the course. Results and analysis of the evaluation are presented to the students who have completed the course as well as to new students at the following course date. The course evaluation is conducted anonymously.

Other

The course is included in the Sports Science Programme.

Required Reading and Additional Study Material

Kenney, W Larry, Wilmore, Jack & Costill, David (latest edition). *Physiology of Sport and Exercise*. Champaign, Illinois: Human Kinetics Publishers, (621 p.)

Scientific publications, comprising approximately 50 pages.