



Course syllabus

Faculty of Social Sciences

Department of Sport Science

IIV206 Människans fysiologi, 7,5 högskolepoäng

Human Physiology, 7.5 credits

Main field of study

Sport Science

Subject Group

Sport Science

Level of classification

First Level

Progression

G1F

Date of Ratification

Approved by Faculty of Social Sciences 2017-05-17

The course syllabus is valid from spring semester 2018

Prerequisites

NO VALUE DEFINED

Objectives

After completing the course, students shall be able to:

- Explain how physical movement is generated from thought to skeletal movement
- Identify and analyse the factors that have an impact on the power, speed, effect and endurance of muscle contractions
- Describe, explain and test metabolic traits and evaluate their relevance to performance and health
- Explain the concept of homeostasis and describe homeostatic functions, and explain how homeostasis can be maintained during exercise
- Identify physiological performance factors for different types of athletes
- Compare and anticipate physiological adaptations during different kinds of exercise.

Content

The course discusses the structure, function and adaptation of the nervous system and the skeletal muscles during exercise. Homeostasis, hormones, metabolism, energy consumption and exhaustion are also addressed. The cardiovascular system and the structure, physiology and adaptation of the lungs during exercise are other important aspects discussed in the course.

Type of Instruction

Teaching consists of lectures, seminars and practical 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 a written exam worth 5 credits, a written laboratory report worth 1 credit, and minor written tests worth 1.5 credits. In order to receive a grade of Pass for the entire course, all the examination assignments must as a minimum be assessed as Pass. To be awarded a final grade of Pass with Distinction, the written exam must be assessed as Pass with Distinction.

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 the students at the following course date. The course evaluation is conducted anonymously.

Credit Overlap

The course cannot be included in a degree along with the following courses of which the content fully, or partly, corresponds to the content of this course: 1IV120 Science of Sport Medicine, module 1 Advanced Anatomy and Physiology 7.5 credits.

Other

This course is included in the Sport Science Programme - Physical Activity, Health and Outdoor Recreation.

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 articles are also included, approximately 50 pages.