HALMSTAD UNIVERSITY
Phone +46 35 16 71 00 - www.hh.se
School of Business, Innovation and Sustainability

Sustainable Exercise for Health Promotion - Theory and Practice 7.5 credits

Hållbar träning för att främja hälsa - teori och praktik 7.5 hp

Second cycle
Main field: Exercise Biomedicine, Second cycle, has only first-cycle course/s as entry requirements (A1N)
Syllabus is adopted by the Research and Education Board (2024-04-14) and is valid for students admitted for the autumn semester 2024.

Placement in the Academic System

The course is included in the Master's Programme (60 credits) in Exercise Biomedicine – Human health and performance and as a single subject course.

Prerequisites and Conditions of Admission

Bachelor's degree within the main field of study in biomedicine, physiotherapy, sports science or equivalent, of which 15 credits anatomy and physiology, 7.5 credits exercise training and 15 credits scientific degree project. The degree must be equivalent to a Swedish kandidatexamen and must have been awarded from an internationally recognised university. English 6. Exemption of the requirement in Swedish is granted.

Course Objectives

The aim of the course is that the student will deepen their knowledge about exercise physiology as a scientific discipline and how physical activity and exercise relate to sustainable health, well-being and performance. The course also aims give the student tools to understand, measure, and evaluate physical activity and exercise in different ages and how to scientifically plan and prepare a study in the scientific discipline of Exercise Biomedicine.

Following successful completion of the course the student should be able to:

Knowledge and understanding

- understand and describe the body's adaptations to physical exercise in current topics in the field of exercise physiology

Skills and ability

- write a research proposal suitable for a scientific study in the discipline Exercise biomedicine
- describe and perform select exercise physiology methods for movement measurements based on either health or performance perspective, describe the method's sources of error, and select a suitable methodology based on the chosen population and situation

Judgement and approach

- critically assess, evaluate and discuss your own and others' project plans and research studies based on scientific, sustainability, equality and ethical perspectives

Primary Contents

The main content of the course is to deepen the knowledge of current topics in exercise physiology related to sustainable health and performance. In the course the students will learn relevant exercise physiology test methods, and write a project plan as a basis for their upcoming master's thesis within the scientific disciple of Exercise biomedicine where scientific, sustainability, equality and ethical perspectives are considered.

Teaching Formats

Teaching is conducted through lectures, laboration and assignments, and seminars. The student is expected to independently study the course literature including relevant scientific articles. Part of the course will be conducted through digital lectures and meetings. Teaching is in English.

Examination

The overall grades of Fail, Pass or Pass with distinction will be awarded for the course.
The examination consists of an individual examination, a written presentation that is done in groups and an individual project plan. In order to receive a grade of Pass with distinction on the entire course, a Pass with distinction on at least 3,5 credits and a Pass on the other elements is required.

Name of the test		Grading
Written Examination	3,5 credits	U/G/VG
Practical and Written Examination	2 credits	U/G
Thesis Proposition	2 credits	U/G

If there are special reasons, the examiner may make exceptions from the specified examination format and allow a student to be examined in another way. Special reasons can

e.g. be a decision on learning support.

For elite sports students according to Riktlinjer för kombinationen studier och elitidrott vid Högskolan i Halmstad, DNR: L 2018/177, the examiner has the right to decide on an adapted examination component or let the student complete the examination in an alternative way.

Course Evaluation

Course evaluation is part of the course. This evaluation should offer guidance in the future development and planning of the course. Course evaluations should be documented and made available to the students.

Course Literature and Other Study Resources

ACSM's Fitness Assessment Manual. Wolters Kluwer Health 2021

McArdle William, Katch Frank I, & Katch Victor L. *Exercise physiology, nutrition, energy & human performanc*e. 9th International ed. Wolters Kluwer Health USA, 2022

Scientific articles and reports related to relevant topic.

Laboratory and equipment manuals.

Referenslitterature

American College of Sports Medicine. *ACSM's resource manual for guidelines for exercise testing and prescription*. Lippencott Williams & Wilkins, 2014 (or the latest edition)

Laake Petter, Benestad Haakon, Olsen Björn, Eds. *Research methodology in the medical sciences*. Academic Press, Elsevier. 2007

Price, Mike. L*ab reports and projects in sports and exercise science – a guide for students*. Routledge, 2013