Linnæus University

Jnr: 2017/2800-3.1.2.2

Course syllabus

Faculty of Social Sciences
Department of Sport Science

1IV303 Tillämpad träningslära, 15 högskolepoäng
Applied Teaching of Exercise, 15 credits

Main field of study
Sport Science

Subject Group
Sport Science

Level of classification
First Level

Progression
G1N

Date of Ratification
Approved 2009-06-17
Revised 2016-05-17 by Faculty of Social Sciences. Changes made under Examination.
The course syllabus is valid from autumn semester 2017

Prerequisites
General entry requirements.

Objectives

The overall objective of the course is for students to acquire knowledge of the structure and function of the human body with specialisation in sports as well as a general and applied knowledge of the ways in which exercise can be conducted. This basic knowledge should be used to critically examine applied science of training.

After completing the course, students shall be able to:

- describe the anatomy of the human body
- describe and explain the physiology of the human body
- explain how the human musculoskeletal system functions during different sports
- develop and plan physical activities in relation to an individual's or a group's physical and motor development
- draw up a plan for how physical trainig can be scheduled and implemented
- describe and evaluate various methods for testing the physical qualities based on target groups
- describe and explain how various sports injuries may be prevented
- evaluate and compare different training methods based on targets and target groups

Content

The course contains lectures and practical sessions in which the anatomy and physiology of the human musculoskeletal system are discussed, as well as muscle physiology

of the human musculoskeletal system are discussed, as well as muscle physiology, energy metabolism, the circulatory system and its function, the circulatory system control mechanisms and absorption of oxygen. The impact of heat and body temperature regulation on the practice of sports are also aspects discussed in the course. Functional anatomy and sports mechanisms are used at movement analysis and testing. An overview is also provided of training science/training planning and training science related to the physical qualities: endurance, strength, mobility, fitness, speed and coordination. Studies into sports medicine and preparatory training are included. Parts of the course are focused on young people and their physical training. How the physical qualities can be planned and intregrated into a major training schedule is looked into and tested before a major plan is drawn up and presented, which is adapted to an indvidual and a target group, preferably with creative resources.

Type of Instruction

Teaching consists of lectures, practical sessions and applications, supervision, literature studies and seminars. A study trip may also be included.

Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).
Examination takes place by means of a written exam, three seminars, three minor written assignments, a test and a major written assignment. In order to receive a grade of Pass, the course objectives must be attained. The test, the three seminars and the three minor assignments are assessed by the grades of Fail or Pass. The written exam and the major written assignment are assessed by the grades of Fail, Pass or Pass with Distinction. To be awarded a grade of Pass with Distinction in the course, the written exam and the major written assignment require the grade of Pass with Distinction, and the other examinations require a grade of Pass.

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

Other

Any additional costs that may arise in connection with the course are paid for by the students themselves.

Required Reading and Additional Study Material

Expertgrupp från TEAM Danmark (2006). *Talangutveckling*. Farsta: SISU Idrottsböcker, (40 p). ISBN 91-85433-04-7

Gjerset, Asbjörn m.fl. (1997). *Idrottens träningslära*. Farsta: SISU Idrottsböcker, (464 p). ISBN: 9789188940148

Kenney, Larry, Wilmore, Jack & Costill, David. (2012). *Physiology of Sport and Exercise*. Fifth edition. Human Kinetics Publishers, (Selected parts, 300 p). ISBN-13:978-0-7360-9409-2

Mattsson, Mikael. (2014). *Träningsplanering*. Farsta: SISU Idrottsböcker, (250 p). ISBN 978-91-87745-00-3

Thomée, Roland, Swärd, Leif & Karlsson, Jon (2011). *Nya motions- och idrottsskador och deras rehabilitering*. Farsta: SISU Idrottsböcker, (344 p). ISBN: 9789186323097

Tonkonogi, Michail & Bellardini, Helena. (2012). *Åldersanpassad träning för barn och ungdom*. Farsta: SISU Idrottsböcker, (147 p). ISBN: 9789186323448

Wirhed, Rolf (2007). *Anatomi med rörelselära och styrketräning*. Harpoon

publications AB, (150 p). ISBN13:9789197078115

Scientific articles, app. 300 pages.