

SYLLABUS

Physiotherapy: Physical training and capacity 7.5 credits S0085H

Fysioterapi: Fysisk träning och kapacitet

Course syllabus admitted: Autumn 2016 Sp 1 - Spring 2018 Sp 4

**DECISION DATE
2016-02-15**

Physiotherapy: Physical training and capacity 7.5 credits S0085H

Fysioterapi: Fysisk träning och kapacitet

First cycle, S0085H

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G VG	Fysioterapi	Therapy, Rehabilitation and Dietary Treatment

Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language +

Swedish upper secondary school courses Sport and Health 1, Mathematics 2a/2b/2c , General Science 2, Social Studies 1b/1a1+1a2 (specifik entry A15).

Or:

Swedish upper secondary school courses Sport and health A, Mathematics B, General Science B, Social Studies A (specifik entry 17)

Selection

The selection is based on final school grades or Swedish Scholastic Aptitude Test.

Examiner

Jenny Röding

Course Aim

On completion of the course, the student should in a scientific way be able to:

1. design and implement a group training programme for individuals with good movement potential;
2. carry out, document and evaluate tests for cardiovascular training and strength;
3. plan, instruct on and implement an individually designed cardiovascular training and strength training programme based on an individual's potential and aims;
4. prepare a scientific report based on the training carried out on an individually designed training programme where collected data are presented, analysed and discussed in relation to methodological aspects and other research;
5. defend his/her own report and critically review another report;
6. describe his/her role as a physiotherapist from an entrepreneurial perspective, a community perspective and a trainer perspective;
7. carry out, analyse and document a simple movement analysis based on pre-defined conditions.

Contents

- Group training on land and in water with target group adaptation
- Strength training and testing of muscle strength based on theory and practice
- Cardiovascular training based on theory and practice
- Testing of cardiovascular function by submaximal bicycle ergometer test (Åstrand) theory and practice.
- Basic scientific theoretical concepts and research methodology with application in physiotherapy and the role of science in society
- Be familiar with the research paradigm in physiotherapy
- Review of scientific articles
- Preparation of a scientific report including problem formulation, a run-through of current research in the subject and reference management
- Reflect on the role of the physiotherapist in society from an entrepreneurial and trainer perspective
- Learn how to perform a simple screening and motion analysis of the musculoskeletal system in order to detect incorrect performance and deficiencies in execution of movements and muscle balance

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

Learning on the course is to a large extent based on the student's own activities both individually and in tutorial groups. Learning takes place through lectures, laboratory sessions, own physical training and the study of literature, including scientific articles. Learning in group training takes place in the form of group assignments, where the group designs a group gymnastics session, interleaved with a lesson on practical implementation methods and lectures. Learning in strength and cardiovascular training and strength and cardiovascular testing takes place in the form of group assignments where the student creates and tests an individually designed strength training programme for a fellow student, while the student him/herself follows an individually designed cardiovascular and strength training programme. The student's own training is documented in a training journal. Completion of the individual cardiovascular and strength training programme is compulsory for a Pass grade. Learning of scientific methods takes place through self-study, lectures and discussions and is applied through the preparation of a scientific report and article reviews with associated seminar exam. In order to explore and be able to describe his/her role as a physiotherapist and trainer from an entrepreneurial and social perspective, the student has to answer and reflect on a number of questions.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

- Learning outcome 1 is examined in practice by the performance of a group training programme and written description of the group training programme (test 0001)
- Learning outcomes 2-3 and 7 are assessed through individual written assignments for strength and cardiovascular training programmes and completed tests and practical examination for strength training and screening (test 0002)
- Learning outcomes 4-5 are examined through a scientifically designed individual written report and a seminar (test 0003)
- Learning outcome 6 is examined through an individual written assignment (test 0004)

Overlap

The course S0085H is equal to S0097H, S0058H

Literature. Valid from Autumn 2015 Sp 2

Andersson G (2011). Nya konditionstest på cykel, Bok & tabellhäfte. SISU idrottsböcker, 2011. ISBN: 9789186323103

Frohm A, Flodström F, Kockum B (2013). 9+ screening batteri. SISU idrottsböcker. ISBN 9789186323691

Larsen, F, Mattson M (2013). Kondition och uthållighet: för träning, tävling och hälsa. Danskt band. ISBN 9789186323677

Olsson H & Sörensen S (2011) Forskningsprocessen: kvalitativa och kvantitativa perspektiv. Liber ISBN 978-91-47-10051-4

Solgevik A, Lövdahl L, Norlin P (2008). Gympa - instruktörsutveckling Toppakademin. ISBN: 978-91-633-2537-3

Thomeé, R., Augustsson, J., Wernbom, M., Augustsson, S., Karlsson, J. (2008). Styrketräning. SISU Idrottsböcker. ISBN: 978-91-85433-55-1

Course offered by

Department of Health Sciences

Items/credits

Number	Type	Credits	Grade
0001	Groupexercise, practical, written	1.5	U G#
0002	Strength and fitness training	3.5	U G VG
0003	Scientific method	2	U G VG
0004	Entrepreneurship, written hand-in assignment	0.5	U G#

Last revised

by 2016-02-15

Syllabus established

by Prefekt vid Inst för Hälsovetenskap 2014-06-29