

SYLLABUS

Physiotherapy: Physical capacity and training 7.5 credits S0097H

Fysioterapi: Fysisk kapacitet och träning

Course syllabus admitted: Autumn 2023 Sp 1 - Present

**DECISION DATE
2023-02-14**

Physiotherapy: Physical capacity and training 7.5 credits S0097H

Fysioterapi: Fysisk kapacitet och träning

First cycle, S0097H

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 or 2b or 2c, General Science 2, Social Studies 1b or 1a1+1a2.

Selection

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

Course Aim

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

1. Design and implement a group training program 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 program based on an individual's potential and aims;
4. Present and discuss achieved results in relation to methodological aspects and current research following a scientific report structure
5. Defend his/her own report and critically review another report;

Contents

- Group training 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 (Ekblom-Bak) theory and practice.
- Basic scientific theoretical concepts and research methodology with application in physiotherapy and the role of science in society
- Research paradigm in physiotherapy
- Review of scientific articles
- Design of a scientific report including problem formulation in relation to current research in the subject and reference management
- 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
- Learn how to perform common strength training exercises including movement technique, adjustments of load or difficulty and using equipment

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 lectures and laboratory session, as well as 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.

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. 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 are assessed through individual written assignments for strength and cardiovascular training programmes and completed tests and practical examination for strength training (test 0002)

Learning outcomes 4-5 are examined through a scientifically designed individual written report and a seminar (test 0003)

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Overlap

The course S0097H is equal to F0017H, S0085H, S0058H

Course offered by

Department of Health, Education and Technology

Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Groupexercise, practical, written	U G#	1.5	Mandatory	S18	
0002	Strength and fitness training	U G VG *	3.5	Mandatory	S18	
0003	Scientific method	U G VG *	2.5	Mandatory	S18	

Last revised

by Anna Öqvist, Director of Undergraduate Studies at the Department of Health, Education and Technology 2023-02-14

Syllabus established

by Prefekt vid Institutionen för hälsvetenskap 2017-06-16