

Faculty of Medicine

# FYPA24, Basic Physiology and Exercise-physiology, 16.5 credits

Grundläggande fysiologi och träningsfysiologi, 16,5 högskolepoäng First Cycle / Grundnivå

# Details of approval

The syllabus is an old version, approved by The Rehabilitation Programmes Board on 2016-10-25 and was last revised on 2020-03-18. The revised syllabus applied from 2020-03-18., spring semester 2020.

## General Information

The course is included in the Bachelor's programme in Physiotherapy, 180 credits, and is compulsory for a degree of Bachelor of Science in Physiotherapy. It is included in semester 2 and complies with the provisions of the Higher Education Ordinance (SFS 1993:100 with later amendments).

Language of instruction: Swedish

The course can be taught wholly or partly in English.

Main field of studies Depth of study relative to the degree

requirements

Physiotherapy G1F, First cycle, has less than 60 credits in

first-cycle course/s as entry requirements

# Learning outcomes

## Knowledge and understanding

On completion of the course, the students shall be able to

- describe and explain basic physiological aspects with regard to metabolism and musculature, and the circulatory, respiratory, nervous and endocrine systems
- describe and explain effects of exercise physiology with regard to metabolism and musculature, and the circulatory, respiratory, nervous and endocrine systems, and provide a general account of nutrition and fluid balance in connection with exercise and relate these concepts to age and gender
- describe and explain physiological examinations, assessments and evaluations of

- functional ability
- provide a basic account of physical activity/exercise as a measure of prevention and health promotion
- identify what is a scientific approach and describe the importance of evidencebased assessments of physiological functional ability and evidence-based prevention and exercise

## Competence and skills

On completion of the course, the students shall be able to

- describe, demonstrate and apply physiological examinations, assessments and evaluations of functional ability
- plan and implement group exercise in practice
- provide basic prescriptions of physical activity/exercise as a measure of prevention and health promotion
- perform information and literature searches in the relevant subject area
- cooperate in groups and reflect on the work process and result, on their own and the group's performance, and provide constructive feedback.

## Judgement and approach

On completion of the course, the students shall be able to

understand the importance of applying a professional approach taking diversity into account

identify their own need of knowledge and development and take responsibility for their own learning process

#### Course content

The course runs for 11 weeks and includes the following subjects: physiology, exercise physiology, combined with physiological assessment and basic examination methods, prevention and exercise methodology, and methods of evaluating functional ability.

# Course design

The course consists of lectures and work in study groups on preparations and processing of thematic questions, laboratory exercises/demonstrations and case study. It includes practical components such as laboratory sessions and exercise and leadership methodology.

#### Assessment

To pass the course, students are required to have

- passed individual written examinations in basic physiology and exercise physiology
  - passed presentations of thematic questions processed in the study groups and of laboratory exercises/demonstrations in the form of reports and method descriptions
  - participated in laboratory exercises/demonstrations and in practical components as well as in the processing and presentation of cases
  - participated in study group work including reflection on their own and the group's work process and result

passed individual theoretical and practical examination in exercise methodology Number of exams

One examination and one opportunity to retake the examination are arranged soon after the course. Students who do not achieve a pass on either of these occasions will be able to retake the examination on a later occasion.

#### New examiner

A student who has failed two examinations on a course or module is entitled to have another examiner appointed, unless there are special reasons to the contrary. (SFS 2006:1053). The request is made to the programme director.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Subcourses that are part of this course can be found in an appendix at the end of this document.

## Grades

Marking scale: Fail, Pass.

# Entry requirements

To be admitted to the course, students must have completed semester 1.

## Further information

The course replaces FYPA22.

# Subcourses in FYPA24, Basic Physiology and Exercise-physiology

# Applies from H23

2301 Physiology, 9,0 hp
Grading scale: Fail, Pass
2302 Exercise Physiology, 7,5 hp
Grading scale: Fail, Pass

## Applies from V17

1601 Physiology, 7,5 hp
 Grading scale: Fail, Pass
 1602 Exercise Physiology, 6,0 hp
 Grading scale: Fail, Pass
 1603 Exercise Methods, 3,0 hp
 Grading scale: Fail, Pass