

## **Kursplan**

Course Title:	Clinical Gait Analysis/ Klinisk gånganalys
Level:	Basic
Points/Credits:	7,5
Depth of study:	B
Education area:	Technique, TE
Subject code:	Prosthetics and Orthotics, OTE

Approved by: Chairperson of the Educational Council on June 09, 2008

Revised by:

Validity: The syllabus is valid as of December 08, 2008

Course code: HGAB18

---

### **1. Organisation**

This is an elective course for students enrolled in the Study Program in Prosthetics and Orthotics, 180 university points. The course may also be taken as an individual subject. One week of study is equivalent to 1,5 university points and includes a minimum of 40 hours of study.

### **2. Goals**

Upon completion of the course students should have the;

Knowledge and understanding in order to

- demonstrate a high level of knowledge related to the technical background of acquiring clinical gait data
- explain relationships in motion between segments of the body.

Skills and abilities in order to

- assess the type and degree of pathology in a subject's gait
- compare and contrast available methods of acquiring accurate gait data
- draw conclusions regarding which method(s) to use in a given setting
- perform valid acquisitions of various gait data
- suggest prosthetic and/or orthotic interventions to alleviate the subject's demonstrated gait problems.

Values and relations in order to

- demonstrate an understanding of the benefits of collaboration and transfer of knowledge from/to other professional groups
- critically evaluate needs for knowledge and competence development, both for the individual and for the profession as a whole.

### 3. Contents

Course content:

- normal gait biomechanics
- different patterns of pathological gait
- neuromuscular control of human movement
- technical background of different gait analysis systems
- practical use of the school gait analysis systems
- interpretation of instrumented gait data
- applied gait analysis case studies

### 4. Examination

#### 4.1 Examination form

Examination will be based upon one oral presentation.

#### 4.2 Examiner

A university lecturer serves as the course examiner.

### 5. Course literature

Perry, J. (1992). *Gait analysis. Normal and pathological function*. SLACK Inc., Thorofare, USA.

Robertson, G., Caldwell, G., Hamill, J., Kamen, G., & Whittelsey, S. (2004). *Research Methods in Biomechanics*. Champaign, Ill., Human Kinetics Publishers.

Relevant journal articles.

### 6. Course Prerequisites

The requirements for entry into this course is a passing grade in the biomechanics course 15 university points, included in the Study Program in Prosthetics and Orthotics. Alternatively, students must have achieved a passing grade in an equivalent biomechanics course of 15 university points.

## 7. Course model and selection

Course model: basic course.

Selection:

1. Students currently enrolled within the Study Program in Prosthetics and Orthotics.
2. Other applicants; higher education credit points.

## 8. Course structure

This course is presented in the form of lectures, group work, seminars and laboratory sessions.

## 9. Additional Regulations

### 9.1 Attendance requirements

During the course attendance is compulsory to laboratory sessions and weekly seminars.

### 9.2 Rate of study

The course is run on a full-time basis.