



## COURSE SYLLABUS

# Clinical Gait Analysis, 7.5 credits

*Klinisk gånganalys, 7,5 högskolepoäng*

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Course Code:	HGAK11	Education Cycle:	First-cycle level
Confirmed by:	Utbildningsrådet Apr 11, 2011	Disciplinary domain:	Medicine
Valid From:	Dec 12, 2011	Subject group:	MT2
Version:	1	Specialised in:	G1F
		Main field of study:	Prosthetics and Orthotics

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### Intended Learning Outcomes (ILO)

Upon completion of the course students should have the:

#### *Knowledge and understanding*

- demonstrate a high level of knowledge related to the technical background of acquiring clinical gait data
- compare results of instrumented gait analysis to findings presented in the scientific literature.

#### *Skills and abilities*

- critically evaluate methods of acquiring gait data and draw conclusions regarding which method(s) to use in a given setting
- independently collect and process gait analysis data from patients with an orthopaedic or neurological deficit
- critically evaluate the function of orthopaedic devices based upon the outcomes of gait analysis and recommend alterations or improvements
- in both oral and written formats, present and discuss the results of gait analysis to one's peers and to other health professionals.

#### *Judgement and approach*

- demonstrate an understanding of the benefits of collaboration and transfer of knowledge from/to other professional groups
- critically evaluate personal needs for knowledge and competence development for the profession as a whole
- demonstrate professionalism with patients undergoing a gait assessment.

### Contents

- review of normal and pathological gait kinematics and kinetics
- interpreting the results of instrumented gait analysis
- gait analysis systems including three dimensional gait analysis, EMG and pressure measurement
- practical use of gait analysis systems
- applied gait analysis case studies

### Type of instruction

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

The teaching is conducted in English.

### Prerequisites

General entry requirements and passing grade in the biomechanics course 15 credits or equivalent.

### Examination and grades

The course is graded A, B, C, D, E, FX or F.

Examination will be based upon one group oral presentation and one individual written assignment.

A university lecturer serves as the course examiner.

Registration of examination:

Name of the Test	Value	Grading
Examination	7.5 credits	A/B/C/D/E/FX/F

### Other information

#### Attendance requirements

During the course attendance is compulsory to laboratory sessions and group presentations.

#### Course literature

Kirtley, C (2006). *Clinical gait analysis: Theory and Practice*. Washington: Churchill Livingstone.

Whittle, M. (2007). *An Introduction to Gait Analysis*. Oxford: Elsevier.

The most recent editions of the course literature should be used.

Additional relevant journal articles.

Registration nr 415/2011

Department of Rehabilitation