## SCHOOL OF HEALTH SCIENCES
### JÖNKÖPING UNIVERSITY

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 |

## 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 evaluatethe 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