

COURSE SYLLABUS

Clinical Gait Analysis, 7.5 credits

Klinisk gånganalys, 7.5 högskolepoäng

Course Code: HGAK11	Education Cycle: First-cycle level
Confirmed: Sep 24, 2025	Disciplinary domain: Medicine
Valid From: Aug 31, 2026	Subject group: Medical Technologies
	Specialised in: G1F First cycle, has less than 60 credits in first-cycle course/s as entry requirements
	Main field of study: Prosthetics and Orthotics

Intended Learning Outcomes (ILO)

On completion of the course the student will be able to:

Knowledge and understanding

- explain, with a high level of knowledge, demonstrate a high level of knowledge related to the technical background of acquiring clinical gait data.

Skills and abilities

- critically evaluate methods of acquiring gait data and draw conclusions regarding which method(s) to use in a given setting
- collect and process gait analysis data from patients with an orthopaedic or neurological deficit
- compare results of instrumented gait analysis to findings presented in scientific literature
- critically evaluate the function of orthopaedic devices based upon the outcomes of gait analysis and recommend alterations or improvements
- present and discuss the results of gait analysis to one's peers and to other health professionals
- apply professionalism with patients undergoing a gait assessment.

Judgement and approach

- reflect upon 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

Content

- normal and pathological gait kinematics and kinetics
- interpreting the results of instrumented gait analysis
- gait analysis systems including 3DGA, for kinetics, kinematics and EMG
- practical application of gait analysis systems
- applied gait analysis case studies

Type of instruction

This course is implemented through lectures, group work, group presentations and laboratory sessions.

Language of instruction is in English.

Entry requirements

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 of the course will be based upon a combined examination consisting of laboratory exercises and one group oral presentation, individual written assignment and one individual written examination

Registration of examination:

Name of the Test	Value	Grading
Combined examination	1 credit	G/U
Written assignment	1 credit	G/U
Written examination	5.5 credits	A/B/C/D/E/FX/F

Course literature

Please note that changes may be made to the reading list up until eight weeks before the start of the course.

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

Richards, J., Levine, D., & Whittle, M. W. (Eds.). (2022). *Whittle's gait analysis* . Elsevier Health Sciences.

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

Additional relevant journal articles will be added.