



**Karolinska
Institutet**

Course syllabus for

Assessment of walking function in children and adults with motor disorders, 7.5 credits

Bedömning av gångfunktion hos barn och vuxna med funktionsnedsättning, 7.5 hp

This course syllabus is valid from autumn 2017.

Please note that the course syllabus is available in the following versions:

Autumn2010 , Autumn2014 , Autumn2017

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| Course code | 2QA124 |
| Course name | Assessment of walking function in children and adults with motor disorders |
| Credits | 7.5 credits |
| Form of Education | Higher Education, study regulation 2007 |
| Main field of study | Not applicable |
| Level | Second cycle, in-depth level of the course cannot be classified |
| Grading scale | Pass, Fail |
| Department | Department of Women's and Children's Health |
| Decided by | Styrelsen för utbildning |
| Decision date | 2010-03-22 |
| Revised by | Education committee KBH |
| Last revision | 2017-04-20 |
| Course syllabus valid from | Autumn 2017 |

Specific entry requirements

A professional degree of at least 120 credits is required in physiotherapy, medicine, prosthetics and orthotics, or physical education. Alternatively a Bachelor's Degree in Podiatry. And proficiency in Swedish and English equivalent to Swedish B/Swedish 3 and English A/English 6.

Objectives

The aim of the course is to increase the knowledge in assessment of gait function in children/youth and adults with physical disability. The students should be given possibility to develop the ability to analyse the influence of physical disability on gait function and give treatment suggestion.

On completion of the course, the student should be able to:

- make an assessment of the walking ability by means of relevant methods and assessment tools
- analyse factors that influence walking ability in various physical disabilities
- propose and justify treatment suggestions

Content

The course is built-up with lectures about:

- physical disability in children/youth and adults based on an overview of relevant literature
- orthopaedics, neurology, surgery, medical treatment
- orthotic devices; analysis of need of orthoses, indications
- biomechanical principles, movement and gait analysis
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The following assessment instrument is used:

- ICF-criteria (International Classification of Function and Disability) on body -, activity - and level of participation and environmental factors
- visual observation of gait
- three-dimensional movement and gait analysis
- measurement tools for muscle activity and muscle strength

Teaching methods

The teaching is given through lectures, seminars and workshops, which all have obligatory attendance. Articles for self-study will be distributed at the beginning of the course.

The responsible kurs leader assesses whether absence from obligatory moments can be compensated for. Only for a student who has taken part in the obligatory moments or compensated for possible absence, study results can be reported.

Examination

Written assignment containing observation of a patient case from the student's own activities. Presentation in seminars during the last days of the course.

A student who has failed in the regular examination, is allowed to take part in five more examinations. If the student has failed six examinations/tests, no more examination is offered.

Transitional provisions

Examination will be provided during a period of two years after a close-down of the course. Examination may take place under a previous reading list during a period of one year after the date of the renewal of the reading list.

Other directives

Language of instruction: Swedish

Literature and other teaching aids

Bartonek, Åsa; Eriksson, Marie

Ortoser för barn och ungdomar

Lund : Studentlitteratur, 2005 - 175 s.

ISBN:91-44-02943-8 LIBRIS-ID:9894044

[Library search](#)

Gage, James R.

The identification and treatment of gait problems in cerebral palsy

2nd ed. : London : Mac Keith Press :b Distributed by Wiley-Blackwell, Keith Press :b Distributed by Wiley-Blackwell,c 2009. - xiv, 644 p.

ISBN:978-1-898683-65-0 LIBRIS-ID:11708750

[Library search](#)

Kirtley, Chris

Clinical gait analysis : Theory and practice. Chapter 14. Observational gait analysis

Churchill Livingstone Elsevier, 2006

ISBN:0 4431 0009 8

[Library search](#)

Perry, Jacquelin; Burnfield, Judith M.

Gait analysis : normal and pathological function

2. ed. : Thorofare, N.J. : SLACK, cop. 2010 - xvi, 551 s.

ISBN:9781556427664 LIBRIS-ID:11855149

[Library search](#)

Shumway-Cook, Anne; Woollacott, Marjorie H.

Motor control : translating research into clinical practice

Fifth edition. : Philadelphia : Wolters Kluwer, [2016], 2017 - xiv, 660 pages

ISBN:9781496302632 LIBRIS-ID:19439369

[Library search](#)

Baker, Richard.

Measuring Walking: A Handbook of Clinical Gait Analysis

Mac Keith Press, 2013

LIBRIS-ID:16257280