



Course syllabus for

Work Related Musculoskeletal Disorders, 7.5 credits

Arbetsrelaterade besvär i rörelseorganen, 7.5 hp

This course syllabus is valid from spring 2016.

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

[Spring2014](#) , [Spring2016](#) , [Autumn2017](#) , [Autumn2019](#) , [Autumn2021](#) , [Autumn2023](#) , [Autumn2024](#)

Course code	3AH019
Course name	Work Related Musculoskeletal Disorders
Credits	7.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Work and Health
Level	AV - Second cycle
Grading scale	Pass with distinction, Pass, Fail
Department	Institute of Environmental Medicine
Decided by	Programme Committee 5
Decision date	2013-09-23
Revised by	Programme Committee 5
Last revision	2015-09-19
Course syllabus valid from	Spring 2016

Specific entry requirements

Occupational therapist - or physiotherapy degree of 180 HE credits or Bachelor's degree in occupational therapy or physiotherapy.

English and Swedish language skills equivalent to English A/English 6 and Swedish B/Swedish 3 at Swedish upper secondary school are also required.

Objectives

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

- Reflect on theories concerning physiological mechanisms and risk factors for work-related disorders in the musculoskeletal system.
- Describe and apply biomechanical principles within physical ergonomics.
- Identify and analyse work-related physical exposures and psychosocial factors and reflect on their importance for origin and maintaining of musculoskeletal disorders.
- Describe and discuss how psychosocial working conditions, stress and cognitive demands

influence work performance and musculoskeletal disorders.

Content

The course includes work physiological mechanisms, such as energetic charge and local physical charges on the locomotive organs and acute and long-term effects regarding physical capacity and trouble in the locomotive organs. In the course, application of biomechanical principles within physical ergonomics is included. The course also concerns theories of how psychosocial working conditions, stress and cognitive charge influence work performance and musculoskeletal disorders.

Teaching methods

The teaching consists of a combination of distance education and scheduled campus teaching. The tuition forms at the campus teaching include lectures, seminars and group assignments. The distance education includes literature studies, group assignments, report writing, interview surveys etc

At the campus compulsory attendance at certain teaching parts can occur.

Examination

Examination takes place through individual, written examination, and a written group assignment with oral presentation in seminars. The examination of the written assignment is assessed from both written contents and oral presentation.

The grading scale is Fail/Pass/Pass with distinction.

passed grade attendance at compulsory lectures is required. The course director assesses if, and in that case, how absence can be compensated. Before student has participated in compulsory lectures or compensated absence in accordance with the instructions of Course Director the student's course results will not be reported in LADOK.

Limitation of number examination sessions

The student has the right to participate in six examination sessions. If the student has not passed after four examination sessions, the student is urged to visit the study adviser.

Every time the student participates in the same test counts as an examination session. Submission of blank exam is counted as examination session. Examination session to which the student has registered but not participated in will not be counted as an examination session.

Transitional provisions

Examination will be provided during a time of two years after a possible cancellation of the course. Examination can take place according to an earlier literature list during a time of one year after the date when a major renewal of the literature list been made.

Other directives

Course evaluation will be carried out according to the guidelines established by the Board for education and also according to evaluation routines within the Master's programme (one-year) in work and health.

Literature and other teaching aids

Arbetslivsfysiologi

Toomingas, Allan; Mathiassen, Svend Erik; Wigaeus Tornqvist, Ewa

1. uppl. : Lund : Studentlitteratur, 2008 - 373 s.
ISBN:978-91-44-04626-6 LIBRIS-ID:11200722

[Library search](#)

Arbete och teknik på människans villkor

Bohgard, Mats

2. uppl. : Stockholm : Prevent, 2011 - 740 s.
ISBN:978-91-7365-110-3 (inb.) LIBRIS-ID:12237276

[Library search](#)

Lundberg, Ulf; Wentz, Görel

Stressad hjärna, stressad kropp: Om sambanden mellan psykisk stress och kroppslig ohälsa

Wahlström & Widstrand, 2010 - 220 s.
ISBN:91-46-00054-2 LIBRIS-ID:12129367

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Heijne Wiktorin, Christina von; Nordin, Margareta

Tillämpad biomekanik

2., [omarb.] uppl. : Lund : Studentlitteratur, 2012 - 292 s.
ISBN:978-91-44-05713-2 LIBRIS-ID:12323542

[Library search](#)

Arbetets betydelse för uppkomst av besvär och sjukdomar : nacken och övre rörelseapparaten. En systematisk litteraturöversikt

Edling, Christer

Stockholm : Statens beredning för medicinsk utvärdering (SBU), 2012 - 721 s.
ISBN:978-91-85413-48-5 LIBRIS-ID:13480678

URL: [Fulltext](#)

[Library search](#)

Basic biomechanics of the musculoskeletal system

Nordin, Margareta; Frankel, Victor H.

4. ed. : Philadelphia : Wolter Kluwer Health/Lippincott Williams & Wilkins, cop. 2012 - xvi, 454 s.
ISBN:9781451117097 LIBRIS-ID:13520085

[Library search](#)

Arbetsmiljöns betydelse för ryggsproblem : en systematisk litteraturöversikt

Stockholm : Statens beredning för medicinsk utvärdering (SBU), 2014 - 643 s.
ISBN:9789185413683 LIBRIS-ID:17388347

URL: [Fulltext](#)

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Melin, Bo

Experimentell och epidemiologisk forskning : relationen psykosocial exponering, stress, psykisk belastning, muskelaktivitet och värk i nacke-skuldra

Göteborg : Institutionen för medicin, 2008 - 47 s.
ISBN:978-91-85971-07-7 LIBRIS-ID:11233432

URL: <http://hdl.handle.net/2077/18925>

[Library search](#)

Nordin, Margareta.; Andersson, Gunnar; Pope, M. H.

Musculoskeletal disorders in the workplace : principles and practice

2. ed. : Philadelphia : Mosby Elsevier, cop. 2007 - xiii, 428 p.

ISBN:978-0-323-02622-2 LIBRIS-ID:11911783

[Library search](#)

Effekter av fysisk träning vid olika sjukdomstillstånd

Svantesson, Ulla; Dahlström, Annette

Stockholm : SISU idrottsböcker, 2007 - 183 s.

ISBN:978-91-85433-16-2 LIBRIS-ID:10353321

[Library search](#)

Johansson, Håkan

Chronic work-related myalgia :b neuromuscular mechanisms behind work-related chronic muscle pain syndromes

Gävle : Gävle Univ. Press, cop. 2003 - xii, 310 s.

ISBN:91-974948-0-1 LIBRIS-ID:9288857

[Library search](#)

Hägg, Göran M.

Handintensivt arbete : en belastningsergonomisk kunskapsöversikt gällande människans kapacitet och interaktion med verktyg och arbetsuppgifter

Stockholm : Arbetslivsinstitutet, 2001 - 87 s.

ISBN:91-7045-606-2 LIBRIS-ID:7595543

URL: [Fulltext](#)

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Hellberg, Annika

Vibrationer i arbetet : hur du minskar risken för skador

1. uppl. : Solna : Arbetsmiljöverket, 2005 - 138 s.

ISBN:91-7464-457-2 LIBRIS-ID:9995612

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