Course syllabus for

**Sports Medicine and Sports Medicine Research Technique, 30 credits**

Idrottsmedicin och idrottsvetenskaplig metodik, 30 hp

This course syllabus is valid from autumn 2010.

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


<table>
<thead>
<tr>
<th>Course code</th>
<th>2QA134</th>
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<tbody>
<tr>
<td>Course name</td>
<td>Sports Medicine and Sports Medicine Research Technique</td>
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<tr>
<td>Credits</td>
<td>30 credits</td>
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<tr>
<td>Form of Education</td>
<td>Higher Education, study regulation 2007</td>
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<tr>
<td>Main field of study</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Level</td>
<td>Second cycle, in-depth level of the course cannot be classified</td>
</tr>
<tr>
<td>Grading scale</td>
<td>Fail (U), pass (G) or pass with distinction (VG)</td>
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<tr>
<td>Department</td>
<td>Department of Molecular Medicine and Surgery</td>
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<tr>
<td>Decided by</td>
<td>Styrelsen för utbildning</td>
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<tr>
<td>Decision date</td>
<td>2010-05-25</td>
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<td>Course syllabus valid from</td>
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**Specific entry requirements**

At least 120 credits within which it should be included a profession - or Bachelor's degree within health care, sports and training or a Bachelor of Education in Physical Education. Or at least 240 credits from the Study Programme in Medicine. English and Swedish language skills equivalent to English A and Swedish B at Swedish upper secondary school are also required.

**Objectives**

The student should have advanced knowledge and understanding on completion of the course for how medical subjects are related to physical activity and sports. On completion of the course, the student should be able to: 1. on the basis of advanced knowledge in sports physiology, sports traumatology, sports rehabilitation and a sports injury epidemiology reflect and explain the relationship between sports/physical training and sports-related injuries, and between sports-related injuries and their rehabilitation. 2. choose adequate evaluation instruments to evaluate both physical status of the uninjured athlete and different physical parameters after rehabilitation of an injured athlete before
returning to sports. 3. design, carry out and document a literature study based on current scientific findings in the sports medical area. 4. identify and carry out preventive actions against sports injuries, and account for how adequate rehabilitation and evaluation after a sports injury should be conducted.

Content

The course gives a scientific insight into current research in sports medicine, including sports physiology, sports traumatology, sports rehabilitation, and a sports injury epidemiology. Part 1 Sports Medicine (Sports Medicine), 14 credits The following sub-parts are treated in the part: - Specialisation in sports traumatology including strain injuries and problems - Rehabilitation after sports-related injuries - Sports physiology including diet and nutrition - Risk factors of sports-related injuries and problems, injury mechanisms, and sports injury prevention Part 2 Areas of general medicine (Areas of general medicine), 4 credits The following sub-parts are treated in the part: - Infection and sports - Women and sports - The special sports problems of children and youths - Sports physiology - Sports-related societal and behavioural science Module 3 Research methodology and statistics (Research methodology and statistics), 4 credits The following sub-parts are treated in the part: - Basic research methodology with different design of research projects - Models for performance reports - Documentation of research projects - Reviewing of scientific articles - Basic statistics - Practical laboratory sessions with various measuring instruments used in sports medicine Module 4 Project work (Project work), 8 credits The following sub-parts are treated in the part: - Literature search - Documentation of literature study - Oral presentation of the study of literature

Sports medicine, 14.0 hp
Grading scale : VU

Areas of general medicine, 4.0 hp
Grading scale : VU

Research methodology and statistics, 4.0 hp
Grading scale : VU

Project work, 8.0 hp
Grading scale : VU

Teaching methods

The course sessions consist of lectures, video demonstrations and discussions of diagnostics, acute treatment and rehabilitation in different case studies, i.e. patients with typical sports-related injuries and clinical joint diagnostics. Some teaching will take place in seminars, in which the students work in groups with different problem-oriented assignments in the sports medical area. Furthermore, teaching of research methodology and statistics, and practical laboratory sessions with the use of various research equipments will take place. In addition to this, literature studies and review of scientific articles are included. All parts in the course should be dominated by a reflecting attitude to sports based on the sports positive both as negative effects on the health. Compulsory participation: 80% attendance is required. If this is not fulfilled, individual written assignments are required. There is no possibility to re-take the course.

Examination
The course is examined in the following way: Part 1: Written examination Part 2: Written examination Part 3: written and oral examination Part 4: oral presentation and written documentation of literature study For a Pass with distinction in the entire course, the grade Pass with distinction is required in all examination parts.

**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: mainly Swedish, but English-speaking guest lecturers may be involved. Evaluation of the course will take place in connection with the course closure and be conducted in accordance with the guidelines established by the Board of Education.

**Literature and other teaching aids**

*Carlsson, Christian*

*Crosstraining : kombinationsträning för alla idrotter*

Farsta : SISU, 2001 - 110 s.
ISBN:91-88941-08-6 LIBRIS-ID:8382255
[Library search](#)

*Ekstrand, Jan; Karlsson, Jon*

*Fotbollsmedicin*

Solna : Svenska fotbollförb., 1998 - 496 s.
[Library search](#)

*Forsberg, Artur; Holmberg, Hans Christer; Woxnerud, Katarina*

*Träna din kondition*

[Ny uppl.]: Farsta : SISU idrottarböcker. Malmö, 2002
[Library search](#)

*Förebygga, behandla, rehabilitera idrottsskador : en illustrerad guide*

*Bahr, Roald (red); Mahlum, Sverre (red)*

[Library search](#)

*Hassmén, Peter; Hassmén, Nathalie; Plate, Johan*

*Idrottspsykologi*

[Library search](#)

*Idrottsskador : frontlinjen inom behandling och rehabilitering*

*Karlsson, Jon; Renström, Per; Holmström, Eva; Forsberg, Artur*
Library search

Johansson, Fredrik
Fysisk träning för ungdom
Farsta : SISU idrottsböcker, 2003 - 135 s.
Library search

Kenttä, Göran; Svensson, Michael
Idrottarens återhämningsbok : fysiologiska, psykologiska och näringsmässiga fakta för snabb och effektiv återhämning
Stockholm : SISU Idrottsböcker, 2008 - 376 s.
URL: http://www.idrottsbokhandeln.se/Images/Article/Omslagsbild/Mellan/690.jpg
Library search

Peterson, Lars; Renström, Per
Skador inom idrotten : handbok om förebyggande, behandlande och rehabiliterande åtgärder för aktiva, ledare, instruktörer, sjukgymnaster, läkare m.fl.
Tunek, Viveka; Brokop, Susanne; Roos, Ole
Library search

Svantesson, Ulla; Thomeé, Roland; Karlsson, Jon
Idrottarens spänstbok : spänst och elasticitet i muskler och senor
Farsta : SISU, 2001 - 152 s.
ISBN:91-88941-02-7 LIBRIS-ID:7776774
Library search

Carlsson, Marianne; Rönér Douhan, Gunel
Statistik : en introduktion
ISBN:91-88606-00-7 LIBRIS-ID:8381886
Library search

Hassmén, Nathalie; Hassmén, Peter
Idrottssvenskapskapliga forskningsmetoder
Stockholm : SISU idrottsböcker, 2008 - 414 s.
URL: http://www.idrottsbokhandeln.se/Images/Article/Omslagsbild/Mellan/674.jpg
Library search

Patel, Runa; Davidson, Bo
Forskningsmetodikens grunder : att planera, genomföra och rapportera en undersökning
ISBN:9789144022888 LIBRIS-ID:8868468
Library search