



Course syllabus for

## **Orthopaedic Radiology, 7.5 credits**

Ortopedisk radiologi, 7.5 hp

This course syllabus is valid from spring 2022.

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

[Spring2010](#) , [Spring2011](#) , [Autumn2011](#) , [Spring2012](#) , [Spring2013](#) , [Spring2018](#) , [Spring2022](#) , [Spring2025](#)

|                            |   |
|----------------------------|---|
| Course code                | 1RS035  |
| Course name                | Orthopaedic Radiology                                       |
| Credits                    | 7.5 credits   |
| Form of Education          | Higher Education, study regulation 2007                     |
| Main field of study        | Radiography   |
| Level                      | G2 - First cycle 2  |
| Grading scale              | Pass, Fail  |
| Department                 | Department of Clinical Science, Intervention and Technology |
| Decided by                 | Programnämnden för Röntgensjuksköterskeprogrammet           |
| Decision date              | 2009-10-16  |
| Revised by                 | Education committee CLINTEC                                 |
| Last revision              | 2021-10-18  |
| Course syllabus valid from | Spring 2022   |

### **Specific entry requirements**

To be qualified to a higher semester, it is required that the student has taken at least 15 credits from last semester, and all credits from previous semesters.

### **Objectives**

- account for changes in the musculoskeletal structure and physiology at various orthopedic disorders
- identify anatomic structures on CT and MR images
- account for orthopaedic diseases that can be diagnosed with radiological methods
- explain the usage of different modalities at pathological processes in the musculoskeletal system
- identify pathological changes in the illustrative material in different modalities
- describe treatment principles and complications in different orthopaedic diseases
- describe current research issues within the orthopaedic radiology
- demonstrate the ability to inform and teach about orthopedic radiology

## Content

In the course, the anatomy and physiology of the musculoskeletal system is treated. This also includes paediatric orthopaedics.

The course also treats different modalities in diagnostic radiology, such as conventional radiology, computer tomography, MRT, ultrasound and nuclear medicine. The student is trained to identify normal anatomic structures and pathological processes in image materials of different modalities. Here, current research fields within orthopaedic radiology are also discussed for example to illustrate the methodology improvement and quality assurance.

The course comprises an overview of treatment principles and rehabilitation of orthopaedic diseases. This includes medical as well as surgical treatments, and the complications that may arise in connection with these. Some principles treatments are studied in practice.

## Teaching methods

The teaching in the course include lectures, . work-integrated learning and group seminars

Seminars are mandatory. Course coordinator assesses whether and if so how absence from compulsory education elements might be assessed. Before the student participated in the mandatory sessions according to instructions the final study results cannot be reported.

The absence of a mandatory training component could mean that the student cannot make up for the time until the next time the course is offered.

## Examination

The course is examined through an independent written examination.

For a Pass grade in the course so that is required passed participation in seminar in a written and oral form.

In consultation with the examiner of the course, the student may get a complementary assignment in case of absence from a compulsory part.

Students who are not approved for regular examination has the right to participate in five examinations. In connection to the course three occasions will be given one within the course, one during the following re-examination. The third opportunity is provided before the beginning of the next semester, or in close connection to that. Three more opportunities will be provided as described above when the course is run next time.

If the student has six examinations, no additional examination will be given. Each participating in one examination date counts as one occasion.. Submission of blank exam counts as examination. Examination for which the student registered but not participating are not counted as examination.

If there are special grounds, or a need for adaptation for a student with a disability, the examiner may decide to deviate from the syllabus's regulations on the examination form, the number of examination opportunities, the possibility of supplementation or exemptions from the compulsory section of the course etc. Content and learning outcomes as well as the level of expected skills, knowledge and abilities may not be changed, removed or reduced.

## Transitional provisions

The student may be examined under a previous syllabus within a year after the date when a close-down or major changes of the course was decided.

## Other directives

Course evaluation will be carried out in accordance with the guidelines established by the Committee for Higher Education at Karolinska Institutet.

## Literature and other teaching aids

*Möller, Torsten B.; Reif, Emil*

### **Pocket atlas of sectional anatomy : computed tomography and magnetic resonance imaging. n Vol. 3, p Spine, extremities, joints**

Stuttgart : Thieme, cop. 2007- - ix, 334 s.

LIBRIS-ID:10446229

URL:

<https://lt.ltag.bibl.liu.se/login?url=http://www.thieme.com/SID2358701978210/ebooklibrary/flexibook/pulz> Extern access endast anställda och studenter vid LiU

*Reiser, Maximilian; Baur-Melnyk, Andrea; Glaser, Christian*

### **Musculoskeletal Imaging**

Stuttgart : Thieme publishing group, 2008 - 340 p

ISBN:9783131451613

[Library search](#)

### **Radiologi**

*Aspelin, Peter; Pettersson, Holger*

1. uppl. : Lund : Studentlitteratur, 2008 - 848 s.

ISBN:978-91-44-03887-2 (inb.) LIBRIS-ID:10948825

URL: <http://www.studentlitteratur.se/omslagsbild/artnr/31995-01/height/320/width/320/bild.jpg>

[Library search](#)

*Lindgren, Urban; Svensson, Olle*

### **Ortopedi**

*Alfredson, Håkan; Johansson, Fredrik*

3., [utök. och uppdaterade] uppl. : Stockholm : Liber, 2007 - 887 s.

ISBN:978-91-47-05253-0 (inb.) LIBRIS-ID:10035559

[Library search](#)

### **Akut ortopedi**

*Hultman, Lena; Järhult, Johannes; Lekberg, Ann-Christine; Lagman, Yvonne*

1. uppl. : Stockholm : Liber, 2010 - 286 s.

ISBN:978-91-47-09401-1 LIBRIS-ID:12032994

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