



**Karolinska  
Institutet**

Course syllabus for

## **Radiology 2, 7.5 credits**

Röntgendiagnostik 2, 7.5 hp

This course syllabus is valid from autumn 2018.

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

[Autumn2007](#) , [Autumn2008](#) , [Autumn2009](#) , [Autumn2010](#) , [Autumn2011](#) , [Autumn2012](#) , [Spring2016](#) , [Autumn2016](#) , [Autumn2017](#) , [Autumn2018](#) , [Autumn2019](#) , [Autumn2021](#) , [Autumn2023](#) , [Autumn2024](#)

Course code	1RS006
Course name	Radiology 2
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 with distinction, Pass, Fail
Department	Department of Clinical Science, Intervention and Technology
Decided by	Programnämnden för röntgensjuksköterskprogrammet
Decision date	2007-06-20
Revised by	Education committee CLINTEC
Last revision	2018-04-10
Course syllabus valid from	Autumn 2018

## **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**

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

- identify and explain pathological changes and their position within diagnostic imaging of the skeleton system
- explain pathological changes in thorax, abdomen and urogenital organs in diagnostic imaging and identify and name commonly occurring pathology
- describe how contrast agents can contribute to the diagnosis in radiological studies
- describe how pathological changes can be visualised in different diagnostic imaging examination methods
- account for current research relevant to diagnostic radiology and discuss the clinical application
- analyse and assess diagnostic radiographic images concerning image quality

## Content

The course examines commonly used pathology in children and adults that can be made visible with image diagnostic methods. By means of image studies, the student is trained to identify disease states that require emergency measures in radiological imagery. A central part is being able to explain pathological changes and their location with adequate medical terminology. Within orthopedics, different types of osteosynthetic material are also studied to identify these.

The focus of the course is to identify pathological changes on conventional x-ray images, computer tomography images and magnetic resonance images. Furthermore, the anatomy is evident in nuclear medicine and ultrasound images and how the anatomy changes in pathological conditions.

The course also discusses image quality related to enabling visualization of pathological conditions.

## Teaching methods

Lectures, project and workshops.

## Examination

The learning outcomes are examined through oral presentation and individual written exam. In order to be approved for the course, an approved implementation of mandatory elements is also required.

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

The student is entitled to a total of six test occasions to get passed.

In connection to the course three occasions will be given One within the course, two during the following re-examinations. In certain cases, it is required that the student submits an exemption application before he/she get the results of his/her latest completed examination. Three more opportunities will be provided as described above when the course is run next time.

If the course is examined by a extern exam, or other assignments with deadlines, a latest submission date is given at the introduction of the course. In cases where a completion is required a new date for latest submission is set. If the requirements for submission are not fulfilled the student is given the opportunity to submit the exam or the assignment at the next time course is given. Reasons for not meeting deadlines may be taken under consideration by examiner.

## Transitional provisions

The student has the opportunity to be examined under a previous course syllabus within a year after the date of the course was decided closed-down or undergoes major changes.

## Other directives

Course evaluation will be carried out in accordance with the guidelines established by the Board of Education at Karolinska Institutet.

## Literature and other teaching aids

*Andersson, Roland m.fl.*

**Kirurgiska sjukdomar**

2. uppl. : Studentlitteratur AB, 2012 - 400 s.

ISBN:978-91-44-05680-7 LIBRIS-ID:12469356

[Library search](#)

*Lisle, David.*

**Imaging for students**

4th ed. : London : Hodder Arnold, 2012. - ix, 292 p.

ISBN:1444164821 (e-book) LIBRIS-ID:14206255

[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](#)

*Möller, Torsten B.; Reif, Emil*

**Pocket atlas of radiographic anatomy**

3rd ed. : Stuttgart : Thieme, cop. 2010 - xi, 388 p.

ISBN:9783131505811 LIBRIS-ID:12080242

[Library search](#)

*Möller, Torsten B.; Reif, Emil*

**Pocket Atlas of Sectional Anatomy : computed tomography and magnetic resonance imaging Vol. II Thorax, Heart, Abdomen, and Pelvis**

4. ed. : Stuttgart : Thieme, 2013

ISBN:978-3-13-170854-0 LIBRIS-ID:17210586

[Library search](#)

*Tjønneland, Ruth Mona; Lagesen, Bente*

**Barnradiografi - en praktisk vägledning**

Gleerups, 2014 - s.

ISBN:9789140686268 LIBRIS-ID:16997610

[Library search](#)

*Wicke, Lothar*

**Atlas of Radiologic Anatomy**

7 : New Jersey : MediMedia, 2004 - 362

ISBN:1929007-4-69

[Library search](#)

*Mettler, Fred A.*

**Essentials of radiology**

3. ed. : Philadelphia, Pa. : Elsevier Saunders, cop. 2014 - ix, 309 s.

ISBN:9781455742257 LIBRIS-ID:14603695

[Library search](#)