



Course syllabus for

## **Radiology 1, 4.5 credits**

Röntgendiagnostik 1, 4.5 hp

This course syllabus is valid from autumn 2011.

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

[Spring2008](#) , [Spring2009](#) , [Spring2010](#) , [Autumn2010](#) , Autumn2011 , [Spring2021](#) , [Spring2022](#) , [Spring2023](#) , [Spring2024](#) , [Spring2025](#)

Course code	1RS002
Course name	Radiology 1
Credits	4.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Radiography
Level	G1 - First cycle 1
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Clinical Science, Intervention and Technology
Decided by	Programnämnden för Röntgensjuksköterskeprogrammet
Decision date	2007-12-10
Revised by	Programnämnd 6 (Biomedicinsk analytiker- och Röntgensjuksköterskeprogrammen)
Last revision	2011-04-18
Course syllabus valid from	Autumn 2011

## **Specific entry requirements**

Standardised admission requirements F.1.1.

## **Objectives**

On completion of the course, the student should be able to: describe how contrast differences arise in the diagnostic image material. identify and name anatomic structures in the diagnostic image material and explain normal features. use correct medical term for positioning of the organs and the method of applied examination methods. explain and motivate the use of contrast medium in radiological examinations. describe, at a general level, commonly used methods for conventional x-ray examinations evaluate images based on image quality criteria

## **Content**

Course main parts consist of methodology for radiographic projections, anatomical structures and image

quality. The course takes its starting point in previously acquired knowledge in anatomy in healthy human. Based on this knowledge, the student is trained to identify anatomic structures in the radiological image material of the nervous system, thorax, abdomen and skeleton. This includes conventional x-ray examinations and examinations with magnetic resonance imaging and computer tomography. In the course, an adequate medical terminology is trained based on the radiological images and examination methodology. The course also deals with contrast medium and its use in the diagnostic imaging.

## Teaching methods

The education consists of lectures and image seminars.

## Examination

The course is examined through an individual written examination. In case of students absence of a compulsory task, the examiner of the course may allow a complementary assignment. 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 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.

## Transitional provisions

If the course is closed or is subjected to substantial changes, the student has the right to be examined under a previous course syllabus within a year from the date of decision.

## 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

*Lisle, David.*

### Imaging for students

3rd ed. : London : Hodder Arnold, 2007. - 1 online resource (x, 283 p.)

ISBN:978-1-4441-1364-8 (electronic bk.) LIBRIS-ID:12100472

[Library search](#)

*Möller, Torsten B.; Reif, Emil*

### Pocket atlas of radiographic anatomy

2nd ed., rev. and enl. : Stuttgart ; a New York : Thieme, 2000. - ix, 374 p.

LIBRIS-ID:10332052

URL:

<https://lt.ltag.bibl.liu.se/login?url=http://www.thieme.com/ebooklibrary/flexibook/pubid-521955621/index>  
z Extern access endast anställda och studenter vid LiU

*Möller, Torsten B.; Reif, Emil*

### Pocket atlas of sectional anatomy : computed tomography and magnetic resonance imaging. n Vol. 1,p Head and neck

3. ed., rev. and updated /b Torsten B.Moeller, Emil Reif : Stuttgart : Thieme, 2007 - ix, 264 s.

ISBN:3-13-125503-X (GTV) LIBRIS-ID:10257344

[Library search](#)

*Möller, Torsten B.; Reif, Emil*

**Pocket atlas of sectional anatomy : computed tomography and magnetic resonance imaging. n Vol. 2, p Thorax, heart, abdomen and pelvis**

3. ed., rev. and updated : Stuttgart : Thieme, cop. 2007 - viii, 247 s.

ISBN:3-13-125603-6 (GTV) LIBRIS-ID:10322889

[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](#)

*Sand, olav; et al*

**Människokroppen : Fysiologi och anatomi**

Stockholm : Liber, 2007 - 544s

ISBN:9789147084357

[Library search](#)

*Feneis, Heinz; Dauber, Wolfgang*

**Anatomisk bildordbok**

*Spitzer, Gerhard; Brinkman, Ingrid*

5., utökade uppl. /b [fackgranskning: Håkan Aldskogius] : Stockholm : Liber, 2006 - [4], 520 s.

ISBN:91-47-05301-1 LIBRIS-ID:10162715

URL: <http://www2.liber.se/bilder/omslag/100/4705301o.jpg>

[Library search](#)

*Wicke, Lothar; Firbas, Wilhelm; Schmiedl, Roland*

**Atlas of radiologic anatomy**

4., English ed. : Munich ; Baltimore : Urban & Schwarzenberg, 1987 - 288 s.

ISBN:0-8067-2114-6 (Baltimore) LIBRIS-ID:5707799

[Library search](#)