

# Course syllabus for **Radiology 2, 7.5 credits**

Röntgendiagnostik 2, 7.5 hp This course syllabus is valid from autumn 2011. Please note that the course syllabus is available in the following versions: <u>Autumn2007</u>, <u>Autumn2008</u>, <u>Autumn2009</u>, <u>Autumn2010</u>, <u>Autumn2011</u>, <u>Autumn2012</u>, <u>Spring2016</u>, <u>Autumn2016</u>, <u>Autumn2017</u>, <u>Autumn2018</u>, <u>Autumn2019</u>, <u>Autumn2021</u>, <u>Autumn2023</u>, <u>Autumn2024</u>

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	Programnämnd 6 (Biomedicinsk analytiker- och Röntgensjuksköterskeprogrammen)
Last revision	2011-08-24
Course syllabus valid from	Autumn 2011

## 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. identify indicated pathological changes in the vascular system and explain endovascular treatment methods. describe how contrast agents can contribute to the diagnosis in radiological studies. describe how pathological changes are visualised in different diagnostic imaging examination methods. review and account for different scientific publications relevant to diagnostic radiology and discuss clinical application of the results. analyse and assess radiographic images concerning image quality

## Content

In the course we studie commonly occurring pathology at adults that may be done visible with diagnostic imaging methods. An important part is to identify disease that require acute actions. Strong emphasis is placed on to be able to explain pathological changes and their position with an adequate medical terminology. Within the orthopaedics we studie various types of osteosyntesmaterial to be trained to identify these. An important part is that the student should practice to identify pathological changes in radiographic images as conventional X-ray images, computer tomography images, magnetic resonance imagings in nuclear medical examinations and in ultrasound examinations.

## **Teaching methods**

Lectures, seminars and image studies.

#### Examination

Examinations takes place through an independent written examination. 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.

#### **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

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Kirurgiska sjukdomar : patofysiologi, behandling, specifik omvårdnad
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Andersson, Roland; Lyons, Lena

Lund : Studentlitteratur, 2004 - 460 s. ISBN:91-44-02418-5 (inb.) LIBRIS-ID:9416256 Library search

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. Page 2 of 3

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

2. ed. : Philadelphia, Pa. : Saunders, cop. 2005 - 416 s.b ill. ISBN:0-7216-0527-3 (hft.) LIBRIS-ID:9681659 Library search