



**Karolinska  
Institutet**

Course syllabus for

## **Radiology 3, 4.5 credits**

Röntgendiagnostik 3, 4.5 hp

This course syllabus is valid from autumn 2019.

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

[Autumn2007](#) , [Autumn2009](#) , [Spring2010](#) , [Autumn2010](#) , [Autumn2011](#) , [Autumn2013](#) , [Autumn2015](#) , [Autumn2016](#) , [Autumn2017](#) , [Autumn2018](#) , [Autumn2019](#) , [Autumn2020](#) , [Autumn2021](#) , [Autumn2023](#) , [Autumn2024](#)

Course code	1RS007
Course name	Radiology 3
Credits	4.5 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	2019-04-01
Course syllabus valid from	Autumn 2019

## **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**

After completing the course the student will:

- explain the relationship between the referral content and choice of modality and the methodology in neuroradiology
- identify and explain common pathological changes and their position within the neuroradiology
- identify indicated pathological changes in the vascular system and explain endovascular therapies
- describe how contrast may contribute to the diagnosis in interventional and neuroimaging studies.
- analyze and evaluate diagnostic imaging regarding medical issues
- relate the latest research and proven experience to the learning outcomes regarding neuro radiology and the choice of clinical application

# Content

The course focuses on various modalities and common pathology that can be made visible with diagnostic methods in neuroradiology and vascular diagnosis with a review of endovascular therapies. An important aspect is to identify medical conditions that require urgent action. Emphasis is placed on being able to explain pathological changes and their location with adequate medical terminology. How different methods for examination may be justified on a scientific basis and evidence-based approach are also studied during the course.

## Teaching methods

Lectures, seminars, image studies and group work.

## Examination

Examination takes place through an independent written examination and active performance of group work.

To pass with distinction the student must pass in the individual written exam with distinction and pass, active participation and performance of group work and attendance at the presentation session. For this the assessment is based on criteria.

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 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.

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/s 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 has the opportunity to be examined according to a previous course syllabus within a year from the date when the course was decided close-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](#)

*Möller, Torsten B.; Reif, Emil*

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

3. ed., rev. and updated : Stuttgart : Thieme, 2007 - PDF (264 p.

ISBN:9781604061314 LIBRIS-ID:10392769

[Library search](#)

*Möller, Torsten B.; Reif, Emil*

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

3. ed., rev. and updated : 2007- - PDF (viii, 247 s.

ISBN:9781604061321 LIBRIS-ID:10318854

[Library search](#)

### **Endovaskulär intervention : en praktisk vägledning**

*Falkenberg, Mårten; Delle, Martin*

1. uppl. : Lund : Studentlitteratur, 2014 - 510 s.

ISBN:9789144079066 LIBRIS-ID:14984995

[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](#)

*Lisle, David A.*

### **Imaging for students**

2. ed. : London : Arnold, cop.2001 - 262 s.

ISBN:0-340-76231-4 (pbk) LIBRIS-ID:8284493

[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](#)

*Wicke, Lothar*

### **Atlas of Radiologic Anatomy**

7 : New Jersey : MediMedia, 2004 - 362

ISBN:1929007-4-69

[Library search](#)