Course syllabus for

Radiology 1, 4.5 credits

Röntgendiagnostik 1, 4.5 hp
This course syllabus is valid from spring 2023.
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	Education committee CLINTEC
Last revision	2022-10-10
Course syllabus valid from	Spring 2023

Specific entry requirements

Mathematics 2a or 2b or 2c, Natural Sciences 2, Social Sciences 1b or 1a1+1a2.

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.

The examiner decides whether, and if so, how absence from compulsory educational elements can be taken again. Study results cannot be reported until the student has participated in compulsory course elements or compensated for any absence in accordance with instructions from the examiner. Absence from a compulsory course element could mean that the student can not retake the element until the next time the course is offered.

Examination

The course is examined through 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.

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

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 Committee for Higher Education at Karolinska Institutet.

Literature and other teaching aids

Lisle, David.
Imaging for students

4th ed. : London : Hodder Arnold, 2012. - ix, 292 p.
ISBN:1444164821 (e-book) LIBRIS-ID:14206255
Library search

Moeller, Torsten B.; Reif, Emil.

Pocket atlas of radiographic anatomy

3rd ed. : Stuttgart : Thieme, c2010 - xi, 388 p.
ISBN:978-3-13-784203-3 LIBRIS-ID:11934526
Library search

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

Blomqvist, Lennart; Zackrisson, Sophia

Upplaga 2 : Lund : Studentlitteratur, 2022 - 668 sidor
ISBN:9789144129013 LIBRIS-ID:8pz0dxzt6ctcn629
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

Sand, olav; et al

Människokroppen : Fysiologi och anatomi

Stockholm : Liber, 2007 - 544s
ISBN:9789147084357
Library search