



Course syllabus for

## **Radiography - clinical education 4, 7.5 credits**

Radiografi - verksamhetsförlagd utbildning 4, 7.5 hp

This course syllabus is valid from spring 2009.

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

[Spring2008](#) , [Spring2009](#) , [Autumn2009](#) , [Spring2010](#) , [Autumn2012](#) , [Autumn2016](#) , [Autumn2018](#) , [Autumn2024](#) , [Spring2025](#)

Course code	1RS017
Course name	Radiography - clinical education 4
Credits	7.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Radiography
Level	G1 - First cycle 1
Grading scale	Pass, Fail
Department	Department of Clinical Science, Intervention and Technology
Decided by	Programnämnden för Röntgensjuksköterskeprogrammet
Decision date	2007-12-10
Revised by	Programnämnden för Röntgensjuksköterskeprogrammet
Last revision	2008-10-28
Course syllabus valid from	Spring 2009

### **Specific entry requirements**

For admission to the course, a Pass grade is required in the course X-ray - Clinical education 3, 7.5 HE credits. Students who have failed the placement (VFU) or the equivalent as a consequence of demonstrating deficiencies in knowledge, skills or attitude so serious that the patient's safety or confidence in healthcare have been at risk is qualified for new placement only when the individual action plan has been completed.

### **Objectives**

On completion of the course, the student should be able to: observe the patient's nursing needs and take measures to the patient's security and convenience in radiographic studies; choose the right approach on the basis of the aim of the study, and carry out the study with growing independence; take the anatomy of the individual patient as a starting point, in the setting of a radiological study; assess illustrative materials concerning image quality and, when necessary, make corrections; carry out radiological examinations in a radiation-hygienic way and be able to motivate the process; identify common pathological changes in

examinations of skeleton, urinary tract, thorax and abdomen document adequate information in connection with the study show ability to cooperate with different professional representatives take responsibility for one's own learning and development

## **Content**

During the course, the student practices to enhance his/her knowledge in conventional radiographic examination methods. This implies, on the basis of the individual patient's anatomy, the medical history and issue of the referral, to choose and apply the methods and techniques that need to be used. Strong emphasis will be placed on analysis of acquired illustrative material regarding commonly occurring pathological changes and met criteria for the study. This takes place by the student, based on a given image material, analyses the X-ray image in terms of anatomy and possible pathological changes and assesses compliance with the decided criteria of examination. The student should also be trained to carry out necessary corrections of a completed study. The student will at this level also practice computer tomography by carrying out commonly occurring examinations under supervision. The student will also participate in field studies in e g nuclear medicine, angio and interventions and magnetic resonance examinations. Advanced nursing will be practiced by the student communicating with the patient in connection with the examination, and through this the student makes a survey of the nursing needs that may be present and takes care of the patient.

## **Teaching methods**

Supervised proficiency training as the student practices to plan and carry out x-ray examinations. Teacher-supervised method exercises and seminars. The course assumes active knowledge acquisition, reflection and critical analysis.

## **Examination**

Assessments during the placement is carried out by means of evaluation forms about which the student is informed at the beginning of the course. The clinical examination is based on referral and method book, as the student carries out the examination of a patient. The student should orally account for the examination method with regard to technique, projections, terminology and anatomic structures in the illustrative material. The placement is compulsory and constitutes 32 hours per 1.5 credits.

Compensation of absence is planned in consultation with the co-opted clinical teacher that has been appointed. The student has the right to take the course at most two times. The examiner may with immediate effect interrupt a student's placement (VFU), or the equivalent, if the student demonstrates such serious deficiencies in knowledge, skills or attitudes that patient safety or patient confidence in healthcare is at risk. When a placement is interrupted like this, it implies that the student fails in the current part, and that a placement opportunity is used. In such cases, an individual action plan should be set up showing which activities and examinations are required, before the student is given the possibility of a new placement in this course.

## **Transitional provisions**

The student may be examined under a previous syllabus within a year after the date when a close-down or major changes of the course was decided.

## **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

*Björkman, Eva; Karlsson, Karin*

### **Medicinsk teknik för sjuksköterskor : material, metod, ansvar**

3., [rev. och utök.] uppl. : Lund : Studentlitteratur, 2008 - 367 s.

ISBN:978-91-44-04794-2 LIBRIS-ID:10956051

[Library search](#)

*Ehrlich, Ruth Ann; McCloskey, Ellen Doble; Daly, Joan A.*

### **Patient care in radiography : with an introduction to medical imaging**

6. ed. : St. Louis, Mo. : Mosby, cop. 2004 - xv, 447 s.

ISBN:0-323-01937-4 LIBRIS-ID:9649937

[Library search](#)

### **Författningshandbok för personal inom hälso- och sjukvården.n 2007 = 38. uppl.**

*Raadu, Gunnel*

Stockholm : Liber, 2007 - 727 s.

ISBN:978-91-47-08420-3 LIBRIS-ID:10324013

[Library search](#)

*Isaksson, Mats*

### **Grundläggande strålningsfysik**

*Lund, Annika*

Lund : Studentlitteratur, 2002 - 310 s.

ISBN:91-44-01528-3 LIBRIS-ID:8427844

[Library search](#)

*Möller, Torsten B.0 77501*

### **Pocket atlas of radiographic positioning**

*Reif, Emil*

Stuttgart : Thieme, 1997 - ix, 286 s.

ISBN:3-13-107441-8 (Stuttgart) LIBRIS-ID:4668759

[Library search](#)

*Möller, Torsten B.0 77501; Reif, Emil*

### **Pocket atlas of radiographic anatomy**

2. ed. rev. and enlarged : New York ;a Stuttgart : Thieme, 2000 - 374 s.

ISBN:3-13-784202-6 LIBRIS-ID:8279031

[Library search](#)

*Möller, Torsten B.; Reif, Emil*

### **Pocket atlas of sectional anatomy : computed tomography and magnetic resonance imaging. n Vol. 3, p Spine, extremities, joints**

Stuttgart : Thieme, cop. 2007- - ix, 334 s.

LIBRIS-ID:10446229

URL:

<https://lt.ltag.bibl.liu.se/login?url=http://www.thieme.com/SID2358701978210/ebooklibrary/flexibook/pulz> 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](#)

*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](#)

*Lindskog, Bengt I.*

### **Medicinsk terminologi**

*Andrén-Sandberg, Åke; Frank, Urban; Buckhøj, Poul*

5., [rev.] uppl. /b [illustrationer: Urban Frank och Poul Buckhøj] : Stockholm : Norstedts Akademiska, 2008 - 704 s.

ISBN:978-91-7227-557-7 (inb.) LIBRIS-ID:10740673

[Library search](#)

*Möller, Torsten B.O 77501*

### **Normal findings in radiography**

Stuttgart : Thieme, cop. 2000 - 276 s.

ISBN:3-13-116531-6 (GTV) LIBRIS-ID:4669244

[Library search](#)