



**Karolinska
Institutet**

Course syllabus for

Radiography - clinical education 3, 7.5 credits

Radiografi - verksamhetsförlagd utbildning 3, 7.5 hp

This course syllabus is valid from autumn 2007.

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

Autumn2007 , [Spring2009](#) , [Autumn2009](#) , [Autumn2012](#) , [Autumn2016](#) , [Autumn2018](#) , [Autumn2024](#)

Course code	1RS014
Course name	Radiography - clinical education 3
Credits	7.5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Radiography
Level	G1 - First cycle 1
Grading scale	Fail (U) or pass (G)
Department	Department of Clinical Science, Intervention and Technology
Decided by	Programnämnden för röntgensjuksköterskprogrammet
Decision date	2007-06-20
Course syllabus valid from	Autumn 2007

Specific entry requirements

To be qualified to a higher semester, it is required that the student has taken at least 10 credits from last semester, and all credits from previous semesters.

Objectives

Observe the patient's nursing needs and take action for patient security and convenience in radiographic examination. Be able to choose the correct method based on the objective of the study and carry out the study under supervision. Be able to base the set-up of a radiological study on the individual patient's anatomy. Be able to adapt exposure parameters in a radiographic examination in order to achieve sufficient image quality in relation to patient dosage and patient radiation protection. Assess image materials concerning image quality and, when necessary, make corrections. Be able to document adequate information in connection with the study. Show ability to cooperate with different professional representatives. Be able to take responsibility for one's own learning and development.

Content

During the course, the student practices to enhance his/her knowledge in radiographic examination methods within orthopaedic, abdomen and thoracic radiology. This implies, on the basis of knowledge in anatomy, the medical history and issue of the referral, to understand the projections and examination

techniques that need to be used in different issues within these areas of activity. Strong emphasis will be placed on an understanding of referral contents, projections and settings of each individual examination. This is done by the student, based on a given illustrative material, analyse the X-ray image in terms of anatomy and met criteria for investigation. The student should also be trained to carry out necessary corrections of a completed study. The student practices, by means of a study assignment, his action readiness in connection with the injection of contrast agents. This implies to study the symptoms that the patient can show, and the drugs used in acute allergic reactions that may occur in the injection of iodic contrast agents. In the technical parts, the student practices an advanced understanding of the parameters affecting image quality and radiation dose to the patient by reference to theoretical explanations. Mainly, this understanding applies to the settings that may be made of radiation quality (kV) and amount (mAs) regarding image quality and radiation dose to the patient, the student will also practice the image processing options built into the systems. Advanced nursing will be practiced in connection with the examination, by the student identifying patient nursing needs in various types of examinations. The student should further take nursing actions for patient well-being and convenience in radiographic examinations. At this level, the student will also be training computer tomography examinations by active participation in examinations. The student will also participate in field studies in nuclear medicine, angio and interventions and magnetic resonance examinations.

Teaching methods

The daily planning of the clinical studies takes place with the appointed, co-opted clinical teacher. The teaching also includes teacher-supervised method exercises, and follow-up seminars. During the course, the student may, together with the supervisor, practice to plan and carry out X-ray examinations.

Examination

In the final assessment, an overall assessment and a clinical examination are included. 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 takes place based on referral and method book, where 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 hec. 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 clinical education parts of the course at most two times.

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

2., [rev. och utök.] uppl. : Lund : Studentlitteratur, 2001 - 206 s.

ISBN:91-44-01669-7 LIBRIS-ID:8353030

[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.; 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.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](#)