

**SYLLABUS**

# **Radiography in-depth studies in anatomy, projectional radiography with applications 7.5 credits M0069H**

**Radiografi - fördjupad anatomi, projektionslära och tillämpningar**

**Course syllabus admitted: Autumn 2016 Sp 1 - Spring 2017 Sp 4**

**DECISION DATE  
2016-02-15**

# Radiography in-depth studies in anatomy, projectional radiography with applications 7.5 credits M0069H

## Radiografi - fördjupad anatomi, projektionslära och tillämpningar

### First cycle, M0069H

Education level	Grade scale	Subject	Subject group (SCB)
First cycle	U G VG	Radiologi	Medicine

## Entry requirements

In order to meet the general entry requirements for first cycle studies you must have successfully completed upper secondary education and documented skills in English language and The course furthermore assumes the following completed courses:

M0070H/M0052H General Pharmacology, Contrast Agents and Pharmaceutical Calculation

M0066H/O0051H Radiography Nursing techniques in position radiography with Clinical Practice

M0067H/O0050H Radiography Nursing Interventions in position radiography with Clinical Practice

M0029H Medical Science: Microbiology, Infection Control and Infection Disease

M0026H Medical Science: Anatomy and Physiology in position to Radiology

O0047H Nursing: Health

M0050H Radiation Science and Radiological Modalities

O0055H Fundamental Principles in Nursing

## Selection

The selection is based on 1-165 credits.

## Examiner

Sara Larsson

## Course Aim

After completing the course, students must have good anatomical knowledge and be able to carry out simple radiography examinations in a patient safely, which means that students will be able to:

- Demonstrate the ability to understand and interpret a radiography referral and provide clinical information to the patient in connection with imaging
- Describe projections and image characteristics for simple conventional radiography examinations
- Describe how different exposure parameters influence the image quality
- Apply basic radiation protection in a clinical environment
- Describe the topographic anatomy of the body
- Describe the anatomic planes of the body, body movements, directions and positions of the body
- Collaborate in practical sessions and reflect on his/her abilities and skills

## Contents

- Referral management
- Projection theory and image criteria
- The effect on the image quality of exposure parameters
- Supervised laboratory sessions regarding radiography examinations
- Radiation protection
- Topographic and advanced anatomy in relation to examination technique
- The anatomic planes of the body, body movements, directions and positions of the body

## Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

This course offers students introductory lectures in the different parts to reach the course objectives. The lectures take place on campus or via distance-bridging technology. During the course, the students work individually and in groups to develop their knowledge through laboratory sessions with x-ray tubes and x-ray images. This results in a manual where the students present mechanical parameters, criteria for the images, how the projections are taken, location of the patient and radiation protection. The skills are practiced and examined through patient cases. The course contains compulsory laboratory sessions and seminars. The content of course elements and its teaching methods specifically geared towards radiology nursing profession.

## Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided. Written individual examination including advanced anatomy, terms and concepts. The skills are examined and assessed through laboratory sessions, written assignments and seminar. Alternative examination formats may be used.

## Overlap

The course M0069H is equal to O0068H

## Literature. Valid from Autumn 2015 Sp 1

Aspelin, P. & Pettersson, H. (eds.) (2008). Radiologi. (1st. ed.) Lund: Studentlitteratur.

Bontrager, K.L. & Lampignano, J.P. (2014). Textbook of radiographic positioning and related anatomy. (8th ed.) St. Louis, Mo.: Elsevier/Mosby.

Ehrlich, R.A. & Coakes, D.M. (2013). Patient care in radiography: with an introduction to medical imaging. (8. ed.) St. Louis, Mo.: Elsevier Mosby.

Lindskog, B.I. & Andrén-Sandberg, Å. (2008). Medicinsk terminologi. (5th., [rev.] ed.) Stockholm: Norstedts Akademiska.

Sand, O. (2007). Människokroppen: fysiologi och anatomi. (2nd. ed.) Stockholm: Liber.

Vigué, J. & Martín Orte, E. (2012). Atlas över människokroppen. (2nd. ed.) Stockholm: Liber.

Reference literature may be added and is stated in the study guide

## Course offered by

Department of Health Sciences

## Items/credits

Number	Type	Credits	Grade
0002	Laborations	1.5	U G#
0003	Written exam	3	U G VG
0005	Assignment report	1.5	U G#
0006	Seminar	1.5	U G#

## Last revised

by 2016-02-15

## Syllabus established

by Prefekt vid Institutionen för hälsovetenskap 2012-03-14