

SYLLABUS

Radiography IV 15 credits

M0103H

Radiografi IV

Course syllabus admitted: Autumn 2024 Sp 1 - Present

DECISION DATE
2024-02-13

Radiography IV 15 credits M0103H

Radiografi IV

First cycle, M0103H

| Education level | Grade scale | Subject | Subject group (SCB) |
|-----------------|-------------|-----------|---------------------|
| First cycle | U G# | 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 assumes corresponding knowledge

M0116H Pharmacology and pharmaceutical management within radiography, 7,5

M0102H Radiography, Science and research methods I, 7,5

M0100H Radiography III, 15

The course also requires the following courses and modules

M0099H Radiography I, 7,5

M0098H Anatomy and Physiology I with focus on radiography, 7,5

M0097H Radiography II, 7,5

M0096H Clinical pathology I specialisation radiography, 7,5

M0100H Radiography III, 15, module 0001, Clinical education

Special eligibility means that all qualifying courses and modules must have approved course grades.

Requirements for special authorization must be met no later than Lp 2.

Selection

The selection is based on 1-165 credits.

Course Aim

After having completed the course the student will be able to:

- Understand the fundamental principles of projection science.
- Describe how a digital image is produced, processed and stored.
- Explain how different exposure parameters affect image quality.
- Understand the meaning of artificial intelligence (AI) in healthcare
- Reflect on the pros and cons as well as ethical challenges with AI
- Demonstrate the ability to understand and interpret a radiology referral
- Describe the technology and examination methodology used in conventional x-ray examinations
- Conduct usual x-ray examinations of the small bones and explain the imaging criteria that apply to these examinations
- Explain anatomy and commonly occurring pathology related to imaging
- Assess, plan, execute and evaluate nursing and care needs for individual patients based on an ethical approach
- Use radiation protection measures and consider patient safety and security in connection with conventional x-ray examinations
- Reflect on self-knowledge and the ability to empathise
- Identify the need for further knowledge in order to continuously develop their skills
- Demonstrate the ability to inform and teach different groups and to carry out supervisory tasks
- Demonstrate the ability for team collaboration and collaboration with other professional groups
- Demonstrate to discuss new facts, phenomena and issues with different professional groups
- Demonstrate the ability to have a professional approach towards patients and their relatives

Contents

- Projection science
- Digital image management
- Artificial intelligence (AI)
- Referral management, RIS and PACS
- Radiation hygiene and medical device safety
- Technology, examination methodology, anatomy and imaging criteria for conventional small bone x-ray examinations
- Clinical Practice

Realization

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

Teaching and learning take place through self-directed studies, study assignments, group discussions, laboratory work, seminars, placements and the exam. Lectures are held within selected parts of the course. Participation in laboratory work and seminars is compulsory. The content of the course and its teaching methods are specifically targeted at the radiology nurse 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. The course learning outcomes will be examined and assessed through assignments submitted (individual and/or in groups), laboratory work, seminars, placements and the exam.

Achieving a Pass for the full course requires a Pass grade for all parts of the course and that all compulsory components have been completed.

When the examiner interrupts the practice-based education period assigned to the activity, it means that the student fails prematurely and an examination opportunity on the practice-based education component is forfeited.

If a student chooses to cancel or not complete the practice-based education period, this means that the student fails prematurely and an examination opportunity on the practice-based education component is forfeited unless special reasons exist and are supported by a medical certificate.

Unauthorized aids during exams and assessments

If a student, by using unauthorized aids, tries to mislead during an exam or when a study performance is to be assessed, disciplinary measures may be taken. The term "unauthorized aids" refers to aids that the teacher has not previously specified as permissible aids and that may assist in solving the examination task. This means that all aids not specified as permissible are prohibited. The Swedish version has interpretative precedence in the event of a conflict.

Remarks

You must successfully pass the placement for this course before you are able to go on the M0106H placement.

You must pass this course before you can be admitted onto M0109H, M0110H, and M0111H. All examination components must have been completed by the regular examination period for quarter 1.

This course, which contains modules with clinical practice (clinical practice modules), is subject to Specific Rules for Clinical Practice, pursuant to a decision by the Head of the Department of Health, Education and Technology, Luleå University of Technology.

Overlap

The course M0103H is equal to M0089H

The programme syllabus applies from the spring semester 2020 for those students who are then admitted to the programme. The course coordinator and subject manager will approve individual study plans for students who have been admitted to the previous programme syllabus and to resume studies after approved leave from studies in accordance with the current programme syllabus.

If a course is no longer provided or has undergone major changes, the students will be offered two opportunities for examination during the first year after the change has taken place and then once a year for another 2 years based on the official course syllabus that applied at registration.

Course M0103H replaces M0089H

Course offered by

Department of Health, Education and Technology

Modules

| Code | Description | Grade scale | Cr | Status | From period | Title |
|------|--------------------|-------------|-----|-----------|-------------|-------|
| 0001 | Clinical education | U G# | 4.5 | Mandatory | S21 | |
| 0002 | Assignment reports | U G# | 4 | Mandatory | S21 | |
| 0003 | Laboratory work | U G# | 1 | Mandatory | S21 | |
| 0004 | Seminar | U G# | 3 | Mandatory | S21 | |
| 0005 | Examination | U G# | 2.5 | Mandatory | S21 | |

Last revised

by Jenny Jäger, Director of Undergraduate Studies at the Department of Health, Education and Technology 2024-02-13

Syllabus established

by Dean of Department of Health Sciences 2020-02-21