

**SYLLABUS**

# **Radiography, Science and research methods I 7.5 credits M0102H**

**Radiografi, vetenskaplig teori och metod I**

**Course syllabus admitted: Autumn 2024 Sp 1 - Present**

**DECISION DATE  
2024-02-13**

# Radiography, Science and research methods I 7.5 credits M0102H

## Radiografi, vetenskaplig teori och metod I

### First cycle, M0102H

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 assumes corresponding knowledge

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

## Selection

The selection is based on 1-165 credits.

## Course Aim

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

- Describe the research process.
- Describe the relationship between research questions and scientific method.
- Be able to exemplify what characterises a scientific text.
- Identify a scientific issue within radiography in relation to qualitative and quantitative study design.
- Apply the principles of academic writing with regard to language, rules of writing and managing references.
- Describe the principles of research ethics and critically reflect on their importance.
- Evaluate and assess the quality of research studies.
- Conduct a systematic literature review.
- Identify and evaluate own needs for further knowledge in order to enable development of own scientific skills
- Initiate development of methods and quality assurance

## Contents

- Research process including scientific theory
- Quantitative method
- Statistics
- Qualitative method
- Quality review
- Research ethics
- Academic writing
- Literature review
- Development of methods and quality assurance

## Realization

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

The components of the course are implemented using integrated working methods that support student understanding, deep learning and independence, which takes place through knowledge search, problem solving and critical reflection based on the learning outcomes for the course. Student learning is supported by lectures, self-directed studies, individual and group assignments and seminars.

Participation in and execution of laboratory work, seminars and study assignments is compulsory.

## 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 learning outcomes for the course will be examined with a written report, exam and seminar. Alternative forms of examination may be available. Achieving a Pass for the full course requires a Pass grade for all parts of the course and the completion of all compulsory components.

## 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

This course must be passed before you can be admitted to the course M0106H.  
All examination components must have been completed by the regular examination period for quarter 4

## Transition terms

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 offered by

Department of Health, Education and Technology

## Modules

Code	Description	Grade scale	Cr	Status	From period	Title
0001	Assignment reports	U G VG	2.5	Mandatory	A20	
0002	Seminar	U G#	2.5	Mandatory	A20	
0003	Written exam	U G VG	2.5	Mandatory	A20	

## 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