



**Karolinska  
Institutet**

Course syllabus for

## **Degree project in Radiography, 15 credits**

Examensarbete i radiografi, 15 hp

This course syllabus is valid from autumn 2018.

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

[Autumn2015](#) , [Autumn2017](#) , Autumn2018 , [Autumn2024](#) , [Spring2025](#)

|                            |   |
|----------------------------|---|
| Course code                | 1RS033  |
| Course name                | Degree project in Radiography                               |
| Credits                    | 15 credits  |
| Form of Education          | Higher Education, study regulation 2007                     |
| Main field of study        | Radiography   |
| Level                      | G2 - First cycle 2  |
| Grading scale              | Pass with distinction, Pass, Fail                           |
| Department                 | Department of Clinical Science, Intervention and Technology |
| Decided by                 | Programnämnd 6  |
| Decision date              | 2015-05-05  |
| Revised by                 | Education committee CLINTEC                                 |
| Last revision              | 2018-04-10  |
| Course syllabus valid from | Autumn 2018   |

## **Specific entry requirements**

90 credits from The Study Programme in Radiography (all courses, semester 1-3), and at least 15 credits from semester 4, and the course Scientifically attitudes and methods for quality development 3 (6 credits).

## **Objectives**

**On completion of the course, the student should be able to:**

- search, critically review, analyze and summarize scientific literature in the field of radiography or related areas relevant to the main field
- relate to in-depth knowledge and practical research skills for the main area's continued knowledge development
- be able to delimit and formulate a research problem in the area of radiography that is relevant to the profession as radiographer
- describe research design and method selection in relation to the chosen problem
- independently based on analysis and interpretation, in written form compile data in relation to problem solving and with a scientific language used in the field of radiography

- show ability to present current research ethical rules and follow good research practice
- give constructive criticism, as opponent, on other students essay at a seminar
- present at the seminar's presentation at the seminar critically, self-critical and reflective approaches to the own and others' scientific questions
- in conjunction with the own essay's seminary treatment, be able to summarize and account for the essay parts using a PowerPoint presentation
- demonstrate the ability to identify the need of additional knowledge and to develop ones skills.

## Content

The course is given as the second-semester course in the program's Scientific Line, Scientific Approach and Methods for Quality Development 1-4, where the students in the previous course wrote a project plan that was reported and examined. Other courses cover the main field of radiography, its most common scientific methods and current scientific issues with in-depth knowledge in quantitative and qualitative methods. The "scientific line" ends after the graduation work with the authors presenting and discussing their dissertation at a radiological clinic.

The course thesis begins with the student discussing the study with the supervisor based on the previously presented and approved project plan. Thereafter, the student will complete a study including the entire part of the research process, including the search, compile scientific literature, describe problem formulation, make selection, collect data with established method, choose the method of analysis, describe a result that can then be discussed against previous research. At the course, the student produces a presentation that is then used for opposition and presentation at the radiological clinic. During the process, the student must show an increasing independence and critical attitude.

Based on the main subject of radiography, the topics can for example be:

- Method development of different radiographic examination methods and interventions
- Optimisation and radiation protection aspects at radiographic examinations and treatments
- Aspects of patient experiences and patient information
- Studies of changes within the radiography

## Teaching methods

The supervision is carried out in group seminars with of the department appointed supervisor. The group seminars contain occasion to discussion about progress, setbacks, follow up of the writing process etc. These opportunities also give supervisors the opportunity to encourage independent and critical approaches. Five mandatory group events are offered during the tutoring process. In addition to these group seminars be given also possibility to individual supervision.

## Examination

After submission of the essay, at the essay seminar, learning outcomes of the appointed examiner are evaluated, where the essay is evaluated by the guidelines for the first level essay found at Karolinska Institutet. Also included is reviewing and feedback on other student essays, which are also assessed by the examiner.

The following grades can be given on the respective part:

- a) respondent (defense and discussion of paper) can obtain Fail or Pass
- b) Present and summarize your own essay for 20 minutes in Swedish with the help of a PowerPoint presentation. The presentation may receive the grades Fail or Pass
- c) Opposition to another's dissertation may receive the grades Fail or Pass.
- d) Written essay may receive the grades Fail, Pass or Well approved.

The seminar is an opportunity for feedback, the opportunity to supplement is given after the seminar. When the final version is submitted to the examiner, grades are given on the essay.

Rating on full course

For the grade Passed on full course, Pass with all grades according to the grade criteria. For Pass with distinction, Pass with distinction on the essay parts according to the grade criteria.

In the case of a failed respondent or opponent (if there is no attendance), written additional information may be required by the examiner. Failure of a degree degree is to be revised and assessed again by re-examination at a later date, in agreement with the supervisor and examiner. In the case of a failed presentation, a list of what will be resolved before a new presentation will be announced after the seminar. Submission times for revised theses follow the timescale for regular exams during the semester.

## Transitional provisions

The student may be examined according 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

*Strömqvist, S*

**Uppsatshandboken: råd och regler för utformning av examensarbeten och vetenskapliga uppsatser**

Uppsala : Hallgren & Fallgren, 2006

*Backman, Jarl*

**Rapporter och uppsatser**

3., [rev.] uppl. : Lund : Studentlitteratur, 2016 - 223 s.

ISBN:9789144097329 LIBRIS-ID:18714387

[Library search](#)

*Olsson, Henny; Sörensen, Stefan*

**Forskningsprocessen : kvalitativa och kvantitativa perspektiv**

3. uppl. : Stockholm : Liber, 2011 - 328 s.

ISBN:91-47-10051-6 LIBRIS-ID:12233128

[Library search](#)

*Harris, M.; Taylor, Gordon; Taylor, G.*

**Medical Statistics Made Easy, third edition**

Scion Publishing Limited,

LIBRIS-ID:15988216

*Trost, Jan; Hultåker, Oscar*

**Enkätboken**

5., [moderniserade och rev.] uppl. : Lund : Studentlitteratur, 2016 - 178 s.

ISBN:9789144115450 LIBRIS-ID:19616911

[Library search](#)

*Forsberg, Christina; Wengström, Yvonne*

**Att göra systematiska litteraturstudier : värdering, analys och presentation av omvårdnadsforskning**

4. rev. utg. : Stockholm : Natur & kultur, 2016 - 216 s.  
ISBN:9789127146549 LIBRIS-ID:18897539

[Library search](#)

*Malterud, Kirsti*

**Kvalitativa metoder i medicinsk forskning : en introduktion**

3., [uppdaterade] uppl. : Lund : Studentlitteratur, 2014 - 286 s.  
ISBN:9789144094984 LIBRIS-ID:16600544

[Library search](#)

*Widerberg, Karin*

**Att skriva vetenskapliga uppsatser**

*Torhell, Sven-Erik*

Lund : Studentlitteratur, 1995 - 91 s.  
ISBN:91-44-49441-6 LIBRIS-ID:8353778

[Library search](#)

**Svenska skrivregler**

3., [utök.] utg. : Stockholm : Liber, 2008 - 263, [1] s.  
ISBN:978-91-47-08460-9 LIBRIS-ID:10935499  
URL: <http://www.liber.se/productimage/large/4708460o.jpg>

[Library search](#)

*Rienecker, Lotte; Stray Jörgensen, Peter; Hedelund, Lis*

**Att skriva en bra uppsats**

3., omarb. uppl. : Lund : Liber, 2014 - 349 s.  
ISBN:9789147111510 LIBRIS-ID:16371593

[Library search](#)

*Olsson, Henny; Sörensen, Stefan*

**Forskningsprocessen : kvalitativa och kvantitativa perspektiv**

3. uppl. : Stockholm : Liber, 2011 - 328 s.  
ISBN:91-47-10051-6 LIBRIS-ID:12233128

[Library search](#)

**Dags för uppsats : vägledning för litteraturbaserade examensarbeten**

*Friberg, Febe*

2., [rev.] uppl. : Lund : Studentlitteratur, 2012 - 181 s.  
ISBN:978-91-44-07323-1 LIBRIS-ID:13374004

[Library search](#)