



**Karolinska
Institutet**

Course syllabus for

Scientific design and method, 7.5 credits

Vetenskaplig design och metod, 7.5 hp

This course has been cancelled, for further information see Transitional provisions in the last version of the syllabus.

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

Autumn2009 , Autumn2010 , Autumn2013 , Spring2015

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| Course code | 1AR012 |
| Course name | Scientific design and method |
| Credits | 7.5 credits |
| Form of Education | Higher Education, study regulation 2007 |
| Main field of study | Not applicable |
| Level | GX - First cycle |
| Grading scale | Pass with distinction, Pass, Fail |
| Department | Department of Neurobiology, Care Sciences and Society |
| Decided by | Programnämnden för arbetsterapeutprogrammet |
| Decision date | 2009-06-25 |
| Revised by | Programnämnden 3 (arbetsterapeut- och sjukgymnastprogrammen) |
| Last revision | 2013-02-18 |
| Course syllabus valid from | Autumn 2013 |

Specific entry requirements

The courses in the program should be taken in the order stated in the programme curriculum. For admission to a higher semester, a student may have no more than 15 credits outstanding from the previous semester.

Objectives

In this course, the student should plan and carry out a scientific project plan in preparation for the degree project in the main field of study occupational therapy in semester 6. The student applies the research process e g by formulating research questions. The research process includes using methods for data collection and analysis within qualitative and quantitative design. Critical reflection and review of research literature on internal and external validity is also included. On completion of the course, the student should have acquired advanced knowledge in scientific design and methodology, and thus be able to independently plan and carry out a research-oriented degree project of 15 credits in the main subject area occupational therapy.

Intended learning outcomes On completion of the course the student should be able to independently;

- collect and process qualitative and quantitative data based on scientific theories and methods (module 1)
- apply knowledge of research questions, design, methodology and the research process by writing a scientific project plan for a degree project (part 2)
- describe and reflect on internal and external validity based on the chosen method in the plan (module 2)

Content

The course consists of 2 modules and build on modules in scientific methods and theories from earlier semesters within the occupational therapy programme.

Module 1 Methods for data collection and data processing, 4 credits (Methods for data collection and analyse)

Module 2 Minor essay for a research-oriented degree project, 3.5 credits (Outline for a planned research study)

Methods for data collection and analyse, 4 hp Contents:

- Qualitative method for data collection interview, observation, literature studies
- Qualitative content analysis, categorisation, thematisation
- Quantitative method for data collection: methods of measurement
- Parametric and non-parametric statistics
- Introduction to questionnaire construction

This module with the above methods for data collection and data processing is a preparation to be able to carry out a degree project in qualitative and quantitative methods in semester 6.

Outline for a planned research study, 3.5 hp Contents:

- Research questions
- Scientific design
- The research process
- Project plan for a research-oriented degree project
- Literature search in databases

In this module, the students should (in pairs) write a project plan (minor essay) as a basis for the degree project in semester 6. The minor essay, which is written in a predetermined structure for a minor essay, should be directed towards the main field of study occupational therapy and be based on research carried out at the Division of Occupational Therapy.

Teaching methods

The course has its educational foundation in a problem-oriented working method where the conditions for an active student engagement are created. The tuition forms vary between lectures, proficiency training, work in study groups, supervision, processing of literature and seminars. See the pedagogical platform of the Study Programme in Occupational Therapy on the programme web page.

Examination

The course is examined according to the following:

Module 1 is examined through:

- an analysis of qualitative data in the form of a written report (in groups) and oral presentation of the group work at a seminar session
- a processing and analysis of quantitative data in the form of a written report (in groups) and oral presentation of the group work at a seminar session

In both examinations, all students in the course should actively reflect and participate in the discussions at the seminars. Grading scale: Pass/Fail

Module 2 In module 2, the students' written project plans for the degree project are examined at a seminar. Grading scale: Pass with distinction/Pass/Fail

For the grade Pass in the whole course (7.5 credits) is required that all grading seminars have been carried out and that the pass grade has been achieved in all subparts. To pass the course with distinction, apart from a pass in module 1, the pass with distinction grade is required in module 2.

All examinations, seminars and laboratory sessions are compulsory. In case of absence, an agreement is made between the student and the responsible teacher concerning compensation of the absence. The examinations included in the course are conducted according to established assessment criteria.

Re-examination takes place on five occasions, at most. These are determined together with the examiner.

Transitional provisions

Examination will be provided during 2 years after any discontinuation of the course or the introduction of a new syllabus.

Other directives

Course evaluation Course evaluation is carried out, on completion of the course, in accordance with the guidelines established by the Board of Education at Karolinska Institutet. A course report with an analysis of the results of the course evaluation will be posted on the course web page after the completion of the course evaluation.

Literature and other teaching aids

Backman, Jarl

Rapporter och uppsatser

Andra upplagan : Lund : Studentlitteratur, 2008 - 1-223

ISBN:978-91-44-04826-0

[Library search](#)

Bogdan, Robert; Biklen, Sari K.

Qualitative research for education : An introduction to theories and methods

5. ed. : Boston : Pearson A & B, cop., 2007 - 304 s.

ISBN:0-205-48293-7

[Library search](#)

Dags för uppsats : vägledning för litteraturbaserade examensarbeten

Friberg, Febe

Lund : Studentlitteratur, 2006 - 154 s.

ISBN:978-91-44-04315-9 (3. tr.) LIBRIS-ID:10143411

[Library search](#)

De Poy, Elisabeth; Giltin, Laura N

Forskning : en introduktion

Lund : Studentlitteratur, 1999 - 373 s.

ISBN:91-44-00170-3

[Library search](#)

Ejlertsson, Göran

Statistik för hälsovetenskaper

Lund : Studentlitteratur, 2003 - 275 s.

ISBN:91-44-03123-8 LIBRIS-ID:8353333

[Library search](#)

Kvale, S.; Brinkman, S.

Den kvalitativa forskningsintervjun

2 upp. : Lund : Studentlitteratur AB, 2009

ISBN:91-44-05598-6

[Library search](#)

Lantz, Annika

Intervjumetodik

2:a uppl. : Lund : Studentlitteratur, 2007

ISBN:9789144008325

[Library search](#)

Trost, Jan

Enkätboken

3., [rev.]uppl. : Lund : Studentlitteratur, 2007

ISBN:9789144018164

[Library search](#)