SM00010  Assessment methodology in quantitative and qualitative research in health care, 7.5 credits
Utvärderingsmetodik i kvantitativ och kvalitativ forskning inom hälso- och sjukvården, 7,5 högskolepoäng

Third-cycle level / Forskarnivå

Confirmation
This syllabus was confirmed by the Council for PhD Education at Sahlgrenska Academy on 2019-03-25, and is valid from Autumn semester 2019.

Responsible Department
Institute of Clinical Sciences, Sahlgrenska Academy

Entry requirements
Completed part I of the compulsory PhD course "Introduction to Research, 8 credits" given at Sahlgrenska Academy (or equivalent).

Learning outcomes
After completing the course the PhD student is expected to be able to:

Knowledge and understanding

- Describe different research methods in the health care system, discuss methodological and statistical problems and give suggestions to the solution of these problems.
- Critically evaluate and review the quality of scientific articles and studies, both related to their own research and other research areas.
- Understand and interpret qualitative data obtained from specific interviews.
- Process and analyse, validate and reliability test data based on quantitative approaches with special focus on questionnaire / evaluation tools.
- Have basic knowledge in basic statistical methods in evaluating validity and reliability.
- Critically evaluate and review research methods both current in their own research and others’, assess the quality and motivate the choice of method, explain methodological
problems and how they are solved.

Skills and ability

- Process and analyse, as well as validate and test the reliability of quantitative data with special emphasis towards the use of questionnaires and scoring systems.
- Gain increased knowledge and understanding of the scientific problems that may arise in development of methods.
- Have basic knowledge to process and analyse statistics relevant to their own research.
- Critically review the research methods used in their own project, judge the quality and motivate the choice of these methods. Further, to describe the methodological problems and discuss the solution of these problems.

Judgement and approach

- Interpret, respect and analyse ethical aspects in research and development especially in terms of patients involved in clinical trials and follow-up studies. Further, to develop and respect an ethical attitude in their own research projects.
- Critically judge and review scientific papers in their own research field as well as other research fields.

Course content

The aim of the course is to deepen the knowledge in research methodology, with special emphasis on evaluation of clinical assessments and evaluation instruments from both a quantitative and a qualitative perspective.

The course includes lectures on quantitative and a qualitative methodology used in research within health care, presenting methodological problem related to clinical studies, and suggestions on clinical as well as statistical solutions. The lecturers will present scientific papers to be analysed and critically reviewed, related to their own research area and methodology. Based on their own experience the lecturers will present different study designs, common problems and how to deal with them.

Types of instruction

Lectures, group work/seminars, self-study

Language of instruction

The course is given in Swedish but can be given in English if necessary.

Grades

The grade Pass (G) or Fail (U) is given in this course.

Types of assessment

A written group exam followed by an oral presentation will be performed. Further, it is required that the student writes an individual essay aiming at discussing the validity and reliability of some of the methods used in their own research.
A student who has failed a test twice has the right to change examiner, unless weighty argument can be adduced. The application shall be sent to the board of the department and has to be in writing.

For a pass grade, obligatory attendance of 80%, including examination is required.

**Course evaluation**

The evaluation will be performed using a written survey followed by an oral discussion. The results of the evaluation will be communicated to the students and will function as a guide for the development of the course.

**Other information**

The syllabus was confirmed by the Council for PhD Studies on 2015-03-03 and was last revised on 2019-02-26 to be valid from autumn semester 2019 (reg.nr.: GU 2019/697). It was entered into Fubas on 2019-03-22.