Course syllabus for

Scientific Methods 3-Quantitative and Qualitative Methods, 9 credits

Vetenskap 3-kvantitativ och kvalitativ metod, 9 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:
Autumn2012 , Autumn2013 , Autumn2014 , Autumn2015 , Autumn2016 , Spring2024

Course code	1AU043
Course name	Scientific Methods 3-Quantitative and Qualitative Methods
Credits	9 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Audiology
Level	G2 - First cycle 2
Grading scale	Pass, Fail
Department	Department of Clinical Science, Intervention and Technology
Decided by	Programnämnd 4
Decision date	2012-05-03
Course syllabus valid from	Autumn 2012

Specific entry requirements

For admission to courses on Semester 5, it is required that the student has managed at least 80 % (96 credits) of the courses on semester 1 - 4.

Objectives

The course is included in a scientific streak which includes total 15 HE credits and runs through all study programme. The general aim with the scientific streak is to provide the student knowledge research methodology and skills in scientific working method. The specific aim of this course Scholarship 3 are to give the student basic knowledge in quantitative and qualitative methods and statistics.

The expected learning outcomes of the course
On completion of the course, the student should be able to:

- Account for scientific theoretical concepts and different research traditions within the audiological subject area
- Explain and define different qualitative and quantitative methods and differences between quantitative

and qualitative methods and concepts
- Carry out a pilot project with quantitative or qualitative method and compile and present collected scientific material in poster form
- Apply statistical methods and hypothesis tests in calculations and arguments
- Produce a project idea that can lead up to a degree project

Content

Scientific concepts and research methodology, 1.5 hp The part gives an introduction to scientific concepts to give understanding of the different research traditions that occur within the audiological subject area. Furthermore, evidence-based research method is treated.
The part contains lectures about basic scientific concepts with a focus on qualitative methodology. Seminar and group assignments on Interview techniques, collection of data and data processing of interviews, evidence-based research and ethics **Quantitative method and statistics, 4.5 hp** The part focuses on quantitative method with an emphasis on descriptive statistics and hypothesis test linked to the subject area audiology. The part is examined in the form of a take-home examination (peer-review) which also given training in critical review of a report.
The part also gives an introduction to statistical programs **Pilot project and Project idea, 3 hp** The part contains seminar and group assignments on collection of data and data processing of questionnaires. Advanced study in an optional part of the main field of study audiology based on scientific articles and literature in the area and practical work in a smaller pilot project. The project work implies training in how one plans and set up a study. The project work is presented in the form of a poster.
As supports for the pilot project and the design of the project idea, follow-up exercise in literature search in databases is carried out, for example pubmed, web of science and similar on the KI libraries

Teaching methods

Lectures, group assignments, exercises and seminars.

Examination

Part 1 - Scientific concepts and research methodology (1.5 HE credits)
Active participation in compulsory seminars.
Self tests about scientific theoretical concepts

Part 2 - Quantitative methodology and statistics (4.5 HE credits)
Self tests about statistical concepts
Take-home examination with application of statistical methods based on articles
Peer-review of take-home examination

Part 3 - Pilot project and Project idea (3.0 HE credits)
Poster presentation of independent implemented project work
Written submission of a minor essay with project idea before Scholarship 4 and Degree Project

For a Pass grade in the course, attendance at compulsory parts is also required. In case of absence from compulsory part, the student is responsible alone to contact course coordinator for complementary assignment. Being offered for students who not have become passed at the regular examination total possibility to six examinations, of which the three last in connection with the next occasion then the course is given.

Transitional provisions

Examination can take place according to earlier literature list during a time of a year after the date then a renewal of the literature list been made. Examination will be provided during a time of two years after a

possible close-down of the course.

Other directives

Examination can take place according to earlier literature list during a time of a year after the date then a renewal of the literature list been made. Examination will be provided during a time of two years after a possible close-down of the course.

Literature and other teaching aids

Ejlertsson, G.
Statistik för hälsovetenskaperna

Lund : Studentlitteratur, 2003 - 275 s.

Kvale, S.; Brinkman, S.
Den kvalitativa forskningsintervjun

2 upp. : Lund : Studentlitteratur AB, 2009
ISBN:91-44-05598-6
Library search

Trost, Jan
Enkätboken

3., [rev.]uppl. : Lund : Studentlitteratur, 2007
ISBN:9789144018164
Library search

Nordenström, Jörgen
Evidensbaserad medicin i Sherlock Holmes fotspår

4., [omarb.] uppl. : Stockholm : Karolinska University Press, 2007 - 106 s.
ISBN:978-91-85565-12-2 LIBRIS-ID:10352883
Library search

Harris, Michael; Taylor, Gordon
Medical statistics made easy

London : Martin Dunitz, cop. 2004 - xii, 114 s.
ISBN:1-85996-219-X (hft.) : £9.99 LIBRIS-ID:8989294
Library search