Course syllabus for

Statistics 2, 5 credits

Statistik 2, 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:
Autumn2012 , Autumn2015

Course code	4FH060
Course name	Statistics 2
Credits	5 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Public Health Sciences
Level	AV - Second cycle
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Learning, Informatics, Management and Ethics
Decided by	Programnämnd 5
Decision date	2012-03-29
Revised by	Education committee LIME
Last revision	2020-09-08
Course syllabus valid from	Autumn 2015

Specific entry requirements

To be eligible for semester 3, the student is expected to have successfully completed courses equivalent to 45 credits on the Master's programme in public health science, specialisation in health economics, policy and management.

Objectives

After completion of the course the student should be able to:

Knowledge and understanding
- describe the uses of logistic regression, ANOVA and Cox regression,
- understand one-and two-way analysis of variance, repeated measures ANOVA and logistic regression,
- identify time-to-event data, types of censoring and able to explain the basic concepts used in survival analysis, such as hazard function and survival function,
- describe Cox regression model and understand how to estimate parameters in the model.

Skills and abilities
- use a statistical software package for analysis of ANOVA, survival data and logistic regression,

- interpret the results of one-way and two-way analysis of variance, repeated measures ANOVA, survival data and logistic regression,
- choose and apply appropriate regression methods for the analysis of health economic data.

Assessment ability and attitude
- critically review scientific papers involving the application of survival analysis, ANOVA and logistic regression,
- demonstrate ethical, critical and scholarly approach to research data and scholarly presentations.

Content

The course covers survival analysis, one-way and two-way analysis of variance, repeated measures ANOVA and logistic regression.

Teaching methods

The teaching methods include lectures, seminars, group-work, group discussion, computer exercises and student presentations.

Examination

Written assignments related to computer based exercises and take home examination.

Requirements for the grade Pass with distinction (VG) are VG on the take home examination and pass (G) on remaining assignments.

Compulsory participation
Seminars, computer exercises, presentations and some lectures are mandatory. The course leader assesses whether and if so, how absence can be compensated. Before the student participated in the mandatory parts or compensated absences in accordance with the course leader's instructions are not recorded in the student's course results LADOK.

Limitation of number of examinations: The student is entitled to participate in a total of six examination sessions. If the student has not passed the exam after four participations he/she is encouraged to visit the study advisor.

Participation in an examination is defined as an occasion on which a student attends an examination, even if the student submits a blank examination paper. If a student has registered to sit an examination, but does not attend the examination, this is not defined as participation in the examination.

Transitional provisions

The course has been cancelled and was offered for the last time in the fall semester of 2018. Examination will be provided until the fall semester of 2020 for students who have not completed the course.

Other directives

Course evaluation will be carried out in accordance with the guidelines established by the Board of Higher Education.

The course language is English.

Literature and other teaching aids

Campbell, Michael J.; Machin, David; Walters, Stephen J.

Medical statistics : a textbook for the health sciences

4. ed. : Chichester : Wiley, cop. 2007 - xii, 331 s.
ISBN:9780470025192 LIBRIS-ID:10097092
Library search

Kirkwood, Betty R.; Sterne, Jonathan A. C.

Essential medical statistics

2. ed. : Malden, Mass. : Blackwell Science, cop. 2003 - x, 501 s.
ISBN:0-86542-871-9 LIBRIS-ID:8731249
Library search

Altman, Douglas G.

Practical statistics for medical research

London: Chapman and Hall, 1991
ISBN:0-412-38620-8 LIBRIS-ID:8286190
Library search