Syllabus
for course at advanced level

Statistics I
Statistik I

7.5 Higher Education
Credits
7.5 ECTS credits

Course code: PSMT59
Valid from: Autumn 2021
Date of approval: 2020-01-23
Changed: 2021-04-27

Department
Department of Psychology

Main field: Psychology
Specialisation: A1N - Second cycle, has only first-cycle course/s as entry requirements

Decision
This syllabus was approved by the Board of the Department of Psychology on 2020-01-23

Prerequisites and special admittance requirements
180 higher education credits, of which at least 90 credits must constitute Psychology I, II and III or equivalent studies. English 6.

Course structure

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Course content
The course aims to: (a) increase the participants’ understanding of basic statistical concepts, including probability, sampling distributions, resampling procedures and interval estimation; (b) provide the skills necessary for applied data analysis, including data management and quality assurance, data visualisation, choosing an appropriate analytical strategy and carrying out analyses using statistical software; and (c) provide training in communicating the results of statistical analyses in writing as well as orally with the help of slideshow software.

The course covers the following topics:
• Data management, data screening, data visualisation;
• Probability, resampling techniques;
• Effect size and interval estimation;
• Correlation and linear regression;
• Variance analysis;
• Applied data analysis using statistical software.

Learning outcomes
In order to pass the course, students are expected to be able to:
1) understand and describe basic statistical concepts (probability, sampling distribution, resampling, effect sizes, interval estimation, etc.) and how they are related to common statistical methods, such as parametric and non-parametric tests of group differences, variance analysis and multiple linear regression;
2) plan and carry out statistical analyses of data, including data screening, descriptive analysis, data visualisation and effect size estimation.

This is a translation of the Swedish original
Education
Instruction is given in the form of lectures, seminars, and exercises in the use of statistical software.

Course requirements/Mandatory components: Oral seminar presentation of a written report. Students who have not passed the oral presentation will be offered a chance to present at an extra seminar, or individually for the course teacher.

Forms of examination
a. Forms of examination
The course is examined on the basis of a written examination and a written paper.

If the student has a certificate from Stockholm University with a recommendation of pedagogical support, the examiner has the right to provide the student with an adjusted form of examination.

b. Grading scale
Grades will be set according to a seven-point scale related to the learning objectives of the course:

A = Excellent
B = Very good
C = Good
D = Satisfactory
E = Adequate
Fx = Fail, some additional work required
F = Fail, much additional work required

On the written paper, grades will be set according to a two-point scale:

G = Pass
F = Fail

c. Assessment criteria
Students will be informed of the written grading criteria when the course starts.

d. Final grade
In order to pass the course, students must receive a grade of E or higher on the written examination, as well as a passing grade on the written report. In addition, all mandatory components must be fulfilled.

e. Failing the course
At least two examination opportunities should be offered during each course and semester.

At least one examination opportunity should be offered during a semester when the course is not given.

Students who receive the grade Fx or F twice by the same examiner are entitled to have another examiner appointed for the next examination, unless there are special reasons to the contrary. Such requests should be addressed to the department board.

Students who receive the grade E or higher may not retake the examination to attain a higher grade.

f. Supplementary assignments
Opportunities to complete a supplementary assignment in order to convert the grade Fx into a passing grade are provided in this course regarding the written paper. Completing the assignment must follow instructions from the examiner.

Interim
If this course is discontinued, or its contents substantially altered, students have the right to be examined according to this syllabus once per semester for three further semesters.

Required reading
A complete list of literature is available on the department website two months prior to course start.