PSYP15, Psychology: Advanced Scientific Methods in Psychology, 15 credits

Psykologi: Avancerade vetenskapliga metoder i psykologin, 15 högskolepoäng

Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by the board of the Department of Psychology on 2024-04-09. The syllabus comes into effect 2024-04-10 and is valid from the autumn semester 2024.

General information

The course is given as a compulsory course within the Master of Science Programme in Psychology, 120 credits. The course is also offered as a freestanding course.

Language of instruction: English

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

Learning outcomes

On completion of the course the student shall

Knowledge and understanding

- demonstrate an in-depth knowledge of contemporary research methods in psychology.
- demonstrate an in depth understanding of research designs based on multiple variables.
- demonstrate an in depth knowledge of advanced methods of data analysis that are currently employed in research in psychology.
- demonstrate an in depth understanding of the relevance of inferential statistics, and effect size in evaluating the scientific importance of a given result.

Competence and skills

- demonstrate an in depth ability to independently construct a research design suited to a specific psychological issue.
- demonstrate an in depth ability to independently use the necessary tecnical skills required to use common statistics programs to analyse advanced research designs.
- demonstrate an in depth ability to independently use methodological concepts and methods of analysis, even in other fields of application, such as planning and evaluation as implemented in working life.
- demonstrate the advanced skills required to independently determine which analytical method is suitable for the current research questions and design.

Judgement and approach

- demonstrate an in depth competence to independently and critically evaluate the scientific importance of a given result, based on inferential statistics and effect size.
- demonstrate an in depth ability to independently and critically identify and reflect on relevant social factors such as gender, class and ethnicity in relation to the themes and tasks that arise in the course.
- demonstrate an in depth ability to independently and critically locate, integrate and evaluate scientific information in the discipline of psychology.

Course content

The course is comprised of two sub-courses:

Sub-course 1. Data-analysis I (7.5 credits)

The sub-course aims to provide students with an overview of various advanced methods of data analysis and the statistical tools necessary to analyse current research in the discipline of psychology. The teaching includes theory and practice in analytical methods, in particular quantitative methods. of data analysis.

Sub-course 2. Data-analysis II (7.5 credits)

The sub-course aims to give students an in-depth knowledge of the more advanced statistical methods that are currently used in research in the field of Psychology. The sub-course further aims to provide an insight into the processes associated with scientific publication, and an understanding of the ethical issues associated with research in this area.

The sub-course focuses on the provision and discussion of information necessary to critically assess research methods and findings.

Course design

The teaching consists of lectures, exercises in methods of advanced analysis and seminars.

Assessment

Assessment is based on written home assignment (subcourse 1) and a written exam (subcourse 2). Three opportunities for examination are offered in conjunction with the course. Within a year of a major change or termination of the course, at least two further examination opportunities will be offered on the same course content. After that, students will be offered further examination opportunities but then in accordance with any changes that have been made to the course syllabus.

The examiner, in consultation with Disability Support Services, may deviate from the regular form of examination in order to provide a permanently disabled student with a form of examination equivalent to that of a student without a disability.

Grades

Grading scale includes the grades: U=Fail, E=Sufficient, D=Satisfactory, C=Good, B=Very Good, A=Excellent
The student's performance is assessed with reference to the learning outcomes of the course. For the grade of E the student must show acceptable results. For the grade of D the student must show satisfactory results. For the grade of C the student must show good results. For the grade of B the student must show very good results. For the grade of A the student must show excellent results. For the grade of Fail the student has shown unacceptable results.

Grade for the entire course is determined by the grades of the individual subcourses and is based on an average of the included grades (where A = 5, B = 4, C = 3, D = 2, and E = 1). In order to receive a grade of Pass (at least E) on the entire course, students must receive a grade of at least E on all sub courses.

At the start of the course students are informed about the learning outcomes stated in the syllabus and about the grading scale and how it is applied in the course.

Entry requirements

To be eligible for the course the student must be admitted to the Master of Science Programme in Psychology, 120 credits, or have completed 150 credits, including a Bachelor's degree project in psychology or the equivalent. Oral and written language proficiency in English equivalent to English 6 from Swedish upper-secondary school is a requirement. International qualifications will be assessed in accordance with national guidelines.