

PSYP12, Psychology: Advanced Scientific Methods in Psychology, 15 credits

*Psychology: Advanced Scientific Methods in Psychology, 15
högskolepoäng*
Second Cycle / Avancerad nivå

Details of approval

The syllabus was approved by the board of the Department of Psychology on 2012-05-08 to be valid from 2012-09-02, autumn semester 2012.

General Information

This course is a free-standing course at the second cycle level and is a compulsory course for students taking a one-year or two-year Master of Science with Psychology as their major field of study, or that are on a programme where the course is included in the programme syllabus.

Language of instruction: English

Main field of studies

Psychology

Depth of study relative to the degree requirements

A1N, Second cycle, has only first-cycle course/s as entry requirements

Learning outcomes

On completion of the course the student shall demonstrate

- an in-depth knowledge of the research methods currently used in Psychology, for instance experimental, quasi-experimental, survey and interview methods,
- an understanding of research designs based on a number of variables, especially those in which mediating and moderating variables play an important part,
- an understanding of the concept "latent variables" and its relevance in the evaluation of other concepts in Psychology,
- an in-depth knowledge of the methods of result analysis that are employed in research in Psychology, both those based on quantitative and those on qualitative data,

- the necessary skills to independently construct a research design suited to a specific psychological issue,
- an understanding of the importance of meta-analysis in relation to the evaluation of the results of many years of research,
- an awareness of and demonstrate a in-depth knowledge of research ethics
- a basic knowledge and understanding of how to apply for research funding,
- an in-depth knowledge of how a research report in the discipline of Psychology should be written.

On completion of the course the student shall demonstrate the ability to

- use analysis of variance, including the analysis of variance with covariates and multivariates, logistic regression and structural equation modelling,
- use and understand the relevance of significance tests, power, effect size and post-hoc analysis in evaluating the scientific importance of a given result
- use methodological concepts and methods of analysis, even in other fields of application, such as planning and evaluation as implemented in working life
- independently choose a suitable analytical method for a specific research design
- use common statistics programs to analyse advanced research designs
- to locate, integrate and evaluate scientific information in the discipline of Psychology

Course content

The course is comprised of two sub-courses.

Sub-course 1. Methodological and design issues (7.5 credits)

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

Sub-course 2. Analysis (7.5 credits)

The sub-course course aims to provide students with an overview of various advanced analytical methods and the statistical skills necessary to analyse current research issues in the discipline of Psychology. The course focuses primarily on skills related to multivariate analysis. The sub-course comprises lectures that also include practice in analytical methods, in particular statistical methods.

Course design

Teaching includes lectures, seminars and project work. Active participation in seminars is mandatory.

Assessment

Sub-course 1 is assessed in a written classroom examination.

Sub-course 2 is assessed on the basis of take-home assignments that are handed out according to the schedule.

An opportunity for re-examination will be provided. A second re-examination will be offered at a later date.

Subcourses that are part of this course can be found in an appendix at the end of this document.

Grades

Marking scale: Fail, E, D, C, B, A.

The grades awarded are A, B, C, D, E or Fail. The highest grade is A and the lowest passing grade is E. The grade for a non-passing result is Fail.

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 must have shown unacceptable results.

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 have fulfilled course requirements of 150 credits, including the course PSYK01, Psychology: Bachelor's course, 30 credits, or 150 credits that include a C level course in Psychology, according to the regulations introduced in 1993. Equivalent studies from another university may also fulfil the admission requirements.

Subcourses in PSYP12, Psychology: Advanced Scientific Methods in Psychology

Applies from H12

- 1201 Methodological and Design Issues, 7,5 hp
Grading scale: Fail, E, D, C, B, A
- 1202 Analysis, 7,5 hp
Grading scale: Fail, E, D, C, B, A