



Course syllabus for

## **Differential Psychology, 15 credits**

Differentiell psykologi, 15 hp

This course syllabus is valid from autumn 2008.

Please note that the course syllabus is available in the following versions:

[Autumn2008](#) , [Autumn2009](#) , [Autumn2010](#) , [Autumn2011](#) , [Autumn2012](#) , [Autumn2013](#) , [Autumn2014](#) , [Autumn2015](#) , [Autumn2016](#) , [Autumn2019](#) , [Autumn2021](#) , [Autumn2022](#) , [Autumn2023](#)

Course code	2PS005
Course name	Differential Psychology
Credits	15 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Psychology
Level	G2 - First cycle 2
Grading scale	Pass with distinction, Pass, Fail
Department	Department of Clinical Neuroscience
Decided by	Programnämnden för Psykologprogrammet
Decision date	2008-05-15
Revised by	Programnämnden för psykologprogrammet
Last revision	2008-07-01
Course syllabus valid from	Autumn 2008

### **Specific entry requirements**

According to the current programme curriculum.

### **Objectives**

Part 1: Psychometrics and statistics On completion of the course, the student should be able to: describe and account for psychometric theory, knowledge and statistics used in the area of differential psychology, make own statistical calculations and analyses of current issues in the area, reflect on and critically review the reliability and validity of psychological tests Part 2: Intelligence and personality On completion of the course, the student should be able to: define and account for central theoretical perspectives within differential psychology regarding the concepts of intelligence and personality, and discuss these with a critical and reflecting attitude, reflect around cultural influences and gender perspectives in relation to intelligence and personality, understand and reflect around the practical usability as well as difficulties (advantages/disadvantages) with psychological tests constituting a part of the psychologist's working tools, reflect on their own experiences of designing and evaluating psychological testing Part 3: Behavioural genetics On completion of the course, the student should be able to: account for and reflect around the relative importance of heredity and environment, when it

comes to differences between the behaviour, personality and talent of people, account for cognitive abnormalities in a behavioural genetics perspective, give examples of research design and methodology used to study the effect and importance of genes for human behaviour

## Content

The course is divided in the following three parts. Part 1: Psychometrics and statistics, 4.5 credits (Psychometrics and statistics) The first part in the course gives an introduction to psychometrics and statistics that are used in the area of differential psychology. The student acquires methods to calculate reliability and different variants of tests for validity testing as well as correlation statistics (i. e. how to analyse relationships between different characteristics of tests), and learn how to isolate underlying characteristics explaining the results of different psychological tests. The student gets practice in interpreting a factor analysis. Furthermore, skills are provided in designing psychological tests and discussions are held on the critical evaluation of their reliability and validity. Part 2: Intelligence and personality, 6 credits (Intelligence and personality) During the other part, the student initially learns about the concept of intelligence and takes part of theories of human intellectual skills and abilities. Inter alia, the G factor vis-à-vis specific intelligences is described. After that, it is described, reflected and discussed around the concept of personality, and theoretically anchored dimensions of the personality in which people differ. Also, cultural influences and gender perspectives are discussed in relation to intelligence and personality. Furthermore, the student may train a differential psychological perspective and psychological approach by studying established intelligence and personality tests and discuss their reliability, interpretation, psychometrics etc The student also designs an own personality or intelligence test. The aim of the work is to illustrate the practical usability of knowledge in the field of differential psychology. Part 3: Behavioural genetics, 4.5 credits (Behavioural genetics) The third part gives the student knowledge about the importance of heritage and environment for differences between people. In this section, knowledge of basic genetic mechanisms is provided, methods to study effects of genes on behaviour, and the relative importance of heredity and environment for differences between people regarding different aspects of intelligence, personality and health behaviours. Further, in a behavioural genetics perspective, the student may take part of knowledge concerning a number of cognitive deviations.

### **Psychometrics and statistics, 4.5 hp**

Grading scale: GU

### **Intelligence and personality, 6.0 hp**

Grading scale: VU

### **Behavioral genetics, 4.5 hp**

Grading scale: VU

## Teaching methods

The teaching consists of teacher-supervised lectures and seminars where the students are encouraged to active participation by discussing and reflecting around the themes of the lectures. Further, teaching consists of laboratory sessions that aim at letting the students practice statistical analyses, design own psychological tests, and use statistical calculation exercises and analyses in order to evaluate them and established tests. These exercises are meant to illustrate the practical importance of knowledge of differential psychology and statistics in the psychologist's everyday work.

## Examination

The course is examined both individually and in groups through oral and written examination assignments. Part 1: Psychometrics and statistics The course part about psychometrics and statistics is evaluated through 1) participation in compulsory laboratory sessions and calculation exercises 2) oral examination in groups In the compulsory laboratory sessions (examination assignment 1) and the oral examination (examination assignment 2), one of the grades Pass/Fail is given. Part 2: Intelligence and personality The student's knowledge of intelligence and personality are evaluated through 1) compulsory seminars during the course 2) participation in laboratory sessions with own work that includes designing an intelligence or personality test based on knowledge from this and preceding parts of the course 3) Written examination In the compulsory discussion seminars (examination assignment 1) and the laboratory sessions (examination assignment 2), the grades Pass or Fail are given. In the written examination (examination assignment 3), the grade Pass with distinction, Pass or Fail is given. Part 3: Behavioural genetics The student's knowledge on behavioural genetics is evaluated through 1) compulsory seminars during the course 2) Written examination In the compulsory discussion seminars (examination assignment 1), the grades Pass or Fail are given. In the written examination (examination assignment 2), the grade Pass with distinction, Pass or Fail is given. Course grade A Pass in the whole course requires at least a Pass grade in all examination assignments in parts 1, 2 and 3. For Pass with distinction in the whole course, a Pass with distinction in the two written examinations is required (the parts 2 and 3), and a Pass grade in other examination assignments. Missed compulsory discussion seminars or laboratory sessions are replaced by written assignments. For the student, who have not met the criteria for at least a Pass (G), re-examinations are arranged and re-examinations in accordance with KI's local guidelines. The student can be offered at most six such examinations for each part in order to achieve approved results.

## Other directives

Certain seminars and exercise sessions are compulsory. Course evaluation takes place according to KI's local guidelines. Results and possible actions are communicated to the students in the course web page.

## Literature and other teaching aids

### Behavioral genetics

*Plomin, Robert; DeFries, John C.; McClearn, Gerald E.; McGuffin, Peter*

5th ed. : New York : W. H. Freeman ; a Basingstoke : b Palgrave [distributor], 2008. - xviii, 532 p.  
ISBN:978-1-4292-0577-1 (hbk.) LIBRIS-ID:10894256

[Library search](#)

*Cianciolo, Anna T.; Sternberg, Robert J.*

### Intelligence :b a brief history

1st ed. : Oxford, UK ; a Malden, MA : Blackwell Pub., 2004. - 170 s.  
ISBN:1-4051-0823-1 (hardcover : alk. paper) LIBRIS-ID:9409528

[Library search](#)

*Fahlke, Claudia; Johansson, Per Magnus*

### Personlighetspsykologi

Stockholmb Natur och Kultur,c 2007 : Natur och Kultur, 2007 - 282 s.c 22 cm  
ISBN:978-91-27-10979-7 (inb.) LIBRIS-ID:10355471

URL: <http://www.nok.se/BR/allmlitt/978-91-27-10979-7B.jpg>

[Library search](#)

*Jay Cohen, Ronald; Swerdlik, Mark*

### PSYCHOLOGICAL TESTING AND ASSESSMENT WITH EXERCISES WORKBOOK

6 : MCGRAW-HILL EDUCATION - EUROPE, 2004

*Borg, E; Westerlund, J*

**Statistik för beteendevetare**

1. uppl. : Stockholm : Liber, 2006 - 456 s.

ISBN:91-47-05335-6 LIBRIS-ID:10162703

URL: <http://www2.liber.se/bilder/omslag/100/4705335o.jpg>

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*Brace, Nicola; Kemp, Richard; Snelgar, Rosemary*

**SPSS for psychologists : a guide to data analysis using SPSS for Windows (versions 12 and 13)**

3. ed. : Basingstoke : Palgrave Macmillan, 2006 - xviii, 450 s.

ISBN:1-4039-8787-4 (hft.) LIBRIS-ID:9971180

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