

Course syllabus for

# Scientific Project in Psychology for Exchange Students, 60 credits

Vetenskapligt projektarbete för utbytesstudenter, 60 hp This course syllabus is valid from spring 2016. Please note that the course syllabus is available in the following versions: Spring2016, <u>Spring2018</u>

Course code	2EE105
Course name	Scientific Project in Psychology for Exchange Students
Credits	60 credits
Form of Education	Higher Education, study regulation 2007
Main field of study	Psychology
Level	AV - Second cycle
Grading scale	Excellent, Very good, Good, Satisfactory, Sufficient, Fail, Fail
Department	Department of Clinical Neuroscience
Decided by	Programme Committee 8
Decision date	2015-11-04
Course syllabus valid from	Spring 2016

## Specific entry requirements

A very good command of English, corresponding to 550 TOEFL scores or a very good command of Swedish, corresponding to a pass in the TISUS test. Three years of university studies with psychology as main field of study. Knowledge of statistics and scientific method corresponding to university studies at undergraduate level (e.g. the knowledge and skills needed to study with a high degree of independence).

# Objectives

#### Module 1. Definition of a scientific problem and collection of data, 30 ECTS

At the end of the module, the student should be able to:

- define a scientific problem within the field of psychology with considerations to the resources and time at hand
- use scientific databases, extract relevant journals, review, evaluate, and summarize the contents of journals with relevance for the scientific project
- collect and evaluate, relevant data in relation to the scientific problem

• describe the ethical principles to be adhered to in psychological research and show basic skills in how to prepare an ethics approval

#### Module 2. Analysis of data and report of the scientific project, 30 ECTS

At the end of the module, the student should be able to:

- compile, analyze and interpret collected data in relation to the scientific problem, present data in written form with scientific stringency
- discuss, evaluate and argue in relation to the student's own and other students' scientific projects, with relevance for the scientific problem and with methodological and ethical considerations
- conduct an oral presentation in English with a summary of the scientific project using relevant technical equipment (power-point, Skype, etc.)
- show ability to follow good research practice, follow ethical rules, show integrity in research and documentation, and be aware of the specific responsibility of research that involves people or animals
- discuss and understand the importance of cooperation in different parts of the research process

### Content

The objective of the course is to further deepen the student's knowledge and skills in psychology and psychological methods adding to previous knowledge and skills by the planning and execution of a 60 ECTS scientific project under supervision in the field of psychology. The scientific project can be carried out by the individual student or by two students in cooperation. In the latter case the students will be required to show which student is responsible for each of the parts of the scientific work and the final project report. The course is divided into two (2) modules:

**Definition of a scientific problem and collection of data, 30 hp** At the course introduction, the student chooses topics and methods of analysis in collaboration with the examiner/course director. Topics for the scientific project are provided by supervisors according to instructions. The topic chosen by the student is discussed by the research faculty of the Division for psychology in consultation with a scientific committee, and finally approved by the examiner of the course. After approval, the student is expected to contact the supervisor in order to further define and limit the specific scientific question and also to set up a time plan. During module 1, the student is also expected to begin to collect, evaluate, and interpret relevant data in relation to the scientific problem, to get familiar with the ethics approval of the project, and also to practice preparing an ethics approval for the current or for another project.

The topics for the scientific project may include different subareas in and approaches to psychology:

- implementation, analysis and report of psychological experiments
- analysis and report of data from an established research project
- psychometric evaluations of instruments with relevance for psychology
- systematic literature surveys, e.g., meta-analysis
- primary analysis of collected data
- secondary analysis of published data

**Analysis of data and report of the scientific project, 30 hp** During module 2, the student continues to work on the scientific project under supervision. Data is further interpreted and discussed. Finally, the scientific project is presented in a written project report. Once the supervisor has decided that the project report is ready to be discussed, it is examined in a project seminar through a scientific discussion between respondent (the student) and opponent (a fellow student). The project seminar should be held at Karolinska Institutet. As an exception, and only after a decision by the examiner, it may be held at distance through digital devices. As a respondent, the student is expected to show ability to orally summarize and present his/her scientific project for about 15 minutes in English, using necessary technical equipment. Slides/material used in this presentation should also be written in English. As an

opponent, the student is expected to constructively discuss another student's scientific report.

### **Teaching methods**

The course includes introductory lectures on scientific writing and how to search for literature / scientific articles. The student is expected to work independently to a large extent with continuous feedback from the supervisor. The student is also expected to participate in compulsory project seminars at the end of the course, to give feedback to another student's project and to receive feedback from another student and from the examiner.

The course coordinator decides whether, and if so how, absence from compulsory course elements can be made up. Study results cannot be reported until the student has participated in compulsory course elements or compensated for any absence in accordance with instructions from the course coordinator.

### Examination

The learning objectives are examined in a project seminar in which the ability as a respondent and the ability as an opponent are evaluated by the examiner. The project seminar is an opportunity of feedback. The possibility to revise the project report is provided after the seminar. Final ratings of the project report (as well as the entire course) are assigned after the final version is submitted to the examiner.

The following grades can be assigned to each of the course requirements 1-4 :

1) Written report: Fail (F), fail (Fx), sufficient (E), satisfactory (D), good (C), very good (B), or excellent (A). Grade F means that considerable additional work is required, and grade Fx means that some additional work is required. Grade E means that the performance meets the minimum criteria, and A that the performance is outstanding with only minor errors).

2) Ability as a respondent: Fail (Fx or F) or sufficient (E).

3) Oral presentation and summary of the report: Fail (Fx or F) or sufficient (E).

4) Ability as an opponent Fail (Fx or F) or sufficient (E).

Grading of the entire course:

- To reach the grade E (sufficient) at the entire course, a minimum of grade E in all four course requirements (1, 2, 3 and 4) is required. Active participation in three other scientific seminars is also required.
- To reach a grade of A, B, C or D at the entire course, a minimum of grade E in each of the course requirements 2-4 is required, as well as a grade of either A, B, C or D at the written project report (course requirement 1). Active participation in three other scientific seminars is also required.
- If any of the course requirements 1-4 is not met, and/or if compulsory attendance is not met, the examiner decides in each individual case, depending on previous performance, how the course objectives should be met. Below are some guidelines for each of the course requirements:

1) The supervisor has a responsibility to give advice on the current status of the project and if it is ready to be presented at a project seminar. If the project report is not ready to be presented in the end of the course, the student will receive additional supervision. If the student choses to present the project report at a seminar and receives a grade of Fx or F, the examiner decides how the student can meet the course objectives for the written project report. A new examination of the project report can take place in a new seminar.

2) Failed ability as a respondent (course requirement 2) and/or as an opponent (course requirement 4) may either require written supplementary assignments as instructed by the examiner or a new seminar to reach at least grade E.

3) Failed presentation (course requirement 3) may either require written supplementary assignments as instructed by the examiner or a new presentation to meet the criteria for the grade of at least E.

### **Transitional provisions**

The transition rules follow KI's local guidelines for examination.

### **Other directives**

If the scientific project work expands in time (more than two semesters from course start) the student cannot rely on supervision from the original supervisor. This may limit the possibility for the student to complete the scientific project according to the original plan.

### Literature and other teaching aids

#### **Mandatory litterature**

Articles according to supervisors instructions.

#### Additional non-mandatory litterature

Bem, D.J Writing a review article for Psychological Bulletin Kazdin, A.E **Preparing and Evaluating Research Reports** Kazdin, Alan E. (ed) Methodological issues & strategies in clinical research 3rd ed. : Washington, DC : American Psychological Association, c2003. - xix, 913 p. ISBN:1-55798-958-3 LIBRIS-ID:9326851 Library search Kazdin, Alan E. Research design in clinical psychology 4. uppl. : Boston, MA : Allyn and Bacon, cop. 2003 - xvii, 637 s. ISBN:0-205-33292-7 LIBRIS-ID:8835326 Library search Rosenthal, R Writing meta-analytic reviews: Psychological Bulletin, 118

Wilkinson, L Statistical methods in psychology journals: : Guidelines and explanations 54 :

#### Publication manual of the American Psychological Association

6. ed. : Washington, D.C. : American Psychological Association, cop. 2010, [eg. 2009] - xviii, 272 p. ISBN:978-1-4338-0561-5 (pbk) LIBRIS-ID:11503766

Library search

Writing references according to APA style: http://kib.ki.se/en/node/9571