



## COURSE SYLLABUS

# Theory of Science and Scientific Methods, 15 credits

*Theory of Science and Scientific Methods, 15 högskolepoäng*

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<b>Course Code:</b> LTSS27	<b>Education Cycle:</b> Second-cycle level
<b>Confirmed by:</b> Director of Education Dec 15, 2017	<b>Disciplinary domain:</b> Social sciences
<b>Valid From:</b> Spring 2018	<b>Subject group:</b> PE1
<b>Version:</b> 1	<b>Specialised in:</b> A1F
<b>Reg number:</b> HLK 2017/5132-313	<b>Main field of study:</b> Education

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### Intended Learning Outcomes (ILO)

On completion of the course, the student should be able to:

Knowledge and understanding

- describe fundamental principles of positivist and interpretivist paradigms in social scientific research
- describe, explain, and compare qualitative and quantitative (descriptive) research methods for the study of early childhood education
- describe ethical considerations relevant for designing and conducting research in early childhood education

Skills and abilities

- under the supervision of an academic mentor, design small to medium-scale qualitative studies of early childhood education, including developing appropriate research aims and questions
- select and coherently organize a variety of qualitative methods for observing, documenting and analyzing phenomena relevant to the study of early childhood education
- review and summarize research literature and research aims and problems relevant for the design of qualitative studies of early childhood education

Judgement and approach

- address ethical considerations relevant to designing and implementing research studies in early childhood education
- evaluate the relevance of various research methods with respect to proposed research aims and questions
- critically evaluate the design of qualitative research studies in early childhood education
- critically evaluate research arguments and research study validity and reliability

## Contents

- Survey of qualitative & quantitative research methods (observation, documentation, and analysis) in early childhood education
- Review of research literature
- Research study design
- Research proposal writing
- Research ethics

## Type of instruction

The course combines classroom-based seminars, lectures, workshops, and student presentations. Instruction will also be supplemented with web-based instructional platforms.

Students who have been admitted to and registered on a course have the right to receive instruction/supervision for the duration of the time period specified for the particular course to which they were accepted. After that, the right to receive instruction/supervision expires.

The teaching is conducted in English.

## Prerequisites

General entry requirements and a bachelor's degree (i.e. the equivalent of 180 ECTS credits at an accredited university) within behavioral science, social work, educational sciences, or related field, including independent, theoretical-based work, i.e. a thesis or equivalent. The applicant must also have a minimum of one year experience working in supervised early childhood education and/or care settings (e.g. preschool, kindergarten, elementary school, daycare). Also completed courses The growth and development of the Swedish preschool: from social policy to educational policy, 10 credits, Preschool educational/didactical perspectives focusing on play, exploration and learning, 10 credits, and Systematic documentation, analysis, evaluation and leadership in preschool, 10 credits, and at least 15 passed credits from the first semester of the programme, or the equivalent. English proficiency is required. Exemption is granted from requirement in Swedish.

## Examination and grades

The course is graded A, B, C, D, E, FX or F.

The grades A, B, C, D and E are all passing grades. For courses with more than one examination, students are given a final grade based on an overall assessment of all examinations included in the course. The final grade of the course is issued only when all course units have been passed.

The examination is based on instruction and course literature.

The examination must allow for students to be assessed on an individual basis. Students may not make a second attempt at any examination (or element of examination) already passed in order to receive a higher grade. Further information concerning assessment and grading criteria is provided in a study guide distributed at the beginning of the course.

Students are guaranteed a minimum of three examination occasions, including the regular occasion. If a student has failed the same examination three times, the student is entitled to request that the next examination is assessed and graded by a new examiner if possible. The decision to accept or reject such a request is made by the vice dean of education.

In case the course is terminated or significantly altered, examination according to the present course syllabus shall be offered on at least two occasions in the course of one year after the termination/alteration.

Evaluations in the course will be based on the following exams:

1. Quantitative methods – individual written assignment (1 credit) Grading: C/FX/F
2. Qualitative methods 1 – individual written assignment (2.5 credits) Grading: C/FX/F
3. Qualitative methods 2 – individual written assignment (2.5 credits) Grading: C/FX/F
4. Methodological Framework – individual written assignment (4 credits) Grading: C/FX/F
5. Research Design and Proposal – individual written assignment (5 Credits) Grading: A, B, C, D, E, FX or F.

Registration of examination:

Name of the Test	Value	Grading
Quantitative methods - Individual written assignment <sup>†</sup>	1 credit	A/B/C/D/E/FX/F
Qualitative methods 1 - Individual written assignment <sup>†</sup>	2.5 credits	A/B/C/D/E/FX/F
Qualitative methods 2 - Individual written assignment <sup>†</sup>	2.5 credits	A/B/C/D/E/FX/F
Methodological Framework - Individual written assignment <sup>†</sup>	4 credits	A/B/C/D/E/FX/F
Research Design & Proposal - Individual written assignment	5 credits	A/B/C/D/E/FX/F

<sup>†</sup> Only C, FX or F is awarded.

### Course evaluation

At the end of the course, a course evaluation is performed and commented on by the course coordinator and, if possible, a student/students (course developer/s).

The course evaluation, which is published on the relevant learning platform and submitted to the study administration, is to function as a basis for future improvements to the course.

### Course literature

Bryman, Alan (2012). *Social research methods* (4th ed). New York: Oxford University Press. (150 selected pages)

Jesson, Jill, Matheson, Lydia, & Lacey, Fiona M. (2011). *Doing your literature review: Traditional and systematic techniques*. London: Sage. (150 selected pages)

Muhkerji, Penny. & Albon, Deborah. (2015). *Research methods in early childhood education*. London: Sage. (200 selected pages)

Selections from Saracho, Olivia. N. (Ed.). (2015). *Handbook of research methods in early childhood education*. Charlotte, NC: Information Age Publishing, Inc. (250 selected pages)

In addition to listed course texts there will be, in accordance with lecturers' recommendations, reports, articles and internet resources proposed to supplement the texts above.

Total pages: 750

### Reference literature

Becker, Howard (1986). *Writing for social scientists*. Chicago: University of Chicago Press.

Becker, Howard (1998). *Tricks of the trade: How to think about research while you're doing it*. Chicago: University of Chicago Press.

Dyson, Anne Haas, & Genishi, Celia. (2005). *On the case*. New York: Teachers' College Press.

Heath, Shirley Bryce, Street, Brian V., & Mills, Molly (2008). *On ethnography*. New York: Teachers' College Press.

Kamberelis, George, & Dimitriadis, Greg. (2005). *On Qualitative Inquiry*. New York: Teachers' College Press.

*Citing Sources – How to Create Literature References*. <http://ju.se/library/search-write/citingsources---how-to-create-literature-references.html>

Information Material about Anti-Plagiarism at Universities. *The Interactive Anti-Plagiarism Guide – Jönköping University*. <http://pingpong.hj.se/public/courseId/10565/publicPage.do>