



## Course syllabus

Faculty of Social Sciences

Department of Pedagogy and Learning

1GN458 Forskningsprocess och vetenskapliga förhållningssätt-  
inriktning förskoleklass och årskurs 1-6/VI-profil, 7,5 högskolepoäng

Theory of Science and Research Methodology, Primary Teacher  
Programme Pre-School and Years 1-6/ Teaching Practic Profile, 7.5  
credits

### **Main field of study**

Didactics

### **Subject Group**

Educational Sciences/General Didactics

### **Level of classification**

First Level

### **Progression**

G1F

### **Date of Ratification**

Approved 2020-01-22

Revised 2020-11-26 by Faculty of Social Sciences. Revision of the course literature.

The course syllabus is valid from autumn semester 2021

### **Prerequisites**

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1GN431 Perspectives on the Teacher Assignment and the School in Society - Preschool  
Class and Year 1-3/Teaching Practice Profile, 7.5 credits

1GN420 Didactics and Curriculum Theory, Primary Teacher Programme in Preschool  
and Years 1-6/Teaching Practice Profile, 7.5 credits

1GN256 Swedish II for Teaching in Primary Teacher Programme with a Specialisation  
in Preschool and Years 1-3/Teaching Practice Profile, 15 credits

1GN241 Mathematics and Mathematics Education I for Teaching in Primary School,  
directed towards Preschool and Year 1-3/Teaching Practice Profile, 15 credits

or the equivalent.

*LAGRV*

1GN406 Perspectives on the Teacher Assignment and the School in Society, for  
Teachers in Years 4-6/Teaching Practice Profile, 7.5 credits

1GN420 Didactics and Curriculum Theory, Primary Teacher Programme in Preschool  
and Years 1-6/Teaching Practice Profile, 7.5 credits

1GN248 Swedish II for Teaching in Years 4-6/Placement Integrated Profile, 15 credits

1GN217 Mathematics and Mathematics Education I for Teaching in Year 4-6/TPlacement-Integrated Profile, 15 credits

or the equivalent.

### Objectives

The aim of the course is for students to acquire knowledge of science and scientific approaches, partly as a knowledge base for research as well as for quality development work within the professional practice, and partly as an introduction to the independent professional practice with the purpose of establishing insight into and understanding of the research process.

Upon completion of the course, students shall be able to:

- explain and discuss different principal orientations within the theory of science, such as correlations between knowledge interest, research question and methodology,
- account for the possibilities and limitations of various data collection tools,
- systematically analyse quantitative and qualitative data,
- independently define and plan an academic study and justify their choices and evaluate the plan on the basis of research ethical principles.

## Content

The course content is focused on developing the students' understanding and knowledge of and proficiency in research and quality development work. The course begins with providing an overview of scientific traditions and research questions within the theory of science, with special emphasis on scientific arguments and principles of reasoning. Other fields of knowledge address the role of theories in the research process, different principles of application of quantitative as well as qualitative data, and research ethical issues. Students also prepare a research design for the coming degree project.

Teaching is particularly focused on the development of a scientific and professional approach. Such an approach is intended to strengthen the student's ability to reflect on the school's mission in relation to changes in society and pupils' learning. A systematic and reflective working method is established through practical exercises where the results are communicated and discussed in groups, in order to illustrate the relation between science/research and the professional practice.

The forms of instruction promote the development of professional communicative skills as well as a democratic competence, where the students by means of descriptions, presentations, analyses and critical questions are given the chance to understand and critically examine the activities and professional practices for which the education is intended.

### *Professional Basis and Professional Progression*

The course emphasizes science and research as a significant part of the educational practice. The scientific approach is also emphasized in the course as a fundamental skill required for the professional practice, and which is also considered a fundamental skill required for evaluation and quality work. Students shall learn how to critically examine and adopt an approach to literature and research.

### *Scientific Approach and Scientific Progression*

The course put the theory of science in relation to the choice of relevant research methods in the development of a research design. Knowledge of key scholarly concepts is challenged, and students learn how to conduct systematic analysis of qualitative and quantitative data. Prior to this course, students are expected to have acquired knowledge of reference management and be able to put this knowledge to use in the course texts. The course is in particular aimed at the relation between profession and science.

## Type of Instruction

Teaching take place by means of lectures, seminars, practical sessions and group assignments as well as work-integrated learning.

## Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).

Examination takes place by means of a written examination comprising 2 credits, two workshops comprising 2 credits, and the development of a research design, comprising 3.5 credits.

In order to receive a grade of Pass, the course objectives shall be attained. For a grade of Pass with Distinction in the course, it is required that the written examination and the research design are assessed as Pass with Distinction.

A retake of the examination is provided in accordance with the Local Regulations for First-Cycle and Second-Cycle Courses and Examination at Linnaeus University.

Should the university determine that a student is entitled to special educational support due to impairment, the examiner may provide the student with an adapted test or the

student may carry out the examination in an alternative way.

### Course Evaluation

A course evaluation is carried out either during or at the end of the course. Results and analysis of the evaluation are presented to the students who have completed the course, as well as to new students at the following course date. The course evaluation is conducted anonymously.

### Required Reading and Additional Study Material

Andreasson, Jesper & Johansson, Thomas (Latest edition). *Vetenskapsteori: grunder och tillämpning*. Edition 1 Lund: Studentlitteratur, (211 p.)

Denscombe, Martyn. (Latest edition). *Forskningshandboken*. Lund: Studentlitteratur, (506.)

Kane, Eva (2015). *Playing practices in schoolage childcare: an action research project in Sweden and England*. Diss. (Summary) Stockholm: Stockholms universitet, (6 p.)

Karlsudd, P. (2018). Att problematisera ”problemet”: Bedömning och utveckling av problemformuleringar i lärarutbildningens självständiga arbeten. *Nordic Journal of Vocational Education and Training*, 8(1), 122.

Vetenskapsrådet. (2017). *God forskningssed*. (84 p.) ISBN: 978-91-7307-352-3. Available on the Internet.

Scientific articles and/or dissertations are also included, (approx. 200 pages).