



Board of Teacher Education  
Physics

## Syllabus

### Degree Project Primary Education, Grades 4-6, Science and Technology

|                                    |                                                                                                                                    |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| <b>Course Code:</b>                | LXAG73                                                                                                                             |
| <b>Course Title:</b>               | Degree Project Primary Education, Grades 4-6, Science and Technology<br><i>Examensarbete Grundlärarprogrammet, 4-6 - NO/Teknik</i> |
| <b>Credits:</b>                    | 30                                                                                                                                 |
| <b>Degree Level:</b>               | Master's level                                                                                                                     |
| <b>Progressive Specialisation:</b> | Second cycle, has only first-cycle course/s as entry requirements (A1N)                                                            |

#### Major Field of Study:

#### Course Approval

The syllabus was approved by the Board of Teacher Education 2016-09-06, and is valid from the Spring semester 2017 at Karlstad University.

#### Prerequisites

Enrollment in Teacher Education Programme: Grades 4-6. Completed courses LPGG01, LPGG02, LPGG05, LPGG09, LPGG15, LPGG18, LPAG05 and one of the courses LPGG10/LPGG11/LPGG12/LPGG19

#### Learning Outcomes

The aim of the course is that students develop further knowledge of research and development projects and ability to carry out an independent subject-specific research project with relevance to teaching and their future teaching profession.

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

1. independently identify, formulate and delimit a relevant subject-specific problem,
2. apply methods for literature searches and select literature relevant to the chosen topic,
3. collect, analyse and compile an empirical material,
4. refer to, analyse and critically review academic literature and empirical data from the perspective of a subject-specific problem,
5. argue for the chosen research methods and theories and the data collections and analyses, and identify any errors in the choice of methods and theories,
6. evaluate the result of their own work in relation to previous research and identify the need of further research in the area in question,
7. structure and write a thesis using adequate language and correct treatment of formal aspects,
8. justify the legal restrictions and ethical principles involved in different types of research methods and material, and

9. defend their own project orally and serve as a peer reviewer.

### **Content**

Students carry out a supervised independent project based on a subject-specific research question related to teaching.

The course comprises the following components:

- formulating a research topic, aim and problem
- literature seminars on seminal research articles
- ethical perspectives on research
- choosing methodological approach and justifying its relevance to the problem
- methods of searching literature and systematic search in the chosen area
- collecting, analysing and compiling empirical data
- analysing and discussing the empirical data in relation to theory, aim and questions
- documenting the investigation
- defending the project in a seminar
- serving as a peer reviewer

### **Reading List**

See separate document.

### **Examination**

Learning outcomes 1-7 are assessed on the basis of a written independent project.

Learning outcome 8 is assessed on the basis of an written individual assignment.

Learning outcome 9 is assessed on the basis of seminar performance as respondent and peer reviewer.

### **Grades**

One of the grades Distinction (VG), Pass (G) and Fail (U) is awarded in the examination of the course.

### **Quality Assurance**

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

### **Course Certificate**

A course certificate will be provided upon request.

### **Additional information**

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.

Replaces LXAG10, LXAG20, LPAG04, LXAG81 and LXAG82.