

Board of Teacher Education Mathematics

# **Syllabus**

# Degree project, Secondary education - Mathematics and Mathematics Teaching

Course Code: LXAA14

Course Title: Degree project, Secondary education - Mathematics and

**Mathematics Teaching** 

Degree project, Secondary education - Mathematics and

Mathematics Teaching

Credits: 15

**Degree Level:** Master's level

**Progressive Specialisation:** Second cycle, has second-cycle course/s as entry requirements

(A1F)

#### Major Field of Study:

#### **Course Approval**

The syllabus was approved by the Board of Teacher Education 2014-06-02, and is valid from the Autumn semester 2016 at Karlstad University.

#### **Prerequisites**

Subject studies 180 ECTS cr and LPGA10 and LPGA11

# **Learning Outcomes**

The aim of the course is that students develop further knowledge of research and development and the ability to independently carry out a research project with relevance to their future profession as a teacher.

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

- independently identify, formulate and delimit a relevant mathematics-specific teaching problem,
- apply methods for literature searches and seek and select relevant literature for the chosen problem,
- collect, process and compile an empirical material,
- refer to, analyse and critically review research literature and empirical material from the perspective of a teaching methodological question,
- give arguments for the chosen methods and theories and completed data collection and analyses, and identify potential sources of error, in relation to chosen methods and theories,
- evaluate the result of their project in relation to previous research and identify the needs of further research in the area,
- structure a written work with adequate language and appropriate treatment of formal aspects,
- give arguments for legal restrictions and ethical principles in using different methods and material in research,
- defend their project orally and serve as a peer reviewer of other students' projects.

#### Content

Students carry out an independent project based on a subject-specific teaching issue, under supervision.

The course comprises the following components:

- formulation of topic, purpose and research question
- research ethical perspectives
- choice of approach with arguments for its relation to the research question
- systematic literature search in the chosen area
- collecting, processing and compiling empirical material
- analysing and discussing the empirical material in the light of theory, purpose and questions
- documenting the research project
- defending the project
- critically review other students' projects

# **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 a written assignment. Learning outcome 9 is assessed on the basis of seminar defence and peer reviewing.

The number of reassessment opportunities is limited to five.

#### Grades

One of the grades Distinction (VG), Pass (G), or 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.

Teacher Education: Secondary school