Linnæus University

Course syllabus

Faculty Board of Science and Engineering

School of Computer Science, Physics and Mathematics

GO7483 Examensarbete i matematikdidaktik, 15 högskolepoäng
GO7483 Degree Project in Didactics of Mathematics, 15 credits

Main field of study
Mathematics

Subject Group
Educational Sciences/Theoretical Subjects

Level of classification
First Level

Progression
G2E

Date of Ratification
Approved 2009-08-11
Revised 2010-08-18 by School of Computer Science, Physics and Mathematics. Revision made for English translation of the syllabus, prerequisites and course evaluation.
The course syllabus is valid from spring semester 2011

Prerequisites
60 credits in General field of Education and at least 60 credits topic relevant studies in any of the following options:

GI1121 Swedish and mathematics directed towards teaching and learning in early school years, 60 credits
or
GU7411 Reading, writing and mathematics 1 – specialization for the primary years, 30 credits + GU7431 Swedish and mathematics – specialization for the primary school years, 30 credits
or
GU7411 Reading, writing and mathematics 1 – specialization for the primary years, 30 credits + GU7441 Basic natural science and technology for the primary school years, 30 credits

GI7112 Mathematics/ Mathematical Didactics in Later School Years and Upper Secondary Level, 60 credits

Objectives
Having completed the course the students should:

- be able to structure and carry out independently a scientific study in the didactics of mathematics as well as be able to present it in the appropriate scholarly form
- be able independently to formulate questions, search for, evaluate, examine, analyse and organise the material relevant to the study
- be able to present relevant research and literature for the study as well as demonstrate a methodological and ethical awareness in the way the study is put together
- be able to defend the degree project with factual and relevant arguments and examine critically and act as opponent to another degree project
- have an advanced ability to respond critically to different sources and also have considerable competence in information technology.

Content
Textual studies, field studies, scientific theory and methodology, research ethics and scientific report writing as well as active participation in seminars and how to be an academic opponent.

The degree project may with advantage be connected to the students' experience from the practical part of their training. Linking with didactic research projects within the university is recommended.

The research carried out by the students should, in the context of teaching, have reference to didactic studies related to the subject of mathematics.

Type of Instruction
The degree project may be planned and carried out individually or in pairs in consultation with a tutor. The course comprises individual work, obligatory seminars and individual study of literature chosen in consultation with the tutor. Teaching and tutoring may also be conducted by net based educational means.
The extent of obligatory elements can be seen on the timetable.

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

On request, students may have their credits translated to ECTS-marks. Such a request must be sent to the examiner before the grading process starts.
The student is assessed through written and oral examinations. In order to pass the student must present and defend the degree project as well as examine critically and act as opponent of another project and, in addition, participate in other, obligatory seminars.
Where students have worked together on a project the individual contribution and performance must be distinguishable and judged separately.
The project is to be presented as a written thesis.

Course Evaluation
A course evaluation will be carried out at the end of the course in accordance with the guidelines of the University. The result of the course evaluation will be filed at the department.

Other
Upon request, a Swedish University degree will be issued upon successful completion

of the full demands for that degree.

Required Reading and Additional Study Material

Required reading

Strömquist, S,*Skrivboken. Skrivprocess, skrivråd och skrivstrategier*. Malmö: Gleerups, 2000: 195-227.Pages 32.
Svenska skrivregler utgivna av Svenska språknämnden. Liber, 2000.Pages 220.
Bryman, A,*Samhällsvetenskapliga metoder*. Malmö:Liber ekonomi, 2000.Pages 498.
Johansson, B., Svedner, P-O,*Examensarbetet i lärarutbildningen*. Uppsala: Kunskapsföretaget, 2001.Pages 136.

Reference Literature

Jarrick, A. & Josephson, O.,*Från tanke till text. En språkhandbok för uppsats-skrivande studenter*. Lund: Studentlitteratur, 1996.Pages 129.
Patel, R. & Davidsson, B,*Forskningsmetodikens grunder*. Lund: Studentlitteratur, 2003.Pages 124.
Patton, M,*Qualitative Research & Evaluation Methods* (3. ed.). Thousand Oaks, California: Sage Publications Inc,2002.
Pages 598.
Kvale, S,*Den kvalitativa forskningsintervjun*. Lund: Studentlitteratur, 1997.Pages 306.
Merriam, S. B,*Fallstudien som forskningsmetod*. Lund: Studentlitteratur, 1994.Pages 228.