Linnæus University

Course syllabus

Faculty Board of Science and Engineering

School of Computer Science, Physics and Mathematics

GU7131 Förskolebarns lärande i matematik och svenska, 30 högskolepoäng

GU7131 Mathematics and Swedish for Pre-school Children, 30 credits

Main field of study
Comparative Literature, Mathematics

Subject Group
Educational Sciences/Theoretical Subjects

Level of classification
First Level

Progression
G1N

Date of Ratification
Approved 2010-04-09
Revised 2010-08-18 by School of Computer Science, Physics and Mathematics.
Revision of the literature list and course evaluation.
The course syllabus is valid from spring semester 2011

Prerequisites
General entry requirements for university studies.

Objectives

Having completed the course the student should:

- be able to analyse observed situations and from these observations be able to come to their own conclusions about how children learn mathematics and language
- be able to explain children's development of concepts and demonstrate the ability to use this knowledge in didactical situations
- be able to give an account orally and in writing of young children's development of speech and sense of space
- be able to give an account orally and in writing of the theories and ideas concerning the way in which Swedish and mathematics are dealt with in pre-school and pre-school-class
- demonstrate didactical proficiency in discussion and narration

- be able to give an account of the importance of the forms of esthetical expression as a part of children's understanding of the concepts of mathematics and speech as well as show the ability to use this knowledge in didactical situations @@be able to exemplify how children's literature can be conveyed to children and how it can be used as a starting point for work in mathematics. Be able to use written and spoken Swedish correctly.

Content

The course is intended to draw attention to the connection between children's development of speech and the development of their concept of mathematics as well as the different ways of stimulating these developments.
The following areas are covered:

- theories and analytical methods for personal research purposes
- children's development of speech and mathematics
- children's literature and drama
- stimulation of speech for different ages
- the meeting between young children and mathematics.

Field studies are an important part of this specialization. Didactical theories that are dealt with in this specialization are connected to pre-school activities through field studies. In a similar way the problems that arise during field studies illustrate the central elements in the didactical theories that are dealt with.
The students must also document and evaluate the teaching situations, study the local governing documents and starting from their own observations problematize the pedagogical work.
The course is in three parts: Swedish Language, 10.5 credits; Literary Studies, 9 credits; the Didactics of Mathematics, 10.5 credits.

Type of Instruction

Teaching is conducted in the form of lectures, field studies, seminars and consideration of teaching methods. The teaching is to a large extent based on the students active participation individually and in groups, which demands attendence at seminars, teaching methods sessions and presentations.

The course is also offered as a distance course.

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 course is examined partly through the students active participation in seminars, teaching methods sessions and presentations and partly through written and oral presentations of individual and group assignments.

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.

On request, a Swedish University course certificate will be awarded upon successful completion of the course.

Required Reading and Additional Study Material

Required reading

Analysschema för åren före skolår 6, Skolverket, 2000. Pages 45 (45).

Andersson, M. & Druker, E. (red) *Barnlitteraturanalyser*, Studentlitteratur, 2008. Pages 100 (213).

Auraldsson, m.fl. *Börja berätta! Om sagor och berättande och sagotips i olika genrer*, Bibliotekstjänst, 2009. Pages 291 (291).

Björklund, C. *En, Två, många. -Om barns tidiga matematiska tänkande*. Liber 2009 174 pages.

DFM, *Stenciler*, Linnéuniversitetet, aktuellt år. Pages 50.

Edwards, A. *Bilderbokens mångfald och möjligheter*, Natur och Kultur, 2008. Pages 160 (160).

Emanuelsson, G. & Doverborg E, *Små barns matematik*, NCM, 2006. Pages 190 (190).

Fast, C, *Berätta! Inspiration och teknik*, Natur och Kultur, 2001. Pages 134 (134).

Fickla, avloppsrör och stjärnprickig, En Bok För Alla, 2002. Pages 94 (94).

Granberg, A, *Småbarns sagostund: kultur, språk och lek*, Liber, 2006. Pages 144 (144).

Hagtvet. B, *Språkstimulering. Del 1: Tal och skrift i förskoleåldern*, Natur & Kultur, 2004. Pages 224 (224).

HeidbergSolem, I.& LieReikerås, E-K. *Det matematiska barnet*, Natur och Kultur, 2004. Pages 260 (345).

Henriksson, L, *Nya Bokpuffar*, En Bok För Alla, 2006. Pages 102 (102).

Håkansson, G, *Språkinlärning hos barn*, Studentlitteratur, 1998. Pages 132 (132).

Kjérsen Edman, L, *Barn- och ungdomsböcker genom tiderna*, Natur och kultur, 2002. Pages 227 (227).

Nya Språket lyfter, Skolverket, 2009. Pages 86 (86).

Stensson, B, *Mellan raderna: strategier för en tolkande läsundervisning*, Daidalos, 2006. Pages 160 (160).

Svensson, A-K, *Barnet, språket och miljön: från ord till mening*, Studentlitteratur, 2009. Pages 231 (231).

Fiction is chosen in consultation with the course coordinator.

Reference Literature

Emanuelsson, G. & Doverborg E, *Matematik i förskolan*, Nämnaren Tema NCM, 2006. Pages 109 (109).