Linnæus University

Jnr: 2016/3596-3.1.2.2

Course syllabus

Faculty of Technology
Department of Physics and Electrical Engineering

1GN240 Teknik för undervisning i förskoleklass och årskurs 1-3/verksamhetsintegrerad profil, 7,5 högskolepoäng

Technology for teaching in primary school, years F-3/Teaching Practice Profile, 7.5 credits

Main field of study
Technology

Subject Group
Educational Sciences/Theoretical Subjects

Level of classification
First Level

Progression
G1N

Date of Ratification
Approved by Faculty of Technology 2016-06-15
The course syllabus is valid from autumn semester 2016

Prerequisites
General entry requirements and English B, Mathematics B, Natural Science A, Civics A. or: Mathematics 2a/2b/2c, Natural Science 1b/1a1+1a2, Civics 1b/1a1 + 1a2

Objectives

Having completed the course the students should:

- be able to show they have acquired both knowledge of the subject and its didactics and an insight into current research and development required to be able to carry out the work
- be able to demonstrate the ability, both independently and with others, to plan and carry out teaching aimed at stimulating and assessing each child/pupil's learning of and development in technology
- be able to identify technical solutions in existing constructions and use them in their own work
- be able to identify and describe technology from a systems perspective
- be able to communicate basic technological solutions through speech, writing, pictures and models
- be able to present the important events and developments in the history of technology and what impact this has and has had on peoples lives and the development of society.

Content

Throughout the course technology is closely related to the pupils by using examples from society and everyday life. The technological content is related to different didactical

society and everyday life. The technological content is related to different didactical approaches and working methods as well as the content described in Lgr11.

The course content comprises four main strands that together encompass the central aspects of the course:

Technological Solutions
This course includes sections where the pupils make constructions in different materials or deconstruct and analyse existing technology. Principally the artefacts and systems focus on mechanical solutions as well as how ordinary solid and stable constructions are built.

Working methods for the development of technological solutions
The course highlights different phases in technological development work as well as linking this to the documentation of technology and the different ways of communicating technological knowledge and solutions.
The course also includes the handling and maintenance of the equipment usually used in the school course.

Technology, People, Society and the Environment
The course also examines the history of technology i.e. how people have defined, observed and dealt with technology throughout history. The needs, driving forces and conditions that lie behind technological development, how technology, man, society and nature affect eachother and what consequences these have had and will have are important aspects of the course.

The Didactics of Technology
The course deals with the central questions concerning the didactics of technology. Assessment of current policy documents characterizes the entire course.

Type of Instruction
Various instruction methods are used during the course such as lectures, seminars, workshops and information retrieval. Field study days may also be included.

Participation in laboratory work, group exercises and seminars is obligatory as are the surveys and presentations associated with these activities.

Examination
The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).
The students' achievements are assessed through written and oral examinations, the presentation of obligatory assignments as well as the participation in practical exercises and seminars. The assessment criteria to pass the course may be seen above in Objectives. A second examination will be offered within six weeks during the regular semester periods.

Course Evaluation
After completion of the course a written course evaluation is compiled with feedback from the students. The evaluation is presented to the appropriate organ of the Institution and the course advisor concerned as well as being filed by those responsible for the course.

Required Reading and Additional Study Material
Required Reading
Sundin, B. (2006). Den kupade handen – människan och tekniken, Carlssons bokförlag. Sidor 354 (362). ISBN 9789173310154

Bjurulf, V. (2011). Teknikdidaktik, Studentlitteratur. Sidor 210. ISBN 9789144100791

Moreland, J., Jones, A. & Barlex, D. (2015). Bedömning för lärande i teknikklassrummet: design and technology inside the black box. Sidor 53. Liber. ISBN

9789147111961

Skolinspektionen. (2014). Teknik: Gör det osynliga synligt. Sidor 52. http://www.skolinspektionen.se/Documents/Kvalitetsgranskning/teknik/kvalgr-teknik-slutrapport.pdf

Skolverket. (2015). Läroplan för grundskolan, förskoleklassen och fritidshemmet 2011 (Reviderad 2015). Sidor 260. http://www.skolverket.se/publikationer?id=2575

Skolverket. (2011). Kommentarmaterial till kursplanen i teknik. Sidor 29. http://www.skolverket.se/publikationer?id=2568

Skolverket. (2011). Diskussionsunderlag till kursplanen i teknik. Sidor 14. http://www.skolverket.se/publikationer?id=2547

Skolverket. (2012). Kommentarmaterial till kunskapskraven i teknik. Sidor 54. http://www.skolverket.se/publikationer?id=2830

Litteratur och exempelsamlingar som väljs i samråd med examinator. Sidor 50 (ca).

IFE, Kopierat material, Linnéuniversitetet, aktuellt år. Sidor 50 (ca).

Reference Literature

Lundahl, C. (2011). Bedömning för lärande. Norstedts. ISBN 9789144101491

Johansson. M & Sandström, M. (2015). Undervisa i teknik - för lärare F-6. Gleerups. ISBN 9789140691668