Linnæus University

Course syllabus

Faculty Board of Science and Engineering
School of Computer Science, Physics and Mathematics

1TG211 Teknikhistoria, 7,5 högskolepoäng
History of Technology, 7.5 credits

Main field of study
Technology

Subject Group
Other Subjects within Technology

Level of classification
First Level

Progression
G1F

Date of Ratification
Approved by Organisational Committee 2009-12-01

The course syllabus is valid from autumn semester 2010

Prerequisites
1TG121 or the equivalent

Expected learning outcomes

Having completed the course the student is expected to be able:

- to describe important happenings and events in the history of technology and their importance for human life and social development
- to present what has been characteristic and decisive for technological and industrial development
- to describe the interplay between technical development and changes in society
- to describe how large technical systems are established and change and how these systems affect the development of society in general
- to describe and reflect upon the different didactic choices with regard to local and national governing documents.

Content

The course should offer the students an overview of the history of western technology in a long-term perspective. Special attention is devoted to major changes and important epochs: the origin and emergence of agriculture, the background to and emergence of the industrial revolution, the development of new technologies and various technical systems, technology as a tool to master nature.

Students will be given the opportunity to work in a practical manner with the history of

technology. The creation of teaching situations where pupils are made aware of how technology has affected historical developments is an important part of the course.

Local and national governing documents are important sources used in the course. Didactic theories are integrated in all course moments.

Type of Instruction

The course is a distance tuition course via the Internet. The students are expected to work individually and in groups. At the start of the different modules of the course the course leader/teacher presents specific reading tasks, study assignments and presentation models. Work assignments may be presented collectively in the form of group conferences and commented on by the course leader/teacher. The work assignments may also be individually designed.

Attendance at examinations and seminars is obligatory.

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

Assessment takes place through oral and/or written tests and/or presentations of compulsory assignments, as well as through participation in web-based seminars. The main form of examination is decided at the start of the course.

Students who do not pass the regular examinations are offered a new chance in close connection to time of the regular examination

Course Evaluation

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

Other

Having completed the training the student will receive a degree certificate upon request from the Graduation Office at the Division of Student Affairs.

Students who receive a passing grade in the course may download a course certificate through the Student Portal. Otherwise they may request a course certificate from the school secretary.

Required Reading and Additional Study Material

Required reading

Skolverket, *Läroplan för det obligatoriska skolväsendet*, www.skolverket.se. Pages 23 (23).
Skolverket, *Kursplan och betygskriterier för ämnet Teknik*, www3.skolverket.se/ki03/front.aspx. Pages 5 (5).
Hansson S, *Den skapande människan*, Studentlitteratur, 2002. Pages 529 (562).
Staffan Sjöberg, *I uppfinnarens verkstad*, Publiktryck, 1997, will be lent to you. Pages 134 (140).
DFM, *Copied material*, current year. Pages 50 (app).

Alternative literature

Nielsen, K & Nielsen H & Jensen H, *Skruen uden ende - Den vestlige teknologis historie*, Teknisk Forlag, 2005. Pages 615 (615).