



Course syllabus

Faculty of Technology

Department of Physics and Electrical Engineering

1TG213 Teknikhistoria, 7,5 högskolepoäng

History of Technology, 7.5 credits

Subject Group

Other Subjects within Technology

Level of classification

First Level

Progression

G1N

Date of Ratification

Approved by Faculty of Technology 2020-04-20

The course syllabus is valid from spring semester 2021

Prerequisites

General entry requirements for university studies.

Objectives

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).

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.

Repeat examination is offered in accordance with Local regulations for courses and examination at the first and second-cycle level at Linnaeus University.

If the university has decided that a student is entitled to special pedagogical support due to a disability, the examiner has the right to give a customised exam or to have the student conduct the exam in an alternative way.

Course Evaluation

During the implementation of the course or in close conjunction with the course, a course evaluation is to be carried out. Results and analysis of the course evaluation are to be promptly presented as feedback to the students who have completed the course. Students who participate during the next course instance receive feedback at the start of the course. The course evaluation is to be carried out anonymously.

Credit Overlap

The course cannot be included in a degree along with the following courses of which the content fully, or partly, corresponds to the content of this course: 1TG211, 7.5 credits

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).

Copied material, current year. Pages 50 (app).

Alternative literature

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