

Centre for Engineering Education, LTH
The Academic Development Unit

Active Teaching and Learning

(Undervisning för aktivt lärande)

Active Teaching and Learning is an elective course within the qualifying teaching and learning in higher education at LTH. The course is intended for members of staff who want to develop an understanding of how to use active teaching practices and digital tools to promote student learning.

Aim: The aim of the course is to provide ideas and support for lecturers in the use of active teaching practices and digital tools to support student learning.

Learning outcomes: Knowledge and understanding

For a Pass on the course, participants shall

- demonstrate knowledge of and be able to describe fundamental theories of active learning

Competence and skills

For a Pass on the course, participants shall

- demonstrate ability to identify and formulate specific pedagogical problems from the viewpoint of some relevant theory of learning and knowledge development
- demonstrate ability to develop their own teaching critically, independently, and creatively with the help of digital tools
- demonstrate ability to create, design and make available active teaching practices
- be able to clearly present and discuss their experiences and conclusions from a development project verbally, in writing, and by using a digital learning management system

Judgement ability and approach

For a Pass on the course, participants shall

- demonstrate ability to evaluate how the use of digital tools and active teaching practices affects student learning
- demonstrate ability to identify their own need of further knowledge and to continuously develop their own competence

Content: Theories of learning and cognition. To formulate pedagogical challenges. Areas of application for active teaching practices (such as quiz, peer review, cooperative learning, and active lectures), technical tools and platforms (such as Canvas, discussion tools, gamification tools) and active learning classrooms.

Work model: Normally, four course meetings and a project linked to the participants own teaching. The project is presented at the last meeting. Between the meetings there are assignments linked to the project. The assignments and the project shall be based on relevant literature.

Assessment: For a Pass on the course, the participant must have attended at least 80% of the scheduled activities, passed the assignments during the course and participated in and passed the final project presentation.

Scope: The course corresponds to two weeks of full-time work.
A current timetable is available on the course homepage.

Admission requirements: To be admitted to the course, participants must normally have a first-cycle degree, and have completed the course Introduction to Teaching and Learning (or similar).

Selection criteria: Priority is given to staff teaching at LTH. Other lecturers are welcome to attend if there are places available.

Language: The course is taught in Swedish or English, se the course homepage.

Homepage: <http://www.lth.se/genombrottet>

Reading: Selected articles and literature based on the project work of the participants.

Course directors: Lecturers **Anna Axelsson** (anna.axelsson@cs.lth.se) and **Sandra Nilsson** (sandra.nilsson@cs.lth.se)

Information on current teachers is available on the course homepage.

Category: The course belongs to the category “Specialisation courses in teaching and learning in higher education” in accordance with the programme syllabus for the qualifying programme in teaching and learning in higher education at LTH.

Other: The course means to stimulate cooperation between teachers at the same department, course and/or programme. Therefore, the projects are favourably performed in relevant constellations of teachers.