



Centre for Engineering Education  
LTH

## Develop your Course with Active Learning

*(Utveckla din kurs med aktivt lärande)*

Develop your course with active learning is an elective course within the qualifying programme for teaching and learning in higher education at LTH. The course is addressing teachers who want to develop their knowledge on how active learning techniques and digital tools can be used to promote student learning. Preferably, participants should be involved in teaching, which they could develop during the course period.

### Aim

The aim of the course is to inspire and support teachers in using active learning techniques and digital tools to promote 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 regarding active learning

#### **Competence and skills**

- For a Pass on the course, participants shall
- demonstrate an ability to identify and formulate specific pedagogical problems based on a relevant theory about learning and knowledge building

- demonstrate an ability to develop their own teaching with the help of digital tools critically, independently, and creatively
- demonstrate an ability to create, design, and make active learning techniques available
- in varying forms of presentations, be able to clearly account for, and discuss, their experiences and conclusions regarding digital tools and active learning techniques

### **Judgement and approach**

- For a Pass on the course, participants shall
- demonstrate an ability to assess how the use of digital tools and active learning techniques affects student learning
- demonstrate an ability to identify their own need of further knowledge and a continuing development of their competence

### **Content**

Theories regarding learning and cognition. To formulate pedagogical challenges. Areas of application for active learning techniques (for example quiz, peer review, cooperative learning, flipped classroom, and active lectures), the use of digital tools (for example videos, Canvas, discussion tools, and tools for gamification) together with rooms for active learning.

### **Instruction**

Normally four course meetings, with sub-tasks based on the participant's own practice before each meeting. The sub-tasks should build on both selected and self-elected scientific articles.

### **Assessment**

To pass the course, participants must attend at least 75% of the scheduled meetings, and have all their completed sub-tasks approved.

### **Scope**

The course corresponds to 2 weeks full-time work.  
See the course website for current schedule.

## Admission

To be admitted to the course, participants must normally have a first-cycle degree, and have completed the Introduction to teaching and learning in higher education course (or similar).

## Selection criteria

Priority is given to teaching staff at LTH. Other teachers are welcome to participate, space permitting.

## Language

The course is taught either in Swedish or in English. Teaching language is stated when the application opens.

## Course website

<https://www.lth.se/index.php?id=219743>

## Reading

Selected scientific articles, and further literature based on what the participants have an interest in.

## Course directors

Lecturer Sandra Nilsson, [sandra.nilsson@cs.lth.se](mailto:sandra.nilsson@cs.lth.se)

Senior lecturer Jonas Månsson, [jonas.mansson@math.lth.se](mailto:jonas.mansson@math.lth.se)

Information on current teachers is found on the course website.

## Category

The course belongs to the category Specialisation courses in teaching and learning in higher education, in accordance with the LTH syllabus for the qualifying programme in teaching and learning in higher education.

## Other

As the course aims at stimulating the collaboration between teachers at the same department, course and/or programme, sub-tasks benefit from being carried out by relevant constellations of teachers.