LD1024 Cognitive Psychology for Teachers: Special Education 4.0 credits

Kognitiv psykologi för lärare: Specialpedagogik

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

Establishment

The official course syllabus is valid from the spring semester 2025 in accordance with a decision from the Faculty board of the ITM school: M-2024-0018. Date of decision: 2024-06-13.

Grading scale

P, F

Education cycle

First cycle

Main field of study

Technology and Learning

Specific prerequisites

General entry requirements

Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

Intended learning outcomes

After passing the course, the student should be able to:

1. Identify and handle special education needs in collaboration with guardians and other professional groups and implement inclusive strategies on individual, school and community level to promote a more inclusive education environment.

2. Develop and implement methods that support pupils' independent learning and thereby improve their ability to adapt to different learning environments and to satisfy varying academic requirements.

3. Understand and apply principles from Cognitive Load Theory to decrease unnecessary cognitive strain in the teaching by using strategies and technologies that efficiently optimise the learning for all pupils.

4. Apply practical methods for inclusion in the classroom including development of group activities that support collaboration and knowledge exchange between pupils with different knowledge backgrounds and needs.

Course contents

This gives a thorough introduction to cognitive science with a focus on special education needs applications. The goal of the course is that the student should be able to apply practical methods in classroom environment that can facilitate participation and improve the learning for all pupils.

Module 1. Identification and handling of cognitive and special education needs.

- Explore how teachers in collaboration with guardians and other professional groups, can identify and handle special education needs on individual, school and community level, with a focus on inclusion and exclusion in the organisation of the teaching.
- Methods to help students develop tools to support their own learning since independent learning strategies increase their ability to adapt to different learning environments and requirements.

Module 2. Practical methods for inclusion and learning.

- Exercises to develop and use practical methods that can facilitate participation for all pupils irrespective of difficulties, neuropsychiatric variations and functional variations.
- Practical methods for inclusion and learning in the classroom through active application of teaching strategies, such as carrying out group activities that encourage pupils with different knowledge backgrounds to cooperate and learn of one another.

Module 3. Cognitive science and learning

- Understanding of how cognitive underlying mechanisms influence students' possibilities and limitations in to learn with special focus on Cognitive Load Theory.
- Presentation of strategies to decrease unnecessary cognitive strain (extraneous load) in the classroom. Practical recommendations and techniques to eliminate or reduce these strains.

Examination

- LEXA - Continuous assessment, 4.0 credits, grading scale: P, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.