

Cognition and Learning in the Anthropocene

Kognition och lärande i antropocen

7.5 credits

Single subject course

917A24

Valid from: 2027 Spring semester

Determined by	Main field of study	
Course Syllabus Board at the Faculty of Educational Sciences	Education	
Date determined	Course level	Progressive specialisation
2025-11-17	Second cycle	A1N
Revised by	Disciplinary domain	
	Social sciences, Education	
Revision date	Subject group	
	Educational Sciences/General Didactics	
Offered first time	Offered for the last time	
Spring semester 2027		
Department	Replaced by	
Institutionen för beteendevetenskap och lärande		

Entry requirements

- A Teacher or Pre-school Teacher Degree of at least 180 ECTS credits
or
Bachelor's Degree, equivalent to a Swedish Kandidatexamen, with a major in one of the following subjects Education, Pedagogy, Pedagogical work, Biology, Ecology, Geography or Sustainable development
or
Bachelor's degree, equivalent to a Swedish Kandidatexamen, and additional clearly documented work experience of at least one year, full time, in outdoor or sustainability education or the equivalent
- English corresponding to the level of English in Swedish upper secondary education (Engelska 6 eller Engelska nivå 2)
Exemption from Swedish

Intended learning outcomes

After completing the course, the student should have acquired knowledge and skills in the following areas

- describe and critically examine the interrelationship between human cognition, modern lifestyles, and learning
- analyze human understanding of environmental and climate issues based on key concepts such as adaptation, complex systems, wild problems, goal conflicts and ethical dilemmas.
- reflect on how cognitive science can be used to understand the sustainability of different environments linked to opportunities for individual and collective change
- apply knowledge in cognitive psychology to work with transformation for change and/or human development within the course area
- reflect on different cognitive responses to environmental and climate change, which can act as both obstacles and drivers of change.

Course content

The course explores how human cognition interacts with the ecological crisis that characterizes the Anthropocene. By integrating theories from didactics with cognitive science, environmental psychology, neuroscience, it is analyzed how perception, attention, emotion and memory affect our understanding of complex sustainability issues including wild problems, situations that must be handled despite incomplete knowledge and disagreement about the causes of identified problems as well as desirable outcomes. Focus is placed on how cognitive biases, affective responses and cultural narratives shape our relationship to natural environments and our ability to act in them. The course also deals with how didactic methods in nature and other place-based learning can support cognitive processes that promote ecological awareness and action competence. Through a transformative learning perspective, it is discussed how teaching in and about natural environments can be designed to challenge ingrained thought patterns, create new understandings and support sustainability-related identity development. The content is concretized through analysis of didactic situations in outdoor educational contexts where the student is trained to identify cognitive and emotional dimensions of learning in nature.

Teaching and working methods

Teaching takes place through seminars, excursions, didactic design and analysis assignments as well as individual studies.

Examination

The course is assessed through oral and written presentations.

Applies to all courses regardless of grading scale.

- Students failing an exam covering either the entire course or part of the course two times are entitled to have a new examiner appointed for the reexamination.

If the course has a three-graded grading scale (U - VG), following applies:

- Students who have passed an examination may not retake it in order to improve their grades.

The following applies to courses that include a compulsory component:

- If special circumstances prevail, and if it is possible with consideration of the nature of the compulsory component, the examiner may decide to replace the compulsory component with another equivalent component.

If the LiU coordinator for students with disabilities has granted a student the right to an adapted examination for a written examination in an examination hall, the student has the right to it.

If the coordinator has recommended for the student an adapted examination or alternative form of examination, the examiner may grant this if the examiner assesses that it is possible, based on consideration of the course objectives.

An examiner may also decide that an adapted examination or alternative form of examination if the examiner assessed that special circumstances prevail, and the examiner assesses that it is possible while maintaining the objectives of the course.

Grades

ECTS, EC

Other information

Planning and implementation of a course must take its starting point in the wording of the syllabus. The course evaluation included in each course must therefore take up the question how well the course agrees with the syllabus.

The course is conducted in such a way that there are equal opportunities with regard to sex, transgender identity or expression, ethnicity, religion or other belief, disability, sexual orientation and age.

If special circumstances prevail, the vice-chancellor may in a special decision specify the preconditions for temporary deviations from this course syllabus, and delegate the right to take such decisions.

About teaching and examination language

The teaching language is presented in the Overview tab for each course. The examination language relates to the teaching language as follows:

- If teaching language is Swedish, the course as a whole or in large parts, is taught in Swedish. Please note that although teaching language is Swedish, parts of the course could be given in English. Examination language is Swedish.
- If teaching language is Swedish/English, the course as a whole will be taught in English if students without prior knowledge of the Swedish language participate. Examination language is Swedish or English (depending on teaching language).
- If teaching language is English, the course as a whole is taught in English. Examination language is English.