EPFL

LEARN-600 **Theoretical Foundations of Learning Sciences 1**

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Cursus	Sem.	Type
Learning Sciences		Obl.

Language of teaching	English
Credits	2
Session	
Exam	During the semester
Workload	60h
Hours	**48**
Courses	14
Exercises	34
Number of positions	**25**

Frequency

Every year

Remark

Next time: fall 2022

Summary

How do people learn and how can we support learning? This is part 1 of a two-part course that provides an overview of major theoretical perspectives that attempt to describe how learning works, and serves as an introduction to interpreting education as a means of designing learning environments.

Content

The field of Learning Sciences concerns two interrelated questions: How do people learn? How can we support learning? The first part of the course will provide students an overview of some of the major theoretical perspectives that have been employed to describe how learning works, such as the different metaphors of learning, preparation for future learning, collaborative learning, conceptual change and misconceptions. Through assigned readings, discussions and design tasks and projects, students are expected to become competent in understanding cognitive and social perspectives on learning and learning environment design, with a focus on human interaction with novel learning technologies and authentic practices for learners. Exposure to seminal literature in the field is expected to lay the theoretical foundation for students to develop new lines of inquiry within the Learning Sciences.

Note

The examination procedure consists of several assignments done across the semester.

Keywords

learning sciences, learning theories, constructivism, instructivism, collaborative learning

Learning Outcomes

By the end of the course, the student must be able to:
 • Understand cognitive, embodied, and social perspectives on learning and learning environment design.