Summary
The students will understand the factors which affect the learning of professionals (such as engineers or teachers). They will understand differences between learning during (a) initial training, (b) induction into the workplace, and (c) the on-going development of experienced professionals.

Content
See the full description of the course in the Introduction to project of the fall semester.

Social and Cognitive Factors in Professional Learning
General Aim: To enable participants to understand the ways in which professionals learn their profession, in the initial training stage, the induction into practice stage and the continuing professional development stage.

General Description of Material: The ability for individuals and organisations to learn is often regarded as central to their survival and success in the contemporary world. But how do professionals (like teachers, or engineers) learn their profession? What are the differences between how we learn (a) in initial training, (b) during the transition into work and (c) when an experienced professional?

Learning is partially a psychological concept, but professionals operate in social contexts and so an understanding of professional learning also draws on sociological research. Therefore understanding professional learning will involve a multi-disciplinary approach.

Plan of the course: Students will design and conduct a piece of research in small teams with advice and supervision. Inputs on aspects of research design, data collection and analysis will be provided.

Keywords
Learning, Education, Social and Behavioural Science Research, Interdisciplinary Studies

Learning Prerequisites
Required courses

How People learn I: HUM-432(a)

Learning Outcomes
By the end of the course, the student must be able to:
- Design an experiment or a survey on learning
- Hypothesize relationships between learning and social or psychological factors
- Interpret literature to generate hypotheses
- Conduct the experiment or survey
- Analyze the data collected using appropriate statistical approaches
• Interpret the data in light of the literature and initial hypotheses

**Transversal skills**

• Plan and carry out activities in a way which makes optimal use of available time and other resources.
• Assess progress against the plan, and adapt the plan as appropriate.
• Set objectives and design an action plan to reach those objectives.
• Communicate effectively with professionals from other disciplines.
• Evaluate one’s own performance in the team, receive and respond appropriately to feedback.
• Negotiate effectively within the group.
• Respect relevant legal guidelines and ethical codes for the profession.
• Access and evaluate appropriate sources of information.
• Collect data.
• Write a literature review which assesses the state of the art.
• Write a scientific or technical report.

**Teaching methods**
Supervised team work sessions, mini-lectures

**Expected student activities**
Participation in planning collaborative research and in executing the plan

**Assessment methods**
80% Written report
20% Portfolio

**Supervision**
Office hours Yes
Assistants No
Forum Yes

**Resources**

**Bibliography**


**Ressources en bibliothèque**
• Surveys in Social Research / De Vaus
• Doing your research project / Bell
• Discovering Statistics Using SPSS / Field
• Research Methods in Education / Cohen

**Moodle Link**
• http://moodle.epfl.ch/course/view.php?id=13956