Embodied Cognition Lab

Skaiste Kerusauskaite

Syllabus

16/05/2024

Learning objectives (Obiettivi formativi)

Embodied cognition is an avant-garde frontier in cognitive science, supported by substantial neuroscientific evidence. It posits that cognitive processes are deeply rooted in the body-mind-environment interactions and are therefore embodied, embedded, enacted, and extended (the famous 4Fs). Through an interdisciplinary (experimental, philosophical, linguistic, anthropological, neuroscientific, and phenomenological) approach, students will explore both the theoretical foundations and practical-empirical applications that challenge the traditional computational view of cognition as solely brain function.

Knowledge and skills to be acquired (Conoscenze ed abilità da acquisire)

By achieving these learning objectives, students will gain a comprehensive understanding of the role of the mind-body continuum in cognitive functioning and its implications for various aspects of human life.

1. Understand the theoretical frameworks and major theories in the field of embodied cognition.
2. Comprehend the impact of body and context on cognitive processes, such as perception, sense-making and language.
3. Critically evaluate and apply empirical research studies in the field of embodied cognition, including experimental designs and data analysis techniques.
4. Apply the concepts and theories to real-world scenarios.
5. Explain the influence of cultural and individual differences on embodied cognition.

Prerequisites for attending the course:

- General knowledge in psychology, major cognitive processes. The students who did not take undergraduate-level psychology course, may need to spend extra time to catch up basic cognitive concepts and terms to be prepared for the discussion portion of class.
- An appropriate level of English language, enabling you to comprehend written scientific material and to interact orally.

Teaching programme

1. The symbol grounding & concepts
2. Sensorimotor integration & predictive processing
3. Affordances & Situated cognition
4. Embodied language & meaning making
5. Spatial schemas & metaphor
6. The extended mind & peri-personal space
7. Consciousness & Embodied self
8. Proprioception & interoception
9. Affect & somatic marker hypothesis

Teaching methods (Modalità di svolgimento del corso)

This course aims at applying theoretical knowledge in interpreting the observations of daily life and of future professional practice. Therefore, additionally to frontal lectures, interactive teaching methods will be applied. This includes also the practical laboratory project to be implemented by the students.

Assessment of learning (Modalità di svolgimento dell'esame)

The final grade will be the result of:

- Assigned Presentation (20%)

- Laboratory project (20%)

- Oral exam (60%): students should demonstrate knowledge of the course contents, reasoning, synthesis and argumentative skills and a good command of the vocabulary regarding the topics covered.

Texts (Testi di riferimento)

A selection of reading texts and video task sheets with URL will be made available for download on the UER website.

Receiving (Ricevimento)

At the end of classes or by appointment (skaiste.kerusauskaite@unier.it)