

Perception, attention

Oktatás célja

Aim of the course:

This course aims to provide an in-depth overview of two critical cognitive processes: perception and attention. After an introduction to the basic concepts, we will review state-of-the-art empirical results from behavioral and neuroscientific studies in order to understand the cognitive processes together with the neural networks and brain mechanisms contributing to the perception of the visual and auditory information, and attentional mechanisms.

Learning outcome, competences

knowledge:

- Basic concepts of perception and attention
Understanding the principles that govern how the mind and brain work in perception and attention
- In-depth knowledge of current methodologies to study perception and attention

attitude:

- Utilization of knowledge in scientific approach, communication, presentation

skills:

- Skills in understanding and applying methodological approaches to study perception and attention
- Skills of identifying cognitive mechanisms and neuroanatomical structures related to perception and attention

autonomy, responsibility:

- Self-employed implementation of knowledge and skills according to ethical standards

Content of the course

Topics of the course

- Introduction to Perception
- Neural Processing and Perception
- Cortical Organization
- Perceiving Objects and Scenes
- Visual Attention
- Taking Action
- Perceiving Motion
- Perceiving Color
- Perceiving Depth and Size
- Hearing
- Auditory Localization and Organization
- Speech Perception
- Music Perception

Learning activities, learning methods

- Lectures
- Seminar work, article presentations

Evaluation of outcomes

Learning requirements, mode of evaluation, criteria of evaluation:

requirements

- Reliable basic knowledge on the neuroanatomical, psychophysiological and neuroscientific background of perception and attention

mode of evaluation: kollokvium

- Written exam

criteria of evaluation:

- Knowledge on basic concepts and the skill of utilizing the models of cognitive neuroscience adequately

Reading list

Compulsory reading list

- E. Bruce Goldstein (2014) Sensation and Perception, International Edition 9th Edition.
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