

Course title: **Brain and Cognition Research in the 21st Century**

Course number: **27-613-01**

Lecturer: **Dr. Vadim Axelrod**

Year: TASHP'HEY (fall semester of 2024)

Hours: 2 h/w

Semester: 1

a. Course goals

The course will provide students with theoretical knowledge on advanced topics in brain and cognition research (Cognitive Neuroscience)

b. Course content:

The course is given in English. The course include a series of frontal lectures on the following topics:

- History of Cognitive Neuroscience
- Research methods in cognitive neuroscience
- Examples of the principles of localization in the brain
- Domain-specific vs. domain-general processing
- Challenges in interpreting localization in the brain
- Hierarchical processing principle
- Feedback processing principle
- Spontaneous activity and brain networks
- Face processing

c. Course requirements

Prerequisites: none

Requirements: Class attendance and passing the final exam

Final grade:

85% final exam

15% class attendance