Neurobiology of Human Memory

Instructor information

Prof. Dr. Bianca Wittmann
Contact: bianca.wittmann@psychol.uni-giessen.de; 0641-99-262160
Office: Phil I, F 21a

Prerequisites

Introductory module in biological psychology or (cognitive) neuroscience

Course description

Memory is essential for cognition and shapes our personal identities. This class will focus on declarative memory.

Course goals

At the end of this course, students will be able to discuss and critically evaluate recent memory research.

Specifically, they will be able to

- Describe the neural mechanisms underlying declarative memory
- Explain how emotion, sleep and exercise influence memory
- Give examples of cortical plasticity

Course requirements

Presence in class is required. Two classes may be missed, but students are responsible for catching up on class content. Students are expected to prepare a presentation on a book chapter or on a current research paper. Depending on class size, some students may prepare an essay instead.

Grading

Oral presentation (or essay): 100%

Course outline

Section 1 – Introductory lecture(s)
Section 2 – Book chapters and papers on basic memory processes
Section 3 – Factors that influence declarative memory
Section 4 – Neural plasticity mechanisms

Language

Readings will be in English; presentations and in-class discussions will be in German. Foreign exchange students may give a presentation in English upon request.