Exchange programme Vrije Universiteit Amsterdam

Vrije Universiteit Amsterdam - Exchange programme Vrije Universiteit Amsterdam - 2024-2025

Exchange

Vrije Universiteit Amsterdam offers many English-taught courses in a variety of subjects, ranging from arts & culture and social sciences, neurosciences and computer science, to economics and business administration.

The International Office is responsible for course approval and course registration for exchange students. For details about course registration, requirements, credits, semesters and so on, please visit the exchange programmes webpages.

Behaviour and the Brain 2: Cognitive Neuroscience

Course Code	P_BBAC_2
Credits	6
Period	P6
Course Level	200
Language Of Tuition	English
Faculty	Faculty of Behavioural and Movement Sc.
Course Coordinator	dr. J.J. Fahrenfort
Examiner	dr. J.J. Fahrenfort
Teaching Staff	dr. J.J. Fahrenfort
Teaching method(s)	Study Group, Lecture

Course Objective

At the end of the course, you will have gained a basic understanding of some explanatory models in cognitive neuroscience (computational, mechanistic). In addition, you will have obtained a broad overview of the history of cognitive neuroscience, the most important discoveries that were crucial in developing the field, and the people who made them. You will have gained basic knowledge of the architecture of the brain and the evolutionary history of the nervous system. You will have gained basic knowledge of the methods and techniques used in cognitive neuroscience such as electrophysiology, EEG, fMRI, TMS and tDCS. You will know which neural mechanisms are involved in vision and perception. You will know some of the mechanisms involved in neural plasticity and memory, and finally, you will have obtained a bird’s eye view of some current neurobiological theories of consciousness and how they relate to attention.

Course Content

The course provides a broad overview of the current state of affairs in cognitive neuroscience regarding neural plasticity, perception, memory, attention, consciousness and mental life and the research methods used in cognitive neuroscience. In addition, students gain a basic understanding of the degree to which human behavior and mental life can be understood in terms of the architecture and computational principles of the brain. The course puts special emphasis on mechanistic understanding and computational principles and provides ample historical context. The workgroups are used to explore theoretical viewpoints and practical applications of cognitive neuroscience through discussions and presentations.

Additional Information Teaching Methods

Lectures, work groups and literature study. Attendance during work groups is obligatory.

Method of Assessment

Written exam (multiple choice, 75%) and work group evaluation (presentations and short reports, 25%)

Entry Requirements

A background in psychology, biology, or medicine is mandatory.

Literature

Brain and Behavior: A Cognitive Neuroscience Perspective by David Eagleman and Jonathan Downar. Oxford University Press. ISBN: 9780195377682

Additional Information

Tuition and all materials will be in English.

Partial grades are only valid in the year in which the grades have been achieved.

Please note that the course will be taught full-time in period 6 (ie.,full-time in June).

Note that the retake for this course takes place in July, which may conflict with travel plans for international students that want to go back home during the summer.

Custom Course Registration

You can only enroll for the preminor courses after the preminor information session early in the year.