

COURSE DETAIL

THE MAMMALIAN BRAIN: STRUCTURE, FUNCTION AND PLASTICITY I

Country

Germany

Host Institution

Free University of Berlin

Program(s)

Humboldt University Berlin, Free University Berlin

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

116

UCEAP Course Suffix**UCEAP Official Title**

THE MAMMALIAN BRAIN: STRUCTURE, FUNCTION AND PLASTICITY I

UCEAP Transcript Title

MAMMALIAN BRAIN I

UCEAP Quarter Units

4.50

UCEAP Semester Units

3.00

Course Description

This course includes electrophysiological recordings (patch-clamp recordings) of neurons in acute brain slices from mice. The basic properties of neurons and their synaptic connections are analyzed. The patch-clamp technique (current and voltage-clamp), neuropharmacology, and stimulation protocols for long-term changes in synapses are taught as methods. Programs such as IGOR are used for the quantitative analysis of the data. In the accompanying seminar, the students present their own project and other relevant publications.

Language(s) of Instruction

English

Host Institution Course Number

23434a,23434b

Host Institution Course Title

THE MAMMALIAN BRAIN: STRUCTURE, FUNCTION AND PLASTICITY I

Host Institution Campus

Host Institution Faculty

BIOLOGIE, CHEMIE, PHARMAZIE

Host Institution Degree

Host Institution Department

Biologie

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