

Module Name Essentials in Neuroscience - Lectures						
Type of Module Advanced Module				Module Code AM-B-N 1		
Identification Number MN-B-N 1	Workload 180 Hours	Credit Points 6 CP	Term 1. – 3. Semester	Offered Every WiSe	Start Winter Term Only	Duration 1 Semester
1	Course Types a) Lecture		Contact Time 49 h	Private Study 138 h		Planned Group Size 50-70 Students
2	Module Objectives and Skills to be Acquired Students who successfully completed this module ... <ul style="list-style-type: none"> • have acquired an understanding of neural functions and mechanisms from the cellular to the behavioral level • have acquired in-depth knowledge of important concepts in the neurosciences • will be in a position to access future developments in the neurosciences • have acquired the ability to form and test hypotheses in the neurosciences 					
3	Module Content <ul style="list-style-type: none"> • Neuroanatomy and cytology • Brain architecture • Ion channels and electrical properties of neurons • Neural signaling • Circuit function • Motor control • Sensory systems • Learning and memory • Neurodegeneration and -regeneration • Neuroendocrinology and neuromodulation • Computational neuroscience • Neuropathology • Neural development • Enteroreception and control of homeostasis • Behavior 					
4	Teaching Methods <ul style="list-style-type: none"> • Lectures 					
5	Prerequisites (for the Module) Formally: none Additional academic requirements: The knowledge of neurobiology on the level of a general biology text book (e.g. Campbell or Purves) is required.					
6	Type of Examination Two hours written examination about topics of the lectures (100 % of the total module mark)					
7	Credits Awarded Written examination at least “sufficient”					

8	Compatibility with other Curricula None
9	Proportion of Final Grade 6/114
10	Module Coordinator PD Dr. Joachim Schmid, phone 470 6135, e-mail: joachim.schmidt@uni-koeln.de
11	Further Information <p>Participating faculty: Prof. Dr. S. van Albada, PD Dr. B. Altenhein, Prof. Dr. A. Büschges, Prof. Dr. S. Daun, Prof. Dr. H. Endepols, Dr. M. Gruhn, Prof. Dr. K. Ito, Prof. Dr. P. Kloppenburg, Prof. Dr. T. Korotkova, Prof. Dr. M. Nawrot, Prof. Dr. R. Predel, Dr. T. Riemensperger, Dr. V. Rostami, PD Dr. J. Schmidt</p> <p>Literature:</p> <ul style="list-style-type: none"> • Information about textbooks and other reading material will be given on the ILIAS representation of the course <p>General time schedule: Weeks 1-14: Tue. and Thu. from 11:00 to 12:30 a.m.; Week 15 (Mon.-Fri.): Preparation for the written examination</p>