

Master “Interdisciplinary Neuroscience”

Lecture “Neuroscience I – selected topics ” WS 2012/13

Monday, 16:15 – 18:00, Wednesday, 08:15 – 10:00
venue: Biologicum, Campus Riedberg, Bio -1.203 (basement) , lecture hall 2

Topics of the lecture are structured according to the chapters in the textbook Bear et al: “Neuroscience: Exploring the brain”.

Additional literature to the lecture: Squire et al. – Fundamental neuroscience
For human brain anatomy (lectures 12-14): Deller/Sebesteny - Fotoatlas Neuroanatomie, Elsevier

Date		Lecturer	Topic
Wed, 17.10.12	Lecture 1 Chapter 1,2	Zimmermann	Neuroscience: Past, Present, and Future
Mo, 22.10.12	Lecture 2 Chapter 1,2	Zimmermann	Neurons and Glia
Wed, 24.10.12	Lecture 3 Chapter 3,4	Roeper	The Neuronal Membrane at Rest/The Action Potential
Mo, 29.10.12	Lecture 4 Chapter 3,4	Roeper	The Neuronal Membrane at Rest/The Action Potential
Wed, 31.10.12	Lecture 5 Chapter 5,6	Klein	Synaptic Transmission / Neurotransmitter Systems
Mo, 05.11.12	Lecture 6 Chapter 5,6	Klein	Synaptic Transmission / Neurotransmitter Systems
Wed, 07.11.12	Lecture 7 addition	Kössl	Phylogeny and Evolution of Nervous Systems
Mo, 12.11.12	Lecture 8 Chapter 9,10	Peichl	The Eye /Central Visual System
Wed, 14.11.12	Lecture 9 Chapter 9,10	Peichl	The Eye /Central Visual System
Mo, 19.11.12	Lecture 10 Chapter 8	Kössl	The Auditory, Vestibular and Somatosensory Systems
Wed, 21.11.12	Lecture 11 Chapter 11,12	Kössl	The Auditory, Vestibular and Somatosensory Systems
Mo, 26.11.12	Lecture 12 Chapter 7 + Appendix	Deller	The Structure of the Nervous System /Human Neuroanatomy
Wed, 28.11.12	Lecture 13 Chapter 7 + Appendix	Deller	The Structure of the Nervous System /Human Neuroanatomy
Mo, 03.12.12 *	Lecture 14 Chapter 7 + Appendix	Deller	The Structure of the Nervous System /Human Neuroanatomy

Wed, 05.12.12	Lecture 15 Chapter 8	Grünewald	The Chemical Senses
Mo, 10.12.12	Lecture 16 Chapter 15	Klein	Chemical Control of the Brain and Behavior
Wed, 12.12.12	Lecture 17 Chapter 13,14	Hilker	Control of Movement
Mo, 17.12.12	Lecture 18 Chapter 13,14	Hilker	Control of Movement
Wed, 19.12.12	Lecture 19 Chapter 16,17,18	Roeper	Motivation, Emotion, Sex and Brain
Mo, 14.01.13	Lecture 20 Chapter 16,17,18	Roeper	Motivation, Emotion, Sex and Brain
Wed, 16.01.13	Lecture 21 Chapter 16,17,18	Roeper	Motivation, Emotion, Sex and Brain
Mo, 21.01.13	Lecture 22 Chapter 19	Stehle	Brain Rhythms and Sleep
Wed, 23.01.13	Lecture 23 Chapter 21	Gaese	Attention
Mo, 28.01.13	Lecture 24 Chapter 20	Kössl	Language
Wed, 30.01.13	Lecture 25 Chapter 22	Sigurdsson	Mental Illness
Mo, 04.02.13	Lecture 26 Chapter 23	Acker-Palmer	Wiring the Brain
Wed, 06.02.13	Lecture 27 Chapter 24,25	Grünewald	Neurobiology of Learning and Memory
Mo, 11.02.13	Lecture 28 Chapter 24,25	Grünewald	Molecular mechanisms of Learning and Memory formation

** please note that the lecture on December 3 (Prof. Deller) will take place at Campus Niederrad, lecture hall in building 27 from 17:00 – 18:45*

Exam:

Friday, 15. February 2013

10:00h

Biologicum, Bio -1.203 (basement) , lecture hall 2