

NRO69H3: The synaptic organization of the brain,  
Mondays 7-9 pm, BV226 and HW 215

Complete Course Material: Lectures 1-10.ppt and 1-10.doc

Additional References: The Synaptic Organization of the Brain, Gordon M. Shephard  
Principles of Neural Science (4th ed.), Kandel, Schwartz, and Jessell

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Office Hours: Mondays: 11-12 pm; 1-2 pm; 5:30-6:30 pm

**Outline**

- Sept. 14 Organizational principles of the mammalian CNS
- Sept. 21 The ionic basis of the action potential and synaptic potentials
- Sept. 28 Synaptic integration and neuronal firing properties
- Oct. 5 Techniques for measuring synaptic activity
- Oct. 19 Synaptic organization of the cerebellum
- Oct. 26 Term test 1 (30%) on lectures 1-4**
- Nov 2 Synaptic organization of the basal ganglia
- Nov. 9 Synaptic organization of the hippocampus
- Nov. 16 Synaptic plasticity and learning
- Nov. 23 **Term test 2 (30%) on lectures 5-7**
- Nov. 30. Synaptic organization of the thalamus
- Dec 3. Extrasynaptic receptors and volume transmission  
Cortical plasticity and cognition

Mark Breakdown: Term test 1: 30%  
Term test 2: 30%  
Final (culminative): 40%

