

Neural Circuits – Syllabus Spring 2017

Instructor: Adam Carter

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Schedule:

Thursdays from 2:00 – 4:00 in Meyer 760

Description:

This reading course is focused on understanding the cellular and synaptic physiology of neural circuits in the mammalian brain. Each class consists of a round table discussion of papers selected to highlight distinguishing features of the circuit. PhD students must have taken Cellular and Molecular Neuroscience, and should have a strong interest in cellular physiology.

Reading:

Shepherd, *The Synaptic Organization of the Brain* (5th Ed.)

Articles will be assigned 1 week beforehand

Grading:

Final grade will be determined by class participation (1/3), class presentations (1/3) and final paper (1/3, due ~May 4). The paper should be written in the following format: 2 pages, single-spaced, 1" margins, 11pt Arial font, and references extra in Neuron format.

Date	Description	Reading
Jan 26	Introduction	Shepherd 1 & 2
Feb 2	Invertebrates	Articles
Feb 9	Spinal cord	Shepherd 3 & Articles
Feb 16	Olfactory bulb	Shepherd 5 & Articles
Feb 23	Retina	Shepherd 6 & Articles
Mar 2	Cerebellum	Shepherd 7 & Articles
Mar 9	Thalamus	Shepherd 8 & Articles
Mar 16	No class	
Mar 23	Basal ganglia	Shepherd 9 & Articles
Mar 30	Amygdala	Articles
April 6	Hippocampus	Shepherd 11 & Articles
April 13	No class	
April 20	Olfactory cortex	Shepherd 10 & Articles
April 27	Cerebral cortex	Shepherd 12 & Articles
May 4	No class	