Synaptogenesis
Tentative Syllabus (April 5 Version)

September 8
Organizational meeting. Fact-finding about synapse diversity across brain regions
Graded homework, due Sept 15

September 15 & 22
Cellular Mechanisms: transport of presynaptic proteins

September 29 & Oct 6
Cellular mechanisms: transport of postsynaptic proteins

October 13
Conversion of axo-dendritic contacts into stabilized synapses

October 20
Synapse Maturation

October 27 & Nov 3
Molecular Mechanisms: Trans-synaptic synaptogenic adhesion molecules

November 10 & 17
Molecular mechanisms: Secreted molecules – neurotrophic factors and their receptors

November 24
Thanksgiving – no class
You may submit a rough draft of a paper

Dec 1
Synapse limiting molecules & Synaptogenesis in adulthood

Dec 8
Debate – hierarchy of mechanisms

Dec 13
No class - Term paper due Dec 15
Class structure

There will be weekly reading assignments, drawn from peer-reviewed journals in the field of neuroscience.

There will be weekly 5-min quizzes, designed to assess whether you have read the material and whether you comprehend the major points made in those reading material.

You will be required to write a paper, and to participate actively in class.

Your grade will be based on class participation, quiz scores, graded homeworks and quality of the paper. The paper will count towards 50% of the final grade. If you want feedback on a rough draft of a paper, that rough draft is due November 24th.