

NEURO 520 Cellular and Molecular Neuroscience (Fall 2013)

Instructor: Patrick Drew
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Overview:

The brain is comprised of neurons and glia, specialized cells whose function underlies behavior. Students will learn the fundamentals of how neurons and glia are organized, how neurons and synapses develop and are modified by activity, and how neurons communicate electrically and chemically with each other. This course will be useful to graduate students in neuroscience and neuroscience related fields.

Objectives

1. To learn the basics of how neurons and glia are organized.
2. To learn development of neurons and synapses and modifications.
3. To learn how neurons communicate electrically and chemically.

Grading

Midterms and Final (75%)

Papers on current research topics (25%)

Text

Principles of Neural Science (5th Edition)
Kandel, Swartz, Jessel, Siegelbaum, and Hudspeth

Pre-requisites

Graduate standing or consent of instructor.