

# BIOL 351: Foundations of Cellular Neuroscience II

This course explores a wide range of cellular neuroscience, including: membrane biophysics and action potentials; ion channels; synaptic transmission and plasticity; dendritic integration and computation. Lectures also introduce techniques used to record and image activity and signaling in neurons as well as quantitative methods used to analyze experimental data. The course also features in-depth discussions of classic and current literature, with problem sets and exams to enhance and test the understanding of lecture materials.

## Learning Objectives

- Develop conceptual and quantitative understanding of basic cellular physiology and biophysics
- Learn about electrophysiological and imaging techniques used in neuroscience experiments
- Gain a historical perspective on the study of ion channels, synapses and neurons

**Credits:** 2

**Class Type:** Graduate Course

**Program:** Biology, Genetics, and Medicine

**Availability** Currently Not Available