NEUROSCIENCE (NEUR)

NEUR 8006 SYSTEMS NEUROSCIENCE (3 credits)
This is an advanced course for the Neuroscience major designed to provide a solid understanding of the peripheral and central connections that make the systems of the body function. Data and theories of brain-behavior relationships from current research in neuroscience will be discussed. (Cross-listed with NEUR 4000).

Prerequisite(s)/Corequisite(s): NEUR 1500, BIOL 1450, BIOL 1750, and PSYC 1010; or permission. Not open to non-degree graduate students.

NEUR 8876 MOLECULAR AND CELLULAR NEUROBIOLOGY (3 credits)
This course presents foundational topics in molecular and cellular neurobiology in the context of how the nervous system is functionally organized. Topics include: nervous system cell types and their subcellular organization; electrical properties of neurons and glia; energy metabolism and biochemistry of the brain; intra- and intercellular neuronal signaling; the regulation of gene expression in neuronal cells; synaptic plasticity; and how these are altered in disease. (Cross-listed with BIOL 4870, BIOL 8878, NEUR 4870).

Prerequisite(s)/Corequisite(s): NEUR 1500, or both NEUR 1520 and NEUR 1540, or BIOL 3020, or permission of instructor.