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.