NEU 466G. Functional and Synaptic Neuroanatomy.

Neuroanatomy and functional connectivity as a basis for brain function and behavior examined from gross structure, cytology, and nanoscale synaptic connectivity in the somatosensory, motor, visual, auditory, olfactory, taste, limbic, vestibular, hypothalamus, and other symptoms. Examination of the synaptic basis of learning and memory, fear, sleep, stress, and synaptic changes during development, aging, mental retardation, and neurological diseases. Laboratory projects involve three-dimensional reconstructions from serial section electron microscopy. Three lecture hours and one and one half laboratory hours a week for one semester. Only one of the following may be counted: Biology 337 (Topic: Neurobiology of Synaptic Circuits), 337 (Topic: Human Neuroanatomy), 366F, or Neuroscience 466G.

Prerequisite: Neuroscience 330 or 365R (or Biology 365R) with a grade of at least B-. 