

Functional Human Neuroanatomy 2009
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GMS 6705, 4 credits
Summer B Term* (June 29-August 5, 2009)

FUNCTIONAL HUMAN NEUROANATOMY is a graduate level course offered by the Department of Neuroscience. This course is modeled after the Medical Neuroscience course, taken by 1st year medical students, and will cover topics related to the neuroanatomical underpinnings of central nervous system function and behavior. Functional Human Neuroanatomy is an intense 6 week course organized with both lecture and lab experiences. Lectures will include topics such as cellular neuroscience, systems neuroscience, and higher cortical functions. The anatomy lab will provide students with an extensive opportunity for a hands-on experience with human brains and brain sections. This course is geared for clinical- or research-oriented graduate students as well as pre-professional undergraduate students who have an interest in medicine or brain-related research (see prerequisites below).

Course Description: Functional Human Neuroanatomy is a Summer B, 4 credit-hour class that will run from June 29 to August 5, 2009. Lab introductions will be given in the morning, followed by structured lab time. Lectures will take place in the afternoon. This is a challenging class; we **strongly** discourage taking any other courses while taking this class. Those actively working in a research lab or with clients should expect to have limited time for research.

For registration, please contact BJ Streetman in the Dept of Neuroscience – streetman@mbi.ufl.edu
* COM IDP students must register for the Summer C section, for funding considerations. Other students can register for the Summer B section. Contact BJ with registration questions.

Prerequisites: Acceptable prerequisites include upper division biology classes that cover molecular/cellular biology or upper division psychobiology courses. Undergraduates are encouraged to take this class, but enrollment will be limited based upon the number of graduate students enrolled as well as previous exposure to the biological sciences.

Text: Purves “Neuroscience” (4th Edition)
Haines “Neuroanatomy: An Atlas of Structures, Sections, and Systems” (7th Edition)
Textbooks will be available at the Health Science Center bookstore.

Broad Educational Goals:

- Understand basic principles of cellular neuroscience - functions of neurons and glia, neurotransmitter actions, and mechanisms of synaptic and action potentials
- Learn gross and microscopic anatomy of the central nervous system (brain, brainstem, and spinal cord)
- Relate the anatomy of central neural pathways to specific functional systems
- Be able to localize and name a CNS lesion when presented with neurological symptoms.
- Begin to appreciate higher cortical functions and how they relate to the practice of neurology