

REPRESENTATIVE SYLLABUS  
CONTENT OF FUTURE COURSES MAY VARY

**APPH 4400 - Human Neuroanatomy**

**Instructor -** [REDACTED]  
**E-mail** [REDACTED]  
**Office** [REDACTED]  
**Office hours -** [REDACTED]  
**Class days/time/place –** [REDACTED]  
**Laboratory –** [REDACTED]

While this text is not emphatically required, it really is a good idea to find a copy. **All readings will come from chapters in this text.** Another option is *Human Neuroanatomy: A Text, Brain Atlas and Laboratory Dissection Guide* (Bruni & Montemurro, ISBN: 978-0195371420). **Occasionally different texts and references use slightly different terms to define the same anatomical structures, so caution is given to branching out too wide. You will be evaluated based on what is presented in this class.**

**General Course Description:**

The purpose of this course is to learn the anatomical makeup of the human nervous system. In this course we will closely examine details of central and peripheral neuroanatomy with links to function where appropriate. As well, comparisons with non-human vertebrate neuroanatomy will be made. We will also regularly link clinical and research perspectives into lectures.

The study of human neuroanatomy can be a challenge, but will be a challenge worth the effort. The expected outcome of this course is to have a very firm knowledge of human neuroanatomy and have a very strong familiarity of the overall architecture and integration of the nervous system.

**Course Grading:**

Exams (3).....	33% each
<b>Total</b>	100%

**\*\*Exam content will differ for graduate students, which will be asked comprehensive and applied questions. Undergraduate exams will be non-comprehensive and content directed.**

## Semester Schedule

<u>Week</u>	<u>Date</u>	<u>Topic</u>	<u>Readings</u>	<u>Notes</u>
1		Overview, Anatomical orientation, Bony features	Ch1	
		Neural development and cells	Ch2	
2		Spinal cord	Ch3	Guest Lecture, Dr. Nichols
		Brainstem and cranial nerves	Ch3 & 4	
3		Receptors and Reflexes	Ch 6-8	Guest Lecture, Dr. Nichols
		Forebrain and CNS architecture	Ch 5	
4		Ascending Sensory Pathways/Receptors Part 1		Guest Lecture, Dr. Nichols
		Ascending Sensory Pathways/Receptors Part 2		Guest Lecture, Dr. Nichols
5		<b>EXAM 1</b>		
		Reticular Formation	Ch9	
6		Vestibular System	Ch11	Guest Lecture, Dr. Nichols
		Auditory System 1	Ch10	
7		Auditory System 2		
		Visual system and reflexes	Ch12 & 13	
8		Thalamus	Ch14	
		Basal ganglia	Ch16.1	Guest Lecture, Dr. Kleim
9		FALL BREAK		<b>No class</b>
		SfN Annual Meeting		<b>No class</b>
10		<b>EXAM 2</b>		
		Motor systems –motoneurons and pyramidal tract	Ch15	
11		Cerebellum	Ch16.2-16.8	
		Olfactory System	Ch17	
12		Meninges and CSF	Ch23	Guest Lecture, Dr. Kleim
		Limbic System/Hypothalamus	Ch18-19	Guest Lecture, Dr. Kleim
13		Autonomic Nervous System 1	Ch20	Guest Lecture, Dr. Nichols
		Autonomic Nervous system 2		Guest Lecture, Dr. Nichols
14		Cerebral Hemispheres and white matter tracts	Ch21	
		Thanksgiving		<b>No class</b>
15		Cerebral Hemispheres and white matter tracts 2		
		Cortical anatomy and systems		
16		Cerebral vasculature	Ch22	
		REVIEW		
FINAL				