Course Syllabus

Course Information

Course Number/Section	NSC 4366.001
Course Title	Neuroanatomy
Term	Fall 2013
Days & Times	Founders North (FN) 2.102 TR 2:30-3:45

Professor Contact Information

Professor	Dr. Steve McWilliams
Office Phone	972-883-6785 (no voice mail)
Email Address	***course-related communication, email must be sent through elearning.*** **I am the 'section instructor'**
Office Location	GR 4.304
Office Hours	MWF 1:00-2:00 or by appointment
Other Information	Course Web Site: UTD eLearning

Course Pre-requisites, Co-requisites, and/or Other Restrictions

None; but NSC 3361 Behavioral Neuroscience is very helpful.

Course Description

This course introduces the basic anatomy of the brain, spinal cord, and peripheral nerves, as well as some functional principles as they relate to neuroanatomical organization. This course will also explore some clinical aspects of neuroscience as it relates to neuroanatomy.

Course Content

To understand the workings of the brain, especially with respect to disease and behavior, you must first learn neuroanatomy and how it relates to function. We will first examine basic nervous system organization and fundamentals. We will then consider clinical neurology and brain imaging and the relationship between neuroanatomy and neurology. This will be followed by a study of the overall anatomical organization of the different parts of the nervous system including the brain, spinal cord, and peripheral nervous system as well as some related functional systems. We will consider several case examples as they relate to clinical neurology.

Student Learning Objectives/Outcomes

After completing the course, students should be able to:

1. Describe the basic fundamental organization of the nervous system
2. Describe the basic principles of neurophysiology as it relates to neuroanatomy
3. Describe and identify the nervous system using proper neuroanatomical terminology
4. Describe and relate neuroanatomical structures with particular functions and systems
5. Describe and analyze several clinical aspects as they relate to neuroanatomical structures
6. Integrate case studies, neurophysiology, and anatomical structures
7. Locate and identify major brain structures on MRI, CAT, and PET scans

Required Textbooks and Materials
Clinical Neuroanatomy, 26th Ed., Waxman (the 27th Ed. Can also be used)
Clinical Neuroanatomy, 7th Ed., Snell

Suggested Course Materials
None

Grading Policy
Exams (100%): There will be four exams and four practicums during the course. Each exam will be worth 20% of your final grade and each practicum will be worth 5% of your final grade. Each exam and practicum will cover the preceding material. The questions on the exams will be taken from the assigned textbook readings, class lectures, as well as any additional material that I may provide. Exams will consist of true/false and multiple choice questions. Practicums will also consist of true/false and multiple choice questions but will require you to identify neuroanatomical structures as well as some pathology from both neuroanatomical drawings and neuroimages. You will need scantron a form 229630 or 229634 and a pencil for each exam and practicum.

Final Grades: A (90–100), B (80–89), C (70–79), D (60–69), F (≤ 59).

Course & Instructor Policies

Make-up exams
Missed exams will be given only if: (1) you were seriously ill and have verifiable documentation from a physician, or (2) you were detained at the time of the exam and have verifiable documentation, or (3) you made arrangements prior to the exam. In any of these cases, you must notify the professor in advance of the exam via eLearning. If you were detained, you must notify the professor as soon as possible. Otherwise, you will receive a grade of zero.

Attendance and Readings
Neuroanatomy is a challenge even for the most studious student. Regular attendance and reading are vital to your understanding the subject. Your performance in this course will probably be affected by your attendance. I will often emphasize particular parts of a chapter that I think are critical for your future studies. If you are not in class, you will not know what parts I have emphasized. In addition, I may from time to time present material in lecture that is not covered in the textbook. This will often include material designed to enhance your knowledge and peak your interest. This should encourage you to attend class and to keep up on your reading assignments.

Elearning
To comply with FERPA regulations, **all email discussions to and from me MUST be through elearning.** This is to protect your privacy, and to keep me organized. Discussion boards and Chat are available for your use. I will not routinely monitor them unless I receive complaints about inappropriate posting. Grades will be posted as soon as they are available. Announcements may be made from time to time.

Assignments & Academic Calendar

Day	Date	Topic	Readings
Tue	27 Aug	Nervous System Fundamentals and Basic Organization	Chpts. 1, 2, 3 (Waxman); 1, 2, 3 (Snell)
Thu	29 Aug	Nervous System Fundamentals and Basic Organization	
Tue	3 Sep	Nervous System Fundamentals and Basic Organization	
Thu	5 Sep	Clinical Neurology and Brain Imaging	Chpts. 4, 22, 23, 24 (Waxman)
Tue	10 Sep	Clinical Neurology and Brain Imaging	
Thu	12 Sep	**Practicum I**	
Tue	17 Sep	**Exam I**	
Thu	19 Sep	The Ventricles, Meninges, and Neurovascular System	Chpts. 11, 12 (Waxman); 15, 16, 17 (Snell)
Tue	24 Sep	The Ventricles, Meninges, and Neurovascular System	
Thu	26 Sep	The Spinal Cord and Spinal Nerves	Chpts. 5, 6 (Waxman); 4 (Snell)
Tue	1 Oct	The Spinal Cord and Spinal Nerves	
Thu	3 Oct	The Brain Stem, Reticular Formation, and Cranial Nerves	Chpts. 7, 8, 18 (Waxman); 5, 9, 11 (Snell)
Tue	8 Oct	The Brain Stem, Reticular Formation, and Cranial Nerves	
Thu	10 Oct	**Practicum II**	
Tue	15 Oct	**Exam II**	
Thu	17 Oct	The Cerebrum	Chpts. 10, 21 (Waxman); 7, 8 (Snell)
Tue	22 Oct	The Cerebrum	
Thu	24 Oct	The Thalamus and Hypothalamus	Chpts. 9 (Waxman); 12, 13 (Snell)
Tue	29 Oct	The Thalamus and Hypothalamus	
Thu	31 Oct	The Cerebellum and Basal Nuclei	Chpts. 7, 13 (Waxman); 6, 10 (Snell)
Tue	5 Nov	The Cerebellum and Basal Nuclei	
Thu	7 Nov	**Practicum III**	
Tue	12 Nov	**Exam III**	
Thu	14 Nov	The Autonomic Nervous System	Chpts. 20 (Waxman); 14 (Snell)
Tue	19 Nov	The Limbic System	Chpts. 19 (Waxman); 9 (Snell)
Thu	21 Nov	The Visual System	Chpt. 15 (Waxman)
Tue	26 Nov	University Closed- No Classes	
Thu	28 Nov	University Closed- No Classes	
Tue	3 Dec	Forensic Neuroanatomy (optional)	
Thu	5 Dec	**Practicum IV**	
Tue	10 Dec	**Exam IV**	
		Finals Week	

UT Dallas Syllabus Policies and Procedures

The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to http://go.utdallas.edu/syllabus-policies for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.