## **Course Syllabus**

# **Neuroanatomy** NSC 4366

Fall 2015 FN 2.102

### Van Miller MD PhD

JO 4.214 van.miller@utdallas.edu phone 972-883-4229 (no voice mail)

Office hours:

M 12-1 PM and by agreement

## **Course Pre-requisites**

Willingness to learn. NSC 3361 (Behavioral Neuroscience) very helpful.

Grad TA: TBA Student TA: TBA

## Course Description

Functional Human Neuroanatomy (3 hours). Function of each major brain system as related to the organization of their principal nuclei. Function of each system related to the neurological disorders associated with disease specific locations.

This course will introduce students to the anatomical organization and basic functional principles of the major systems that work together in the human brain: sensory, motor, cortical and modulatory. This course will prepare students with the medical terminology and neurological concepts for a general understanding of the human brain and its functions in relation to disease and behavior. It has a more clinical orientation than some Neuroanatomy courses. The overall objective of the course will be a three-dimensional understanding of nervous system structure and organization, based upon anatomical connections, system functions, and diseases that affect the brain.

#### elearning

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 will be made from time to time. In event of lecture cancellations due to the end of the world or nice golfing weather, I will post an announcement or send emails to all in the class.

## Required Textbook

Required readings are the appropriate chapter for the lecture from:

Essential Neuroscience, 2<sup>nd</sup> ed., by Siegel and Sapru ISBN:0781783836 ISBN-13:9780781783835 eISBN:1609136438

Publisher: Lippincott Williams & Wilkin

eISBN-13:9781609136437

Pub.Date: April 2010

## Suggested Course Materials

Clinical Neuroanatomy, 26th Edition or newer [Paperback and Kindle Editions] Stephen G. Waxman, Publisher: McGraw-Hill Medical; ISBN-10: 0071603999 ISBN-13: 978-0071603997

For consultation as needed for the clinical aspects of this course:

Fundamentals of neurologic disease: an introductory text / Davis, Larry E., Demos Medical Pub., 2005. Available as eBook through the library web site and at library.

# Turning Point Clickers

This course requires the use of a clicker. This allows you to provide real-time feedback to me during class. Class summary results are displayed graphically, providing students and me a gauge as to how well the class is grasping the material, and it periodically derails monotonous lecturing. You can purchase (and sell back) your clicker at the UTD Bookstore.

For course-related communication, email must be sent through elearning.

### **Assignments & Academic Calendar**

Class	<u>Topic</u>	Siegel chapter
1	Introduction / Overview	none
2	Neurologic thinking	none
3	Imaging	none
4	Coverings / Ventricles	3
5	Spinal Cord	9
6	Spinal Cord	9
7	Practicum 1 (9/15)	
8	Test 1 (9/17)	
9	Cranial nerves	14
10	Brainstem	11
11	Brainstem	12
12	Brainstem	12
13	Blood supply	4
14	Practicum 2 (10/8)	
15	Test 2 (10/13)	
16	Motor systems	19
17	Motor systems	20, 21
18	•	
	Hypothalamus	26
20	Thalamus	24
	Practicum 3 (11/3)	
22	Test 3 (11/5)	
23	•	16
	Limbic system	25
	Cerebrum	26
	Cerebrum	26
	Cerebrum	26
	Practicum 4 (12/3)	
29	Test 4 (12/8)	

### **Grading Policy**

**Exams:** There will be four exams during the course. Each exam will be worth 20% of your final grade. Material covered on the exams will be taken from the assigned readings and class lectures, mostly the lectures. These will focus on the location and clinical significance of relevant anatomical structures. The exams will be multiple choice questions. Bring scantron 229630 and your lucky pencil with you.

There will be four practica, "point-outs" requiring students to identify structures and their connections or function on projected slides of human brain sections or drawings. Each practicum counts 5% of the final grade. Many practicum questions will be derived from the book. There is no final exam. I strongly encourage you to form study groups to prepare for the point-outs portion of the exam - quiz each other. Practice teaching it to others; that is the best way to learn anything.

#### **Turning Point Clickers**

This course requires the use of a clicker. This allows you to provide real-time feedback to me during class. Class summary results are displayed graphically, providing students and me a gauge as to how well the class is grasping the material, and it periodically derails monotonous lecturing. You can purchase (and sell back) your clicker at the UTD Bookstore.

You receive 2 points for every correct clicker question answer, and 1 point for every incorrect answer. For the final grade computation, I will average the top three students' total clicker points and set that as 100%. So, if the top three students earned 130, 129 and 128 points, 100% is the average of these: 129. If you scored 112 total points, then your grade for the clickers is 112/129: 87%. These are bonus points. You can earn up to 5 bonus points on your course grade (5 x .87 = 4.4 points).

Recall the wisdom of Woody Allen: "Ninety percent of life is just showing up".

<u>Final Grades</u>: A final grade will be submitted: A+: 97-100%, A: 93-96.9%, A-: 90-92.9%, B+:87-89.9%, B: 83-86.9%, B-: 80-82.9%, C+: 77-79.9%, C:73-76%, C-: 70-72.9%, D: 50-69.9%, F < 50.

#### **Course & Instructor Policies:**

#### Missed exams:

Make-up exams will be given only if: (a) you were seriously ill and have verifiable documentation from a physician, or (b) you were detained the day and time of the exam, or (c) you made arrangements prior to the exam to attend an urgent affair. In any case, you must notify me in advance of the scheduled time of the exam via email. Otherwise, you will receive a 0.

#### Attendance:

Your performance and grade in this course will be greatly influenced by your attendance. A lot of material covered in lecture is not covered in the textbook.

**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 <a href="http://go.utdallas.edu/syllabus-policies">http://go.utdallas.edu/syllabus-policies</a>