INTD 5047 Neuroanatomy Fall 2016

CLASS DAYS and TIME: Wednesdays, 8:30 - 10:30 AM

CLASSROOM: Medical School Building, Room 229B – Pharmacology Conference Room

COURSE DIRECTORS: Omid Rahimi, PhD & Randy Glickman, PhD

OFFICE LOCATION and HOURS:	Dr. Rahimi: Dental Bldg, 4.422T	Dr. Glickman: McDermott Bldg, 4.338
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READ THIS DOCUMENT CAREFULLY - YOU ARE RESPONSIBLE FOR ITS CONTENTS.

COURSE DESCRIPTION AND OBJECTIVES

The purpose of this course is to provide students with a practical working knowledge of the structure of both the peripheral and central nervous system. The emphasis is on the organization of the human brain, although the brains of other species may also be included as relevant to students' research interests. The course will look at each of the individual components of the central nervous system in some depth but will also emphasize the complex integration of these various components into a functional brain. The topics covered in the course are specifically designed to mesh in time with those covered in Fundamentals of Neuroscience II describing the function of these areas. For this reason, it is best if students have either taken the Fundamentals of Neuroscience II course previously or are taking these two courses concomitantly. The course is didactic with digital images, models, and wet specimens included in the course.

Pre-requisites – None, but it is recommended to have taken Fundamentals of Neuroscience II previously or simultaneously.

Semester credit hours – 2.0

By the end of this course, each student should be able to:

- Know the functional anatomy of the human nervous system.
- Identify the major neuroanatomical structures and pathways of the human brain.
- Discuss the functional deficits following lesions to neuroanatomical structures and pathways.

COURSE ORGANIZATION

The main teaching modalities used in this course include:

1) Didactic and interactive lectures

- 2) Invited guest lecturers
- 2) Student presentations
- 3) Hands-on laboratory activities
- 4) Online & self-study activities

Materials - Syllabus notes will be made available on Canvas.

<u>Computer Access</u> – Course material will be made available online through Canvas and will require a computer with internet access.

<u>**Reading Assignments**</u> – Syllabus notes and web links posted on Canvas and / or handed out in class are required reading assignments and considered testable on exams.

ATTENDANCE

Class attendance is mandatory for all regularly scheduled classes.

Unexcused class absences may be considered a sufficient cause for failure. Excused absences may be granted by the course directors in such cases as illness or personal emergency. Such leaves are considered on an individual basis, and verification of the reason for the absence may be required. Students are responsible for all information presented in classes that they have not attended regardless of whether the absence was excused or unexcused. It is the responsibility of the student to take the initiative to meet with the faculty to obtain missed class material/information.

TEXTBOOKS

Required: None

Recommended for Reference (check library for availability):

Haines, Fundamental Neuroscience for Basic & Clinical Applications

Blumenfeld, Neuroanatomy through Clinical Cases

Liebman's Neuroanatomy, Made Easy and Understandable

GRADING POLICIES AND EXAMINATION PROCEDURES

Testable material will derive from classroom presentations, syllabus notes, and related online material posted on Canvas.

Grades are calculated as follows:

Class attendance/participation- 10% (10 points possible; 14 sessions/0.71 points per session)

Midterm Exam- 40% (40 points possible)

Final Exam- 40% (40 points possible)

Student participation based on required presentation- 10% (10 points possible as based on the following breakdown):

PowerPoint presentation- 2.5 points Handout that covers material presented- 2.5 points Quality of lecture presentation- 5 points

Grading System

Credit hours are earned in the graduate programs only for the grades **A**, **B**, and **C**. Grade points are assigned as follows:

A = 4 (above average graduate work) = 100-90%

- **B** = 3 (average graduate work) = 89-80%
- **C** = 2 (below average graduate work) = 79-70%
- **F*** = 0 (failing graduate work) = below 69%

*Grades below **C** are not acceptable for graduate credit.

REQUESTS FOR ACCOMODATIONS FOR DISABILITIES

In accordance with policy 4.2.3, **Request for Accommodation Under the ADA and the ADA Amendments Act of 2008 (ADAAA)**, any student requesting accommodation must submit the appropriate request for accommodation under the American with Disabilities Act (ADA, form 100) to his/her appropriate Associate Dean of their School and a copy to the ADA Coordinator. Additional information may be obtained at <u>http://uthscsa.edu/eeo/request.asp</u>.

ACADEMIC INTEGRITY AND PROFESSIONALISM

Any student who commits an act of academic dishonesty is subject to discipline as prescribed by the UT System Rules and Regulations of the Board of Regents. Academic dishonesty includes, but is not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an exam for another person, signing attendance sheets for another student, and any act designed to give unfair advantage to a student or the attempt to commit such an act. Additional information may be obtained at http://catalog.uthscsa.edu/generalinformation/generalacademicpolicies/academicdishonestypolicy/

TITLE IX AT UTHSCSA

Title IX Defined:

Title of the Education Amendments of 1972 is a federal law that prohibits sex discrimination in education. It reads "no person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance."

University of Texas Health Science Center San Antonio's Commitment:

University of Texas Health Science Center San Antonio (UTHSCSA) is committed to maintaining a learning environment that is free from discriminatory conduct based on gender. As required by Title IX, UTHSCSA does not discriminate on the basis of sex in its education programs and activities, and it encourages any student, faculty, or staff member who thinks that he or she has been subjected to sex discrimination, sexual harassment (including sexual violence) or sexual misconduct to immediately report the incident to the Title IX Director.

In an emergency, victims of sexual abuse should call 911. For non-emergencies, they may contact UPD at 210-567-2800. Additional information may be obtained at http://students.uthscsa.edu/titleix/

EMAIL POLICY

Every student is issued a University e-mail address and account at the time of enrollment. As a matter of University Policy, communications between students and faculty that occur using the student's University e-mail address is considered official business. Therefore, **students are expected to check their University email inboxes on a regular basis** so that any announcements, instructions, or information regarding this course will be received in a timely way. Missed communications due to inadequate monitoring of incoming emails on the University's email server will never be a valid excuse for unsatisfactory academic progress.

USE OF RECORDING DEVICES

Recording of lectures and other learning activities in this course by any means (*e.g.*, video, audio, etc.) is only permitted if approved by the instructor or required for compliance with Americans with Disabilities Act (ADA).

ELECTRONIC DEVICES

Cell phones must be turned off during all class meetings and exams. Computers and electronic tablets are allowed only for participating in classroom activities (*e.g.*, viewing slides presented in lecture or conference materials). No texting, tweeting, emailing, web-surfing, gaming, or any use of electronic devices that is not directly connected with classroom activities is permitted.

Lecture Schedule INTD 5047 Neuroanatomy – Fall 2016

Course Directors – Omid Rahimi, PhD and Randy Glickman, PhD Room 229B – Pharmacology Conference Room

Date	Time	Торіс	Instructor
0/24	0.20 0.20		Dahimi
8/24 8:30 - 9:30	Microscopic and Macroscopic Basis of Neuroanatomy	Rahimi	
	9:30 - 10:30	Meninges and Ventricular System / Development of Brain	Rahimi
8/31	8:30 - 10:30	Gross Anatomy of the Brain	Rahimi
9/7 8:30 – 9:30 9:30 – 10:30	Spinal Cord and Spinal Nerves	Rahimi	
	Descending Pathways	Rahimi	
9/14 8:30 - 9:30	Ascending Pathways	Rahimi	
9:30 - 10:30	Pain Pathways	Rahimi	
9/21	8:30 - 10:30	Cranial Nerves	Rahimi
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9/28 8:30 – 9.30 9:30 – 10:30	Auditory & Vestibular Systems	Students	
	Comparative Vertebrate Neuroanatomy	Students	
10/5	8:30 - 9:30	Autonomic Nervous System	Rahimi
9:30 - 10:30	9:30 - 10:30	Review for Midterm	Rahimi
10/12	8:30 - 10:30	Midterm Examination	Rahimi
10/19	8:30 - 10:30	CNS Cross-Sections	Rahimi
10/26	8:30 - 9:30	Basal Ganglia	Rahimi
9:30 - 10:30	Cerebellum	Pugh	
11/2 8:30 - 9:30 9:30 - 10:30		Thalamus	Rahimi
	9:30 - 10:30	Hypothalamus	Vaughan
11/9	8:30 - 9:30	Visual System I	Glickman
•	9:30 - 10:30	Visual System II	Glickman
11/16	8:30 - 9:30	Taste & Olfaction	Students
	9:30 - 10:30	Limbic System, Amygdala	Rahimi
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11/23 8:30 - 9:3 9:30 - 10	8:30 - 9:30	Hippocampus Reticular Activating System	Rahimi Rahimi
	9:30 - 10:30	Reticular Activating System	Kanimi
11/30	8:30 - 10:30	Review for Final Exam	Glickman/Rahimi
12/7	8:30 - 10:30	Final Examination	Rahimi