INTD 5047  
Neuroanatomy  
Fall 2020

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

CLASSROOM: Online, https://zoom.us/j/91937697882; Meeting ID: 919 3769 7882

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

OFFICE LOCATION and HOURS:  
Dr. Rahimi:  
Dental Bldg, 4.422T  
By appointment  
rahimi@uthscsa.edu  
210-567-3789

Dr. Glickman:  
McDermott Bldg, 4.338  
By appointment  
glickman@uthscsa.edu  
210-567-8420

EMAIL:  
rahimi@uthscsa.edu  
glickman@uthscsa.edu

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 (online)  
2) Invited guest lecturers (online)  
3) Student presentations (online)  
4) Hands-on laboratory activities (if possible)  
4) Online & self-study activities
Materials – Syllabus notes will be made available on Canvas.

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

Reading Assignments – 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:

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 ACCOMMODATIONS 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 http://uthscsa.edu/eeo/request.asp.

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/scholasticdishonestypolicy/

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 IN TD 5047 Neuroanatomy – Fall 2020

Course Directors – Omid Rahimi, PhD and Randy Glickman, PhD

https://zoom.us/j/91937697882
Meeting ID: 919 3769 7882

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Topic</th>
<th>Instructor</th>
</tr>
</thead>
<tbody>
<tr>
<td>8/19</td>
<td>8:30 – 9:30</td>
<td>Microscopic and Macroscopic Basis of Neuroanatomy</td>
<td>Rahimi</td>
</tr>
<tr>
<td></td>
<td>9:30 – 10:30</td>
<td>Meninges and Ventricular System / Development of Brain</td>
<td>Rahimi</td>
</tr>
<tr>
<td>8/26</td>
<td>8:30 – 10:30</td>
<td>Gross Anatomy of the Brain</td>
<td>Rahimi</td>
</tr>
<tr>
<td>9/2</td>
<td>8:30 – 9:30</td>
<td>Spinal Cord and Spinal Nerves</td>
<td>Rahimi</td>
</tr>
<tr>
<td></td>
<td>9:30 – 10:30</td>
<td>Descending Pathways</td>
<td>Rahimi</td>
</tr>
<tr>
<td>9/9</td>
<td>8:30 – 9:30</td>
<td>Ascending Pathways</td>
<td>Rahimi</td>
</tr>
<tr>
<td></td>
<td>9:30 – 10:30</td>
<td>Pain Pathways</td>
<td>Rahimi</td>
</tr>
<tr>
<td>9/16</td>
<td>8:30 – 10:30</td>
<td>Cranial Nerves</td>
<td>Rahimi</td>
</tr>
<tr>
<td>9/23</td>
<td>8:30 – 9:30</td>
<td>Auditory &amp; Vestibular Systems</td>
<td>Students</td>
</tr>
<tr>
<td></td>
<td>9:30 – 10:30</td>
<td>Comparative Vertebrate Neuroanatomy</td>
<td>Students</td>
</tr>
<tr>
<td>9/30</td>
<td>8:30 – 9:30</td>
<td>Autonomic Nervous System</td>
<td>Rahimi</td>
</tr>
<tr>
<td></td>
<td>9:30 – 10:30</td>
<td>Review for Midterm</td>
<td>Rahimi</td>
</tr>
<tr>
<td>10/7</td>
<td>8:30 – 10:30</td>
<td>Midterm Examination</td>
<td>Rahimi</td>
</tr>
<tr>
<td>10/14</td>
<td>8:30 – 9:30</td>
<td>Basal Ganglia</td>
<td>Rahimi</td>
</tr>
<tr>
<td></td>
<td>9:30 – 10:30</td>
<td>Cerebellum</td>
<td>Pugh</td>
</tr>
<tr>
<td>10/21</td>
<td>8:30 – 10:30</td>
<td>CNS Cross-Sections</td>
<td>Rahimi</td>
</tr>
<tr>
<td>10/28</td>
<td>8:30 – 9:30</td>
<td>Thalamus</td>
<td>Bartanuszova</td>
</tr>
<tr>
<td></td>
<td>9:30 – 10:30</td>
<td>Hypothalamus</td>
<td>Nation</td>
</tr>
<tr>
<td>11/4</td>
<td>8:30 – 9:30</td>
<td>Visual System I</td>
<td>Glickman</td>
</tr>
<tr>
<td></td>
<td>9:30 – 10:30</td>
<td>Visual System II</td>
<td>Glickman</td>
</tr>
<tr>
<td>11/11</td>
<td>8:30 – 9:30</td>
<td>Taste &amp; Olfaction</td>
<td>Students</td>
</tr>
<tr>
<td></td>
<td>9:30 – 10:30</td>
<td>Limbic System, Amygdala Hippocampus</td>
<td>Rahimi</td>
</tr>
<tr>
<td>11/18</td>
<td>8:30 – 9:30</td>
<td>Reticular Activating System</td>
<td>Rahimi</td>
</tr>
<tr>
<td></td>
<td>9:30 – 10:30</td>
<td>Review for Final Exam</td>
<td>Glickman/Rahimi</td>
</tr>
<tr>
<td>11/25</td>
<td>8:30 – 10:30</td>
<td>Exam Review – Self Directed Study</td>
<td>Glickman/Rahimi</td>
</tr>
<tr>
<td>12/2</td>
<td>8:30 – 10:30</td>
<td>Final Examination</td>
<td>Rahimi</td>
</tr>
</tbody>
</table>
ADDITIONAL SOCIAL DISTANCING PROCEDURES AND PRACTICES FOR ON CAMPUS SESSIONS (if any)

A face mask/cloth mask must be worn at all times while on campus in common areas shared by other individuals. Social (physical) distancing must be practiced (maintain a physical distance from others of ≥ 6 feet [≥ roughly two upper limb lengths]).

Only designated available seating should be used in the classroom. Seating is marked to provide social (physical) distancing. Direct handling/touching with hands of common structures should be avoided (e.g. card readers, entry & exit door handles & push bars, hand railings, items/fixtures in the common corridor in the anatomy lab where the hooks/racks and light boxes are located etc.). Protect hands with a piece of disposable paper.

Upon entering the classroom hands should be cleaned with hand sanitizer and again upon leaving the classroom.