

**BIOL 2340**  
**CRN 27239**  
**Spring Semester 2020**  
**Introductory Neuroscience**  
**Drs. Han, Khan and Cushing**

**Instructor in charge:** Kyung-An Han, Ph. D.  
Office: 3.152 Biosciences Building  
Office hours: 3:00 PM - 4:00 PM T or by appointment  
**All communications via Course Messages in the Blackboard**

**Class Meetings:** 1:30 PM – 2:50 PM, TR

**Classroom:** Business Admin Building Room 309

**Prerequisites:** Biology 1305 plus 1107 or Biology 1306 plus 1108 (may be taken concurrently).

**Text:** Purves, Augustine, Fitzpatrick, Hall, LaMantia, Mooney, Platt & White (2018). **Neuroscience 6<sup>th</sup> edition**, Oxford University Press. ISBN: 9781605353807. Supplemental readings, when needed, will be provided.

**Course Objectives:** This course begins with the study of neuronal structure and function, and the propagation of nerve impulses and the transfer of information between cells. We then move to sensory and motor systems, the integration of neural and endocrine systems, and motivation, emotion, learning, and sleep. This course will provide critical knowledge for upper division neuroscience courses in the Departments of Biological Sciences or Psychology. The knowledge gained in this course will provide an appropriate background for students planning to pursue careers in neuroscience research, medicine or the allied health fields, or education.

**Learning Objectives and Outcomes:** This team-taught course will provide a broad introduction to nervous system structures and functions. At the end of the academic term, students who successfully complete this course will be able to: 1) define the molecular, cellular, and tissue-level organization of the central and peripheral nervous system; 2) explain the properties of cells that make up the nervous system including the propagation of electrical signals used for cellular communication; 3) relate the properties of individual cells to their function in organized neural circuits and systems; and 4) describe how the interaction of cells and neural circuits leads to higher level activities such as cognition and behavior. In addition, students will be able to demonstrate effective teamwork, oral and written communication, quantitative skills, and critical thinking abilities.

**Examinations and grading:** There will be 4 exams, which will include multiple choice, true/false, matching, short-answer, essay or fill-in-the-blank questions, and will be weighted equally.

Exams:	80% of the grade (4 exams total; each exam = 20%)
<b>Presentation/Participation</b>	<b>20% of the grade</b>

Final grades will be assigned as follows: A=90-100, B=80-89, C=70-79, D=60-69, F=0-59  
**Alternatively, S (successful) or U (unsuccessful) when selected**

**Academic Dishonesty and Expected Behavior:** Students at UTEP are expected to behave in a manner that supports the integrity of the academic system. Cheating, plagiarism and collusion are prohibited, and will result in disciplinary action. Violations will be reported to the Dean of Students. A zero tolerance policy for plagiarism will be applied. For more information, please check the web site: [www.plagiarism.org](http://www.plagiarism.org)

**Plagiarism/Academic Dishonesty Statement:** Cheating/Plagiarism: Cheating is unethical and not acceptable. Plagiarism is using information or original wording in a paper without giving credit to the source of that information or wording: it is also not acceptable. Do not submit work under your name that you did not do yourself. You may not submit work for this class that you did for another class. If you are found to be cheating or plagiarizing, you will be subject to disciplinary action, per UTEP catalog policy. Refer to <http://www.utep.edu/dos/acadintg.htm> for further information.

**Classroom Etiquette:** Attendance of the entire class duration will only be counted into grade (i.e. coming late or leaving early would not have attendance grade). If you must arrive late, leave early, or exit the classroom during class time for personal reasons, please do so quietly and with as little disruption as possible. Cell phones or other text messaging devices should be off. Should you need to leave them on, please put them on a vibrate or silent mode. You are welcome to use a laptop or iPad to take notes but not for other purposes including surfing, emailing and watching movies or youtubes.

**Disabilities:** I will make any reasonable accommodations for students with limitations due to disabilities, including learning disabilities. Please see me personally before or after class in the first two weeks or make an appointment, to discuss any special needs you might have. If you have a documented disability and require specific accommodations, you will need to contact the Center for Accommodations and Support Services (CASS) in the East Union Bldg Room 106 within the first two weeks of classes. CASS can also be reached in the following ways: Web, [www.sa.utep.edu/cass](http://www.sa.utep.edu/cass), Phone: (915) 747-5148 voice or TTY; E-Mail: [cass@utep.edu](mailto:cass@utep.edu)

**Course Schedule**

Date	Topic
1/21/20 T –	Introduction and Neural Signaling Dr. Han
2/13/20 R	Exam 1
2/18/20 T –	Sensory and Motor Systems Dr. Khan
3/12/20 R	Exam 2
3/31/20 T –	Changing Brain and Complex Brain Functions: Circadian Rhythm, Sleep, Motivation Dr. Cushing
4/16/20 R	Exam 3
4/21/20 R	Complex Brain Functions and Cognitive Neuroscience Attention, Memory, Emotion, Language Dr. Han
5/14/20 R (1:30 - 2:30 pm)	Exam 4

**\*The schedule is subject to change. Please check Blackboard regularly for changes and important announcements.**

**\*\* Drop/withdrawal deadline: May 7, 2020**