

Neurobiology (ZOO 4384)
(CRN #19493)

Course Syllabus, Fall 2020

TR: 3:00-4:20 pm

ONLINE (<https://us.bbcollab.com/guest/7f80a9c23da74d19b327163d4a1e7a4c>)

Manuel Miranda, Ph. D.

Office: Biosciences Building 2.166

e-mail: mmiranda3@utep.edu

Office Hours: Open door policy

TEXTBOOK (required) – *Neuroscience*, Fourth, Fifth or Sixth Edition,

Editors: Purves, D; Augustine, G.J; Fitzpatrick, D; Hall, W.C; LaMantia, A.S; Mcnamara, J.O; White, L.E.

Publisher: Sinauer Associates, Inc. www.sinauer.com

Class time: we will have live sessions at the scheduled time, the link is above this message. If you are not present at that time, I will allow access to the recorded lecture on the same and the following day. Your book has an access code to quizzes and flashcards, use it; it is free of charge for you. I will also provide some links to YouTube videos on the reviewed materials.

(Suggested)– *Biological Psychology*, Sixth Edition

Editors: Breedlove, M; Watson, N.V; Rosenzweig, M.R.

Publisher: Sinauer Associates, Inc. www.sinauer.com

First day of classes	August 24th
Census Day:	Sept 9 th
Course Drop Deadline:	Oct 30th
Last day of classes	Dec 3rd
Final Exam:	Thursday, Dec 10th, 4:00-6:45 pm

All grades of Incomplete must be accompanied by an Incomplete Contract that has been signed by the instructor of record, student, departmental chair, and the dean. Although UTEP will allow a maximum of one year to complete this contract, the College of Science requests it be limited to month based upon completion data. A grade of Incomplete is only used in extraordinary circumstances confined to a limited event such as a missed exam, project, or lab. If the student has missed a significant amount of work (e.g. multiple assignments or tasks), a grade of Incomplete is not appropriate or warranted.

Center for accommodation and support services:

If you have a disability and need classroom accommodations, please contact: The Center for Accommodations and Support Services (CASS) at 747-5148, or by email to cass@utep.edu, or visit their office located in UTEP Union East, Room 106. For additional information, please visit the CASS website at www.sa.utep.edu/cass.

OBJECTIVES:

Upon completion of this class, students should be able to:

- Understand the basic architecture of the Central and Peripheral Nervous System

- Understand the electrical properties of Neurons and propagation of signals in the Nervous System
- Analyze the components and function of the different neuronal circuits.
- Understand the mechanism of action of several pharmacological agents and their targets

EXAMINATION PROCEDURE

- There will be three on-line exams during the semester, all available on backboard during class time.
- You must take all three exams. If you missed exams without a university accepted excuse, you may be withdrawn from the course.
- There will be a comprehensive Final Examination of all the chapters that we have covered in the class during the semester. Exam will be multiple choices.
- In addition to the above, there will be several in-class assignments and presentations.

NOTE: If you work hard and get 90% or above in the three scheduled regular exams, you will be exempt from a final exam and your final grade will be “A”.

GRADING POLICY

A = 90-100
 B = 80-89
 C = 70-79
 D = 60-69
 F = Below 60

GRADE DISTRIBUTION

Exams (3)	50%
Final Exam	25%
Assignments/Quizzes	25%

LECTURE	DATE	TOPIC	Required Reading
1 -2	Aug 25, 27	Introduction: Studying the Nervous System	Chapter 1
3 – 4	Sept 1, 3	Electrical Signals of Nerve Cells	Chapter 2
5-6	Sept 8, 10	Voltage Dependent Membrane Permeability	Chapter 3
7-8	Sept 15,17	Channels and Transporters	Chapter 4
	Sept 24	EXAM-1	
9	Sept 22	Synaptic Transmission	Chapter 5
10-12	Sept 29- Oct 1,6	Neurotransmitter and their Receptors	Chapter 6
13-14	Oct 8,13	Molecular Signaling within Neurons	Chapter 7
15 – 17	Oct 15,20,22	Synaptic Plasticity	Chapter 8
18 – 19	Oct 27, Nov 3	The Sensory System: Touch and Proprioception	Chapter 9
	Oct 29	EXAM-2	
20 – 21	Nov 5,10, 12	Pain	Chapter 10
22	Nov 17,19, 24	Vision: The Eye	Chapter 11
23-26	Nov 26	Thanksgiving-No class	
	Dec 1	Review	
	Dec 3	EXAM-3	
	Dec 10th	FINAL EXAM	