Course Syllabus

Course Information

Course Number/Section	NSC 3361. MW (sections 005/004)
Course Title	Introductory Neuroscience
Term	Spring 2020
Days/Times/Room	MW (section 005) 11:30-12:45 / (section 004) 1:00-2:15

Professor Contact Information

Professor	Dr. Steve McWilliams
Office Phone	972-883-6785 (No voice mail; do not leave messages)
Email Address	**All course-related communication must be sent through official UTD email/eLearning. I am the 'section instructor'**
Office Location	GR 4.714
Office Hours	*Please email* **When emailing, please include your section number in subject line**
Other Information	Course Web Site: UTD eLearning
Teaching Assistant	TBD
Email	@utdallas.edu
Office hours	*-by appointment only-*
Supplemental Instructional	TBD
Email	@utdallas.edu
Office hours	*-by appointment only-*

Course Pre-requisites, Co-requisites, and/or Other Restrictions

None

Course Description

This course explores the nature of the brain processes underlying basic neurobiology and behavior, including basic neurophysiology, the physiology of movement and sensation, learning and memory, emotion and behavioral disorders. This course is designed to introduce students to the brain and behavior as well as to provide a foundation for those pursuing degrees in the various areas of neuroscience, including psychology, cognition, and child development. In this course, we will briefly examine nerves cells and the transfer of information from one neuron to another. This will include a survey of basic neuroanatomy and the chemistry of the brain. This will be followed by a study of the different sensory systems, hormones, biological rhythms, cognitive processes, and psychopathology.

In order to understand and communicate about the nervous system, there will be a lot of new vocabulary that you will need to learn!

Student Learning Objectives/Outcomes

After completing the course, students should be able to:

1. Identify and describe basic neuro-anatomical structures, lobes of the brain, and their major functions
2. Describe the differences between neurons and glia, their primary functions, and their physiological processes
3. Describe the physiological processes associated with neuronal conduction, communication, and the transfer of information from neuron to neuron

4. Display a basic understanding of neurochemistry and basic neuropharmacology as it relates to neuronal function and mental disorders
5. Identify and describe basic neurochemistry as well as specific neurotransmitters and their functions
6. Describe the anatomical structures and mechanisms associated with both sensory and motor systems at both the cellular level and system level
7. Describe the anatomical structures and associated mechanisms involved with cognition, behavior, and some psychiatric disorders

Required Textbooks and Materials
Mind's Machine by Watson & Breedlove (2nd or 3rd edition is okay)

Optional Course Materials (Not required!)
If you desire additional sources of information -*because you just can't get enough to read*- you can look at (1) *Foundations of Behavioral Neuroscience* by Carlson, and/or (2) *Neuroscience* by Bear. Again, THESE TEXTBOOKS ARE NOT REQUIRED!

Academic Support/Tutoring
In person Academic Support and Tutoring is not currently available due to the closure of the University and many of its' offices. Students will be notified should these services once again become available. (Students needing any type of academic help are encouraged to contact the course instructor.)

Grading Policy
Exams (100%): There will be four exams during the course, with each exam being weighted equally. I will DROP your lowest grade. Exams I and II are in-class exams, exams III and IV will be posted online. Exams III and IV will be time limited and browser protected. Students are expected to work on the exams individually. STUDENTS ARE EXPECTED TO FOLLOW UTD POLICIES CONCERNING THE USE OF SOCIAL MEDIA AND THE SHARING OF INFORMATION SUCH AS EXAMS- SEE BELOW. Questions on the exams will be taken from the PowerPoints and assigned textbook readings. Exams will consist largely of multiple-choice questions, but may include matching, and true/false questions. STUDENTS WILL USE THE ANSWER SHEET PROVIDED (on each exam) AND RETURN via UTD EMAIL ON THE DATE DUE. Final grades are based on in-class exams only. No extra credit work will be given or accepted.

Final Grades: The plus/minus grading system is used in this course. A+ (97–100), A (94<97), A- (90<94), B+ (87<90), B (84<87), B- (80<84), C+ (77<80), C (74<77), C- (70<74), D+ (67<70), D (64<67), D- (60<64), F (< 60).

Course & Instructor Policies

eLearning, course information, and UTD email
This course has now been moved to an online course and will use resources available through eLearning. All course information including audio lectures, PowerPoints, exams will be posted on eLearning. However, I do not own the copyright to the diagrams and pictures that I use, so no portion of classroom material including all PowerPoint slides may duplicated, reposted, retransmitted, sold, or otherwise used without the express written approval of the author. ANY EXAM POSTED ON THE COURSE WEBSITE (eLEARNING) SHOULD NOT BE POSTED OR TRANSMITTED BY ANY STUDENT FOR ANY REASON ON ANY DEVICE OR ANY TYPE OF SOCIAL MEDIA SOFTWARE. I will open up the Discussion Board of eLearning during regular class times. I will use eLearning to post announcements from time to time as well as any urgent changes to the course. All and any email correspondence related to the course MUST be sent through official UTD email/eLearning; I will not respond to emails sent via any outside email addresses. To comply with FERPA regulations, **all email discussions to and from**

me MUST be through eLearning. This is to protect your privacy!

Make-up Exams

Students missing Exam I or Exam II, will automatically have the missing grade replaced at the end of the semester with a grade averaged from completed exams. Exams III and IV must be completed and submitted by DUE Date. Missing more than one exam without prior approval from instructor will result in a grade of zero for that exam as well as any additional missed exams. Prior notification of instructor, for example just sending me an email, does not itself imply approval. Approval to take a late exam is typically only granted under extreme circumstances such as you were hospitalized or incarcerated in jail. In such cases, you will need proof of hospitalization or incarceration. No other make-up exam will be given. Students are not allowed to take an exam early for any reason.

Reviewing Past Exams

Students will not be able to review past exams in person given the policies now set forth by the University. These policies have been put in place by UTD to ensure the safety and well-being of everyone involved.

UT Dallas Syllabus Policies and Procedures

The information below is contained in the following link and constitutes the University's policies and procedures segment of this course and the course syllabus. Please go to http://go.utdallas.edu/syllabus-policies for these policies.

Students should be informed as to the policies of the University concerning the Sharing of Confidential Information, Student Conduct and Discipline, Social Media Use, Academic Integrity, Copyright Notices, and Email Use,

Accommodations for Students with Disabilities

It is the policy and practice of UT Dallas to make reasonable accommodations for students with properly documented disabilities. If you are a student with a disability and believe you will need academic accommodations for this class, you are encouraged to register with the Office of Student AccessAbility (OSA). Some aspects of the course, the assignments, the in-class activities, and the way the course is typically taught may be accommodated to facilitate your participation and progress. OSA will assist you in determining academic accommodations that are appropriate for your situation. Any information you provide is private and confidential and will be treated as such. To avoid any delay, please contact OSA as soon as possible. Please note that accommodations are not retroactive and disability accommodations cannot be provided until an OSA Letter of Accommodation has been given to the instructor. Students who have questions about receiving accommodations, or those who have, or think they may have, a disability (mobility, sensory, health, psychological, learning, etc.) are invited to contact OSA for a confidential discussion. OSA is located in the Student Services Building, AD 2.224 They can be reached by phone at 972-883-2098, or by email at studentaccess@utdallas.edu.

The **Student Counseling Center** offers confidential services to students either for individual appointments or as part of groups. Initial appointments must be made in person in the Student Counseling Center, which is located in SSB 4.600, on the fourth floor of the Student Services Building. Their main number is 972-883-2575 and the 24/7 Crisis Hotline is 972-883-8255 (972-UTD-TALK).

Lecture/Exam Schedule, Chapter Readings, and Academic Calendar

Week Of	Day	Topic	Reading
Jan 13	M	Course Introduction/A word on "learning"/Introduction to the Brain	Chapter 1
	W	Cells and Structures	Chapter 2
Jan 20	M	NO CLASS ON MONDAY	
	W	Cells and Structures	Chapter 2
Jan 27	M	Neurophysiology	Chapter 3
	W	Neurophysiology	Chapter 3
Feb 3	M	The Chemistry of Behavior	Chapter 4
	W	The Chemistry of Behavior	Chapter 4
Feb 10	M	**Exam I**	
	W	*TEST TAKING SKILLS (Hindsight is 20/20!)*	
Feb 17	M	The Sensorimotor System	Chapter 5
	W	Hearing, Balance, Taste, and Smell	Chapter 6
Feb 24	M	Vision	Chapter 7
	W	Vision	Chapter 7
Mar 2	M	Hormones and Sex	Chapter 8
	W	Hormones and Sex	Chapter 8
Mar 9	M	**Exam II**	
	W	Homeostasis	Chapter 9
Mar 16	M	<SPRING BREAK>	
	W	<SPRING BREAK>	
Mar 23	M	<SPRING BREAK Continued- No Classes>	
	W	<SPRING BREAK Continued- No Classes>	
Mar 30	M	Biological Rhythms and Sleep	Chapter 10
	W	Emotions, Aggression, and Stress	Chapter 11
Apr 6	M	Psychopathology	Chapter 12
	W	**Follow up/Review/Discussion Board**	
Apr 13	M	**Exam III**	
	W	Memory, Learning, and Development	Chapter 13
Apr 20	M	Attention and Consciousness	Chapter 14
	W	Brain Asymmetry, Spatial Cognition, and Language	Chapter 15
Apr 27	M	**Follow up/Review/Discussion Board**	
	W	**Exam IV**	
May 4		**(Final Exam Week)**	

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.