

Course Syllabus

Course Information

Course Number/Section	NSC 3361 Section 004
Course Title	Introductory Neuroscience
Term	Spring 2022
Days/Times/Room	Section 004 TR 10-11:15 am in FN 2.102(online to start- See Below)
Class Format/Method of Instruction	Per the instructions given by UTD Admin, this course will utilize <u>synchronous on-line</u> instruction via <u>Blackboard Collaborate in eLearning</u> from Tuesday Jan. 18 to Friday Feb. 4 followed by regular <u>in-person</u> classes starting Monday February 7. <u>Synchronous online classes will be held “live” during normally scheduled class days and times.</u> There is NOT an asynchronous option for this particular class section. Live lectures will NOT be recorded or posted. (Blackboard Collaborate can be accessed via the course eLearning page. After opening the course, simply “click” on the Blackboard Collaborate tab on the left- this will allow you to join that day’s class.)

Professor Contact Information

Professor	Dr. Steve McWilliams
Email Address	steven.mcwilliams@utdallas.edu ALL course-related communication must be sent via email through eLearning/official UTD email- I am the ‘section instructor.’ (When emailing, please include your course in subject line, so that I know who you are...)
Office Location	GR 4.714
Office Hours	MTWR 9:15-9:45 AM -or email to set up an individual meeting-
Other Information	Course Web Site: UTD eLearning

Teaching Assistant(s)

To Be Announced Email: *TBA*

Class Participation

Regular class participation is expected- regardless of course modality. Students who fail to participate in class regularly are inviting scholastic difficulty. This class requires active participation during regularly scheduled class times as a way of learning the material. Student feedback and class discussion are critical to success in the class. Successful participation is defined as consistently adhering to university requirements, as presented in this syllabus. Failure to comply with these University requirements is a violation of the Student Code of Conduct.

Technical Requirements

In addition to a confident level of computer and Internet literacy, certain minimum technical requirements must be met to enable a successful learning experience. Please review the important technical requirements on the Getting Started with eLearning webpage.

Course Access and Navigation

This course can be accessed using your UT Dallas NetID account on the eLearning website. Please see the course

access and navigation section of the [Getting Started with eLearning](#) webpage for more information. To become familiar with the eLearning tool, please see the [Student eLearning Tutorials](#) webpage. UT Dallas provides eLearning technical support 24 hours a day, 7 days a week. The [eLearning Support Center](#) includes a toll-free telephone number for immediate assistance (1-866-588-3192), email request service, and an online chat service.

Communication

This course utilizes online tools for interaction and communication. Some external communication tools such as regular email and a web conferencing tool may also be used during the semester. For more details, please visit the [Student eLearning Tutorials](#) webpage for video demonstrations on eLearning tools. Student emails and discussion board messages will be answered within 3 working days under normal circumstances.

Distance Learning Student Resources

Online students have access to resources including the McDermott Library, Academic Advising, The Office of Student AccessAbility, and many others. Please see the [eLearning Current Students](#) webpage for more information.

Server Unavailability or Other Technical Difficulties

The University is committed to providing a reliable learning management system to all users. However, in the event of any unexpected server outage or any unusual technical difficulty which prevents students from completing a time sensitive assessment activity, the instructor will provide an appropriate accommodation based on the situation. Students should immediately report any problems to the instructor and also contact the online [eLearning Help Desk](#). The instructor and the eLearning Help Desk will work with the student to resolve any issues at the earliest possible time.

Academic Support Resources

Students should visit <https://go.utdallas.edu/academic-support-resources> for a list of resources to help students succeed.

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.

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

See the Student Success Center (<http://www.utdallas.edu/studentsuccess/leaders/si.html>) concerning Supplemental Instruction (SI) for this course.

Your class TA -if assigned- is a good source of information and can be very helpful if you are having trouble in the class with regard to understanding the material. Teaching Assistants (TA) are graduate students with a good degree of knowledge about the material you are being given; it's likely he or she has taken this class. Please feel free to email your TA at any time during the semester or to speak with him/her before or after class. His or her contact information is listed above.

Course Policies Regarding Course Content, Materials, eLearning, and UTD email

Course information

Course information including lecture PowerPoints will be posted on eLearning. However, I do not own the copyright to the diagrams and pictures that I often use in my lectures/PowerPoints, SO NO PORTION OF CLASSROOM MATERIAL INCLUDING ALL POWERPOINT SLIDES OR AND LECTURES MAY DUPLICATED, REPOSTED, RETRANSMITTED, SOLD, OR OTHERWISE USED WITHOUT THE EXPRESS WRITTEN APPROVAL OF THE AUTHOR. Lectures may be recorded for audio needs only- they should not be posted via any public forum.

eLearning and UTD email

To comply with FERPA regulations, **ALL EMAIL DISCUSSIONS TO AND FROM ME MUST BE THROUGH eLEARNING. That is, any and all correspondence between instructor and student must be through your official UTD email.** This is to protect your privacy! Discussion boards and Chat rooms are available for your use. I will not routinely monitor them unless I receive complaints about inappropriate posting.

Grades will be posted as soon as they are available. Announcements may be made from time to time regarding lecture schedule and exam dates.

Exams, Quizzes, Missed Exams or Quizzes, Grading and Course Policies

Exams (90%): There will be 4 exams during the course. All exams are weighted equally. No exam grade will be dropped. Exams will cover the material preceding the exam, and therefore are not comprehensive by design. You will have 60 minutes to complete each 50-question (multiple-choice/true-false) exam. Exams will be taken in the Testing Center, not in the regular classroom- See Below

All exams will be distributed by and completed in the Testing Center on the dates scheduled below.

STUDENTS MUST PRE-REGISTER WITH THE TESTING CENTER 72-HOURS BEFORE THE EXAM- NO EXCEPTIONS. THE TESTING CENTER DOES NOT ALLOW WALK-IN APPOINTMENTS- NO EXCEPTIONS. STUDENTS ARE ENCOURAGED TO REGISTER FOR ALL EXAMS DURING THE FIRST TWO WEEKS OF THE SEMESTER AT ets.utdallas.edu/testing-center

Exam Schedule and Testing Center Hours

Exam I February 8 Tuesday (Testing Center hours- 8:30 am to 9:00 pm)

Exam II March 8 Tuesday (Testing Center hours- 8:30 am to 9:00 pm)

Exam III April 7 Thursday (Testing Center hours- 8:30 pm to 9:00 pm)

Exam IV May 5 Thursday (Testing Center hours- 8:30 pm to 9:00 pm)

See below regarding missed exams!

STUDENTS SHOULD CONFIRM TESTING CENTER HOURS PRIOR TO THAT DAY'S SCHEDULED EXAM. You will **NOT** be allowed to check-in for your exam if the allotted exam duration (per the professor's instructions) exceeds the Testing Center's scheduled closing time.

Once you have registered for an exam, you will receive a confirmation email receipt!

Your Comet Card ID is the official UT Dallas student ID. It will be the **ONLY** form of ID accepted by the UTD Testing Center. **NO** other forms of ID will be accepted. You will be **DENIED** access without a **PHYSICAL** Comet Card. If you do not have a Comet Card, you must obtain one prior to your exam.

If something unforeseeable should arise on the day your exam is scheduled, you should contact the TESTING CENTER at infotestingcenter@utdallas.edu as soon as possible to reschedule. If you have preregistered, they will often accommodate you should something unforeseeable arise.

Testing Center Location and Contact Information

Location: 3020 Waterview Parkway, SP2 First Floor, Suite 11.175, Richardson, Tx 75024

Contact Information: (972) 883-5497 or (972) 883 2460; Email at infotestingcenter@utdallas.edu

REGARDING MISSED EXAMS- SEE BELOW!

Please note that these exams have been scheduled well in advanced and cannot be rescheduled.

Missing a scheduled exam for any reason, including failure to preregister in time for an exam, will result in a zero for that exam, unless preapproved by the instructor. Prior notification of instructor, for

example just sending me an email even with an attached doctor's note, does not itself imply approval. **ANY STUDENT GRANTED PERMISSION TO TAKE A MAKEUP EXAM OUTSIDE OF THE TESTING CENTER WILL BE DEDUCTED ONE LETTER GRADE, UNLESS THE MISSED EXAM IS EXCUSED BY THE INSTRUCTOR**

The only possible excuse for missing an exam (without prior notification and approval) is that you were either hospitalized (with an IV in your arm or are unconscious) or jailed the day of the exam (I probably don't want to know why). Prior approval for missing an exam is typically only given for (1) the need to attend an official UTD event for which you are an official UTD member, or (2) the loss of an immediate family member or emergency involving an immediate family member- proof of emergency is typically required (An immediate family member is defined as a spouse, parent, sibling, or your children.)

If granted a makeup exam, instructor reserves the right to use a different form of the exam (a different exam) from that given to the class

Quizzes (10%): A 5-question weekly quiz will be available each week following that weeks' lectures. Quizzes will be posted and made available on the eLearning Course Homepage. QUIZZES ARE NOT TAKEN IN THE TESTING CENTER. Your highest 10 quiz grades will be totaled and averaged into your final course grade. Quizzes must be completed within the allotted time window- **no exceptions! There are no makeup quizzes!**

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). **No extra credit work will be given or accepted.**

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.

Sharing Confidential Information

Students considering sharing personal information in email, in person, or within assignments or exams should be aware that faculty members and teaching associates/assistants and graduate/research assistants are required by UT Dallas policy to report information about sexual misconduct to the UT Dallas Title IX Coordinator. Per university policy, Sexual Misconduct Policy - [UTDBP3102](#), faculty have been informed that they must identify the student to the UT Dallas Title IX Coordinator. Students who wish to have confidential discussions of incidents related to sexual harassment or sexual misconduct should contact the Student Counseling Center (972-883-2575 or the 24/7 Crisis Hotline at 972-UTD-TALK or 972-883-8255), the, a health care provider in the Student Health Center (972-883-2747), a clergyperson (or other legally recognized religious advisor) of their choice, or an off-campus resource (e.g., rape crisis center, doctor, psychologist). Students who are sexually assaulted, harassed, or are victims of sexual misconduct, domestic violence, or stalking, are encouraged to directly report these incidents to the UT Dallas Police Department at 972-883-2222 or to the Title IX Coordinator at 972-883-5202. Additional information and resources may be found at <https://www.utdallas.edu/institutional-initiatives/title-ix/resources/>.

Student Conduct and Discipline

The University of Texas System ([Regents' Rule 50101](#)) and UT Dallas have rules and regulations for the orderly and efficient conduct of their business. It is the responsibility of each student and each student organization to be knowledgeable about the rules and regulations which govern student conduct and activities. General information on student conduct and discipline is contained in the Student Complaints Resources in the online UT Dallas Undergraduate

Catalog, <https://catalog.utdallas.edu/now/undergraduate/resources/student-complaints> and the Graduate Catalog, <https://catalog.utdallas.edu/now/graduate/resources/student-complaints>.

UT Dallas administers student discipline within the procedures of recognized and established due process. Procedures are defined and described in the Student Code of Conduct, UTDSP5003 (<https://policy.utdallas.edu/utdsp5003>). Copies of these rules and regulations are available to students in the Office of Community Standards and Conduct, where staff members are available to assist students in interpreting the rules and regulations (SSB 4.400, 972-883-6391) and online at <https://www.utdallas.edu/conduct/>.

A student at the University neither loses their rights nor escapes the responsibilities of citizenship. He or she is expected to obey federal, state, and local laws as well as the Regents' Rules, university regulations, and administrative rules. Students are subject to discipline for violating its standards of conduct whether such conduct takes place on or off campus, or whether civil or criminal penalties are also imposed for such conduct.

Social Media Use

The Student Code of Conduct includes behaviors conducted via any digital platform. Students may not use any digital platform to seek or provide unauthorized assistance for any assignment done for academic credit. Students may not use any digital platform to impersonate or represent any person other than themselves. Please consult with your instructor regarding authorized assistance.

Academic Integrity

The faculty expects from its students a high-level of responsibility and academic honesty. Because the value of an academic degree depends upon the absolute integrity of the work done by the student for that degree, it is imperative that a student demonstrates a high standard of individual honor in his or her scholastic work.

See <https://www.utdallas.edu/conduct/integrity/>.

Academic Dishonesty: Academic dishonesty can occur in relation to any type of work submitted for academic credit or as a requirement for a class. It can include individual work or a group project. Academic dishonesty includes plagiarism, cheating, fabrication, and collaboration/collusion. In order to avoid academic dishonesty, it is important for students to fully understand the expectations of their professors. This is best accomplished through asking clarifying questions if an individual does not completely understand the requirements of an assignment.

Additional information related to academic dishonesty and tips on how to avoid dishonesty may be found here: <https://www.utdallas.edu/conduct/dishonesty/>.

Copyright Notice

It is the policy of UT Dallas to adhere to the requirements of the United States Copyright Law of 1976, as amended, (*Title 17, United States Code*), including ensuring that the restrictions that apply to the reproduction of software are adhered to and that the bounds of copying permissible under the fair use doctrine are not exceeded. Copying, displaying, reproducing, or distributing copyrighted material may infringe upon the copyright owner's rights. Unauthorized distribution of copyrighted material, including unauthorized peer-to-peer file sharing, may subject students to appropriate disciplinary action as well as civil and criminal penalties. Usage of such material is only appropriate when that usage constitutes "fair use" under the Copyright Act. For more information about the fair use exemption, see <https://guides.lib.utexas.edu/fairuse/home>. As a UT Dallas student, you are required to follow UT Dallas' copyright policy (UTDPP1043 at <https://policy.utdallas.edu/utdpp1043>) and the UT System's policy, UTS107 at <https://www.utsystem.edu/board-of-regents/policy-library/policies/uts107-use-copyrighted-materials>.

Email Use

UT Dallas recognizes the value and efficiency of communication between faculty/staff and students through electronic mail. At the same time, email raises some issues concerning security and the identity of each individual in an email exchange. All official student email correspondence will be sent only to a student's UT Dallas email address and UT Dallas will only consider email requests originating from an official UT Dallas student email account. This allows the University to maintain a high degree of confidence in the identity of each individual corresponding via email and the security of the transmitted information. UT Dallas furnishes each student with a free email account that is to be used in all communication with university personnel. The Office of Information Technology provides a method for students to have their UT Dallas mail forwarded to other email accounts. To activate a student UT Dallas computer account and forward email to another account, go to <https://www.utdallas.edu/oit/netid/self-service>.

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).

Student Success Center

The **Student Success Center (SSC)** offers assistance to students in the areas of writing, mathematics, communication, multiple science fields, study skills, and other academic disciplines. These services are available through individual appointments, small group appointments, drop-in labs, workshops, and weekly reviews. All undergraduate students enrolled at UT Dallas are eligible to participate in these services. Not all courses will be supported by all services. Please check the website at the beginning of each semester to find out which courses are supported by which services.

ALL EXAMS WILL BE GIVEN IN THE TESTING CENTER. STUDENTS MUST CHECK TESTING CENTER AVAILABILITY DAYS AND HOURS AND MUST PREREGISTER AT LEAST 72-HOURS IN ADVANCE BEFORE BEING ALLOWED TO TAKE AN EXAM

Lecture and Exam Schedule

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

Week Of	Day	Topic	Reading
Jan 18	T	<Classes START Tuesday, January 18 th > Basic Science Review for the Neuroscience Student	PPT Postings
	R	Basic Science Review for the Neuroscience Student	"
Jan 25	T	Basic Science Review for the Neuroscience Student	"
	R	Neurons, The Nervous System, and Basic Neuroanatomy	Chapter 2/PPTs
Feb 1	T	Neurons, The Nervous System, and Basic Neuroanatomy	"
	R	Neurons, The Nervous System, and Basic Neuroanatomy	"
Feb 8	T	Exam I (in Testing Center)	
	R	<i>(Learning and Test-Taking Skills: Let's talk...)</i>	
Feb 15	T	Neurophysiology (What are membrane potentials)	Chapter 3/PPTs
	R	Neurophysiology (How do neurons do what they do)	"
Feb 22	T	Neurophysiology (What are action potentials)	"
	R	The Chemistry of Behavior (Basic neurochemistry)	Chapter 4/PPTs
Mar 1	T	The Chemistry of Behavior (Neurotransmitters)	"
	R	The Chemistry of Behavior (Pharmacology)	"
Mar 8	T	Exam II (in Testing Center)	
	R	The Sensorimotor System (Converting sensations into action potentials)	Chapter 5/PPTs
Mar 15	T	(SPRING BREAK) No Classes	
	R	(SPRING BREAK) No Classes	
Mar 22	T	The Sensorimotor System (Spinal and brain control of movement)	"
	R	Hearing (Converting sound waves into action potentials)	Chapter 6/PPTs
Mar 29	T	Vision (Anatomy of the eye)	Chapter 7/PPTs
	R	Vision (Converting light energy into action potentials)	"
Apr 5	T	Vision (Brain processing of visual information)	"
	R	Exam III (in Testing Center)	
Apr 12	T	Hormones (The hypothalamus and pituitary gland)	Chapter 8/PPTs
	R	Homeostasis	Chapter 9/PPTs
Apr 19	T	Biological Rhythms and Sleep	Chapter 10/PPTs
	R	Emotions, Aggression, and Stress	Chapter 11/PPTs
Apr 26	T	Psychopathology	Chapter 12/PPTs
	R	Memory and Learning	Chapter 13/PPTs
May 3	T	Attention and Consciousness	Chapter 14/PPTs
	R	Exam IV (in Testing Center) May 5th Last day of Regular Classes	
May 10	T	Final Exam Week May 7-May 13	