

Course Syllabus

Course Information

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| Course Number/Section | NSC 3361 Sections 003 and 004 |
| Course Title | Introductory Neuroscience |
| Term | Spring 2021 |
| Days/Times/Room | (Section 003) MW 11:30-12:45: (Section 004) MW 1:00-2:15 |
| Class Format | This is an online class. (No on-campus, in-person meetings are required). SEE Course Modality and Expectations below |

Professor Contact Information

| | |
|-------------------|--|
| Professor | Dr. Steve McWilliams |
| Office Phone | 972-883-6785 (do NOT leave messages- See email information below) |
| Email Address | 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 | -Please email to set up an individual online meeting, if necessary- |
| Other Information | Course Web Site: UTD eLearning |

Course Modality and Expectations

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|---|---|
| Instructional Mode | This course will use Remote Virtual (Live-online) Instruction for class lectures and discussions- See below regarding Asynchronous Instruction and Class Participation |
| Course Platform | Class lectures as well as any needed instructor-student meetings will be conducted via Blackboard Collaborate in eLearning. This link is accessible through the course webpage in eLearning. |
| Expectations | Students are expected to complete all necessary assignments, exercises, and exams when due. Weekly participation is highly recommended! |
| Asynchronous Learning Guidelines | While students can complete this course asynchronously (without attending live lectures), I strongly encourage students to participate in live on-line class sessions to get the most from the class. |

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.

Class Recordings

Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. Failure to comply with these University requirements is a violation of the [Student Code of Conduct](#).

Note: if the instructor records any part of the course, then the instructor will need to use the following syllabus statement:

The instructor may record meetings of this course. Any recordings will be available to all students registered for this class as they are intended to supplement the classroom experience. Students are expected to follow appropriate University policies and maintain the security of passwords used to access recorded lectures. Unless the Office of Student AccessAbility has approved the student to record the instruction, students are expressly prohibited from recording any part of this course. Recordings may not be published, reproduced, or shared with those not in the class, or uploaded to other online environments except to implement an approved Office of Student AccessAbility accommodation. If the instructor or a UTD school/department/office plans any other uses for the recordings, consent of the students identifiable in the recordings is required prior to such use unless an exception is allowed by law. 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.

Teaching Assistants

(Section 003) Thomas Szabo-Pardi Email: tas130030@utdallas.edu
(Section 004) Hajira Elahi Email: hxe150130@utdallas.edu

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

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.

Assignments and Grading Policy

Exams (90%): There will be three exams during the course. All exams are weighted equally. Exams will cover the material preceding the exam, and therefore are not comprehensive. No exam grade will be dropped. Exams will be given online via eLearning. Exams will become available the following day starting at 9:00 am and remain available until 9:00 am the following morning. YOU MUST COMPETE THE EXAM SOMETIME WITHIN THE 24-HOUR TIME WINDOW. You will have 60 minutes to complete the exam once started. Exams will be browser protected, and timed. (You cannot back up to look at questions, so you must answer questions in the order they appear!) See BELOW regarding MISSED EXAMS.

Quizzes (10%): A 5-question weekly quiz will be available each Friday, except during exam week. Each quiz is worth 10 points. These points will be averaged into your final course grade. Quizzes must be completed on the day assigned. There are no makeup quizzes! However, extra quizzes will be given throughout the semester, so only your highest 10 quiz grades will be totaled.

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). Final grades are based on in-class exams and the writing assignment only. No extra credit work will be given or accepted.

Course & Instructor Policies**Course information**

All course information including lecture PowerPoints will be posted on eLearning. However, I do not own the copyright to the diagrams and pictures that I 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.

Missed Exams

Students are expected to complete all exams within the allotted time. No makeup exam will be given unless preapproved by the instructor. An exam not completed within the allotted time will be given a grade of zero. Prior notification of instructor, for example just sending me an email, does not itself imply approval. No other

make-up exam will be given.

Attendance, Class Participation, and Readings

Learning about neuroscience can be a challenge even for the most studious student. I strongly suggest that you attend regular online class sessions. Your performance in this course will probably be affected by your attendance and participation during online class sessions.

eLearning and UTD email

To comply with FERPA regulations, **all email discussions to and from me MUST be through eLearning**. 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.

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 clergy person (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.

Comet Creed

This creed was voted on by the UT Dallas student body in 2014. It is a standard that Comets choose to live by and encourage others to do the same:

“As a Comet, I pledge honesty, integrity, and service in all that I do.”

I want very much for you to succeed!

Lecture and Exam Schedule

| Week Of | Day | Topic | Reading |
|---------|-----|---|------------|
| Jan 18 | M | No Classes- (Classes start Tues Jan 19) | |
| | W | Cells and Structures | Chapter 2 |
| Jan 25 | M | Cells and Structures | Chapter 2 |
| | W | Neurophysiology | Chapter 3 |
| Feb 1 | M | Neurophysiology | Chapter 3 |
| | W | The Chemistry of Behavior | Chapter 4 |
| Feb 8 | M | The Chemistry of Behavior | Chapter 4 |
| | W | The Sensorimotor System | Chapter 5 |
| Feb 15 | M | The Sensorimotor System / Exam I (online) | Chapter 5 |
| | W | How do I Learn/Test Taking Skills? (Hindsight is 20/20!) | |
| Feb 22 | M | Hearing, Balance, Taste, and Smell | Chapter 6 |
| | W | Hearing, Balance, Taste, and Smell | Chapter 6 |
| Mar 1 | M | Vision | Chapter 7 |
| | W | Vision | Chapter 7 |
| Mar 8 | M | Hormones and Sex | Chapter 8 |
| | W | Hormones and Sex | Chapter 8 |
| Mar 15 | M | Spring Break- No class | |
| | W | Spring Break- No class | |
| Mar 22 | M | Homeostasis | Chapter 9 |
| | W | Homeostasis | Chapter 9 |
| Mar 29 | M | Biological Rhythms and Sleep | Chapter 10 |
| | W | Biological Rhythms and Sleep / Exam II (online) | Chapter 10 |
| Apr 5 | M | Emotions, Aggression, and Stress | Chapter 11 |
| | W | Emotions, Aggression, and Stress | Chapter 11 |
| Apr 12 | M | Psychopathology | Chapter 12 |
| | W | Psychopathology | Chapter 12 |
| Apr 19 | M | Memory, Learning, and Development | Chapter 13 |
| | W | Memory, Learning, and Development | Chapter 13 |
| Apr 26 | M | Attention and Consciousness | Chapter 14 |
| | W | Attention and Consciousness | Chapter 14 |
| May 3 | M | Brain Asymmetry, Spatial Cognition, and Language | Chapter 15 |
| | W | Brain Asymmetry, Spatial Cognition, and Language / Exam III (online) | Chapter 15 |
| May 10 | M | Final Exam Week- NO COMPREHENSIVE FINAL EXAM | |
| | W | | |

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