**Course Description** 

Prerequisite: PSYC1100 (Introduction to Neuroscience)

This course provides an introduction to neuroscience with the relationship between the brain,

mind, and behavior in varying contexts. For a better understanding of neuroscientific findings,

neuroscientific research methods will be discussed with related studies. Topics include neuron

and nervous system, drug addiction, motivation and regulation, perception, emotion, memory,

consciousness, along with mental disorders.

**Course Objectives** 

This course offers an overview of various topics in neuroscience and aims to prepare students

with basic knowledge of neuroscience and foster further interest in neuroscience. Upon

successful completion of this course, students will have a good understanding of the structure

and function of the nervous systems and the neural mechanisms of human behavior, regulation,

and higher functions associated with the mind. Further, students should be able to critically

understand the media's coverage of neuroscientific findings in varying contexts.

**Course Learning Outcomes** 

1. Describe the structure and function of neurons and nervous systems related to mind and

behavior

2. Demonstrate understanding of basic neuroscientific research methods

3. Develop causal reasoning on the association of neural mechanisms in mind and behavior

in diverse contexts

4. Organize neuroscientific knowledge for understanding complex behavior and disorders

# **University of North Texas at Dallas**

# **Introduction to Neuroscience, PSYC 3310**

Department of	Psycholog	y	School of	Liberal Arts & Sciences
<b>Instructor Name:</b>	Dr. Matthew Harrison			
Office Location:	FH 201E			
Office Phone:	310-709-4880			
Email Address:	Matthew.Harrison@untdallas.edu			
	Email is the most efficient communication method for this course. Please write your course name (e.g., Intro Neuroscience) in the subject line for efficient communication and include your name for follow-ups. I will do my best to respond to your email within 24 hours.			
Office Hours:	T, Th: 10am-1:00pm			
Classroom:	W: 3:30pm-5:30pm FH 303			
Class Meeting Days	& Times:	T, Th: 2:30p	m – 3:50pm	
Course Catalog			-	ience with the relationship between the
Description:		_		
r. r.	brain, mind, and behavior in varying contexts. For a better understanding of neuroscientific			
	findings, neuroscientific research methods will be discussed with related studies. Topics			
	include neuron and nervous system, drug addiction, motivation and regulation, perception,			
	emotion, memory, consciousness, along with mental disorders.			
Prerequisites:	PSYC 1100 with C or better			
Required Text:  Lambert, K. (2017) Biological Psychology (Ist Ed.). Oxford University Press, New York, NY. ISBN: 9780199766109				
Access to Learning Resources:			UNT Dallas Library	<b>7:</b>
			phone: (972) 780-161	16
			web: http://www.unto	dallas.edu/library

email: library@untdallas.edu

**UNT Dallas Bookstore:** 

phone: (972) 780-3652

web: http://www.untdallas.edu/bookstore

e-mail: untdallas@bkstr.com

**Supported Browsers:** 

Chrome 67 & 68

Firefox 60 & 61

Flash 29, 30 (for audio/video)

Respondus Lockdown Browser

Safari 10, 11

**Supported Devices:** 

iPhone

Android Chromebook

(Tablet users can use the Canvas app)

**Screen Readers:** 

VoiceOver (Safari)
JAWS (Internet Explorer)

NVDA (Firefox)

Note: There is no screen reader support for

Canvas in Chrome

Access Canvas via untdallas.instructure.com

Username: your EUID # Password: your password

**Getting Help with Canvas:** 

Canvas 24/7 Phone Support for Students: 1-833-668-8634

**Canvas Help Resources:** 

Web: Canvas Student Guide

For additional assistance, contact Student Assistance

(Distance Learning):

DAL 1, Rm 157

phone: (972)338-5580

email: distancelearning@untdallas.edu

If you are working with Canvas 24/7 Support to resolve a technical issue, make sure to keep me updated on the troubleshooting progress with the ticket number & screenshots.

If you have a course-related issue (course content, assignment troubles, quiz difficulties) please contact me during office hours or by email.

### **Course Goals or Overview:**

This course offers an overview of various topics in neuroscience and aims to prepare students with basic knowledge of neuroscience and foster further interest in neuroscience. Upon successful completion of this course, students will have a good understanding of the structure and function of the nervous systems and the neural mechanisms of

human	behavior, regulation, and higher functions associated with the mind. Further, students should be able to		
critical	critically understand the media's coverage of neuroscientific findings in diverse contexts.		
Learn	ing Objectives/Outcomes: At the end of this course, students will be able to:		
	, , , , , , , , , , , , , , , , , , ,		
1	Describe the structure and function of neurons and nervous systems related to mind and behavior		
2	Demonstrate the understanding of the basic neuroscientific research methods		
3	Develop causal reasoning on the association of neural mechanisms in mind and behavior in diverse		
	contexts		
4	Organize neuroscientific knowledge for understanding complex human behavior and disorders		

## **Course Schedule**

This schedule is subject to change by the instructor. Any changes to this schedule will be communicated in class or via class email or the Canvas announcement. Additional readings and activities may be added, these will be noted in the Readings and Activities/Assignments sections. All due time is 11:59 pm of the due date.

Week	Chapter	Learning activities & Due Dates
Week 1	Chapter 1. Introduction to Behavioral	Post your introduction to Discussion Forum
Aug 26 - Sep 1	Neuroscience?	Read Chapter 1 & related materials
		Complete Chapter quiz
Week 2	Chapter 2. The Nervous System: Structure	Read Chapter 2 & related materials
Sep 2 - Sep 8	and Function	Complete In-class activities
		Complete Chapter quiz
Week 3	Chapter 3. Cells and Circuits:	Read Chapter 3 & related materials
Sep 9 - Sep 15	Organization and Functions of the Nervous System	Complete In-class/Discussion activities

		Complete Chapter quiz
W. 1 4	D 1 G1 1 1 2 0 2	
Week 4	Review Chapters 1, 2, & 3	Review
Sep 16 - Sep 22		Complete In-class/Discussion activities
		Exam 1
Week 5	Chapter 4. Neurochemistry,	Read Chapter 4 & related materials
Sep 23 - Sep 29	Neuropsychopharmacology, and Drug Addiction	Complete In-class/Discussion activities
		Complete Chapter quiz
Week 6	Chapter 5. Neural Development, Brain	Read Chapter 5 & related materials
Sep 30 - Oct 6	Injury, and Recovery	Complete In-class/Discussion activities
		Complete Chapter quiz
Week 7	Chapter 6. Senses: Vision, Hearing,	Read Chapter 6 & related materials
Oct 7 - Oct 13	Touch, Smell	Complete In-class/Discussion activities
		Complete Chapter quiz
Week 8	Review Chapters 4, 5, & 6	Complete In-class/Discussion activities
Oct 14 - Oct 20		Review for Exam 2
Week 9	Chapter 7. Get Moving! Motor	Exam 2
Oct 21 - Oct 27	Tract/Spinal Cord, Movement Disorders	Read Chapter 7 & related materials
		Complete In-class/Discussion activities
		Complete Chapter Quiz
Week 10	Chapter 8. Homeostasis: Maintenance and	Read Chapter 8 & related materials
Oct 28 - Nov 3	Motivation	Complete In-class/Discussion activities

		Complete Chapter quiz
Week 11	Chapter 9. Consciousness: Sleep, Coma,	Read Chapter 9 & related materials
Nov 4 - Nov 10	Dream	Complete In-class/Discussion activities
		Complete Chapter quiz
Week 12	Review Chapters 7, 8, & 9	Complete In-class/Discussion activities
Nov 11 - Nov 17		Exam 3
Week 13	Chapter 10: Emotional Expression &	Read Chapter 10 & related materials
Nov 18 - Nov 24	Regulation	Complete In-class/Discussion activities
		Complete Chapter quiz
Week 14	Chapter 11: Affiliative and Reproductive	Read Chapter 11 & related materials
Nov 25 - Dec 1	Behavior (What is Love?)	Complete In-class/Discussion activities
		Complete
Week 15	Chapter 12: Learning, Memory &	Read Chapter 12 & related materials
Dec 2 - Dec 8	Decision Making	Complete In-class/Discussion activities
		Complete Chapter quiz
Finals Week		Exam 4 (Final exam day/time TBA)
Dec 9 – Dec 14		

### **Course Evaluation Methods**

This course will utilize the following instruments to determine student grades and proficiency of the learning outcomes for the course. If you are having a problem with your performance in this course, please schedule an appointment with me (Use the Calendly link on the first page) as soon as possible so that we can discuss it together. The instructor is willing to help solve problems you might experience involving this course, other than failure to keep up with the assigned readings and work. Students will earn grades by weekly learning activities, exams, and writing papers in a cumulative fashion. In other

words, this course requires consistent and diligent work throughout the semester.

### 1. CHAPTER QUIZES (300 POINTS)

There will be 12 Chapter quizzes to ensure learning content in each chapter. You will complete the Chapter quiz via the digital learning platform. For learning purposes, you can repeat the quiz up to 3 times. Only the highest score will be taken for your grade. Each quiz is worth 25 points totaling 300 points.

#### 2. IN-CLASS ASSIGNMENTS and CHAPTER ASSIGNMENTS (50 POINTS TOTAL)

There will be occasional in-class assignments and chapter assignments (i.e. discussion board posts about in-class demonstrations) that will be worth between 5-10 points each, for a total of 50 points.

### 3. EXAMS (400 POINTS TOTAL)

In order to help you to learn basic knowledge blocks for physiological psychology to understand human behavior and mental processes, you will be given 4 exams to measure your mastery of learning materials. Each exam will cover each unit for up to 100 points and equally weighted. There will not be a comprehensive final exam. All four exams will cover textbook chapters, the corresponding study material, and all other relevant learning material. Exam periods are listed in the course schedule. Exams will be taken in class. You can take each exam only once.

### 4. TOPIC PRESENTATION (50 POINTS TOTAL)

To facilitate discussion and understanding of the material, you will be expected to lead one class discussion on an assigned date. A list of topics will be provided in the Week 2 materials, and discussed in-class, and you will be required to pick a day/topic on which to present during the third week of the semester. You have many options when designing your discussion-leading session. For example, if you enjoy presenting you can a presentation in person or via video (via YouTube, etc.). If you choose this route, the presentation should be approximately 10-15 minutes and should contain some type of visual aid (PowerPoint, Prezi, Video) and/or demonstration.

No matter which format you choose, in each presentation students will need to identify one scholarly research article related to their topic and make at least one real world connection (e.g., news story, magazine article, blog, etc.). Discussion leaders should briefly summarize the key aspects of the research article and the real-world application.

Leaders should focus on describing the connections between research and real life. Students are encouraged to discuss connections to their own lives, course materials, and/or to the field of Psychology in general.

This assignment is designed to give you agency in creating your discussion-leading session. The goals are as follows: 1) Your discussion should be grounded in a topic within the course, 2) Your discussion should be grounded in a research article on the topic you have selected, and 3) You should apply the topic to reality in some tangible way. How you accomplish these goals is up to you – do not be afraid to be creative! I hope that this can be both informative and fun. Please let me know if you have any questions about this assignment.

Late or Missed Assignment, Exam, Quiz, classwork: Students can submit late work within the availability period specified on the assignment with a late penalty. Any excuse for failure to meet the availability period must cover the entire availability period (i.e., approximately 10 days). In order to avoid penalties, the students should show a document with the University approved excuses. If an event arises that prevents a student keep a due date, a written request for arranging the due date modification should

be made within 3 days. **Requests will be approved only with a university-approved excuse and documentation.** Examples include documented funeral attendance, religious holidays, and illness (See student handbook). A note from a friend or family member does not constitute appropriate documentation. The qualifying student will be given 5 calendar days following the missed date. Beyond the 10 days, except under extreme circumstances, no late submission or taking exam/quiz will be allowed and a zero will be assigned. Internet failure/outage/etc. is not a valid excuse. If Canvas is experiencing system errors, you must contact Canvas support and email me your ticket number.

# **Grading Matrix**

Instrument	Value (points)	Total
Chapter quiz	12 @ 25pts each	300
In-class & Chapter assignments	5-10 pts each, 50 pts total	50
Exams	4 @ 100pts each	400
Topic Presentation	1 @ 50 pts	50
Total		800

### **Grading Scale**

A = 90% or better (720 pts or above)

B = 80 - 89 % (640 pts or above)

C = 70 - 79 % (560 pts or above)

D = 60 - 69 % (480 pts or above)

F = less than 60% (below 420)

### **Course Policy**

Artificial intelligence (AI) language models, such as ChatGPT: Artificial intelligence (AI) language models, such as ChatGPT, may not be used for discussion board posts (which are meant to reflect your own thoughts, opinions, and knowledge) or any assignment which does not explicitly state ChatGPT may be used. However, you may use AI language models (including ChatGPT) for assignments which specifically state that AI language models/ChatGPT is permitted, as long as it is used with appropriate citation. If you are in doubt as to whether you are using AI language models appropriately in this course, I encourage you to discuss your situation with me. Examples of citing AI language models are available at: https://apastyle.apa.org/blog/how-to-cite-chatgpt

When use of AI language models is allowed, you are responsible for fact checking statements composed by the AI language models.

*Grading Timeline*: While it is your responsibility to turn assignments in on time and be functional for working in the online class. In general, assignments are graded and posted on the course grade on Canvas within seven days of the assignment due date.

Late Work/ Make-up policy: All assignments should be submitted online via Canvas. No email submission will be accepted. Students who miss an assignment must document an illness or family emergency to become eligible for turning in assignments without penalty upon the instructor's approval. Such documentation must be provided within 3 days of the missed assignment due date. Failure to do so will result in an assigned zero. In general, requests will be approved only with a university-approved excuse and documentation. Examples include documented funeral attendance, religious holidays, and illness (See student handbook). The qualifying student will be given 5 calendar days following the missed date. Beyond 10 days period, except under extreme circumstances, no late assignments will be allowed and a zero will be assigned. Any excuse for failure to meet the assignment due date must cover the entire duration of that unit (i.e., approximately 10 days). Internet failure/outage/etc. is not a valid excuse. If Canvas is experiencing system errors, you must contact Canvas support and email me your ticket number.

Late assignments without the University-approved document will receive a 5-percent deduction per day beginning at 12:01 am after the deadline. A late submission beyond the availability date (specified on Canvas) will not be accepted.

Be sure to make backup files of your work. An easy way to do this is to send yourself an email with the file attached. Since participation must involve classmates, missed participation cannot be made up once the corresponding week has ended.

*Final Grades*: Grades will not be changed after final grades for the semester are submitted, except in cases of documented errors or grading errors. Students should retain all returned assignments until students have confirmed that the final grade has been computed and reported accurately. Please note that students must earn the exact number of points that correspond with the percentage associated with a particular letter grade to earn that grade. Grades are earned not given.

*Email*: Please include your full name and the specific situation you wish to address. In the subject line, please place the name of the course, the course number, and the section. (Example: PSYC 4640-001) for proper follow-ups. E-mails without this information may be considered junk by Outlook and filtered into the spam folder.

*Electronic Devices and Online Policies:* This course requires access to the Internet; preferably high-speed internet from a computer. It is not recommended to use a smartphone, tablet, or e-reader to complete your online exams, as they may not display correctly. It is the student's responsibility to be functional for an online portion of the class.

### **University Policies and Procedures**

## **Students with Disabilities (ADA Compliance):**

The University of North Texas Dallas faculty is committed to complying with the Americans with Disabilities Act (ADA). Students with documented disabilities are responsible for informing faculty of their needs for reasonable accommodations and providing written authorized documentation. Grades assigned before an accommodation is provided will not be changed as accommodations are not retroactive. For more information, you may visit **Section 504 Coordinator**, **Cynthia Suarez**, **at 972-338-1777 or email <u>cynthia.suarez@untdallas.edu</u>**. For additional information see <u>Disability Services Office</u>. You may also contact them by phone at 972-338-1777; by email at <u>UNTDdisability@untdallas.edu</u> or Building PL, room 1104.

## **Disruptive Behavior in an Instructional Setting:**

Students are expected to engage with the instructor and other students in this class in a respectful and civil manner at all times to promote a classroom environment that is conducive to teaching and learning. Students who engage in disruptive behavior will be directed to leave the classroom. A student who is directed to leave class due to disruptive behavior is not permitted to return to class until the student meets with a representative from the Dean of Students Office. It is the student's responsibility to meet with the Dean of Students before class meets again and to provide the instructor confirmation of the meeting. A student who is directed to leave class will be assigned an unexcused absence for that class period and any other classes the student misses as a result of not meeting with the Dean of Students. The student is responsible for material missed during all absences and the instructor is not responsible for providing missed material. In addition, the student will be assigned a failing grade for assignments, quizzes or examinations missed and will not be allowed to make up the work.

The Code of Student's Rights, Responsibilities, and Conduct (Policy 7.001) describes disruption as the obstructing or interfering with university functions or activity, including any behavior that interferes with students, faculty, or staff access to an appropriate educational environment. Examples of disruptive behavior that may result in a student being directed to leave the classroom include but are not limited to: failure to comply with a reasonable directive of University officials, action or combination of actions that unreasonably interfere with, hinder, obstruct, or prevents the right of others to freely participate, threatening, assaulting, or causing harm to oneself or another, uttering any words or performing any acts that cause physical injury, or threaten any individual, or interfere with any individual's rightful actions, and harassment. You are encouraged to read the Code of Student's Rights, Responsibilities, and Conduct for more information related to behaviors that could be considered disruptive.

### **Canvas Instructure Accessibility Statement:**

The University of North Texas at Dallas is committed to ensuring its online and hybrid courses are usable by all students and faculty including those with disabilities. If you encounter any difficulties with technologies, please contact our ITSS Department. To better assist them, you would want to have the operating system, web browser, and information on any assistive technology being used. <a href="Canvas Instructure Accessibility Statement is also provided.">Canvas Instructure Accessibility Statement is also provided.</a>

<u>NOTE</u>: Additional instructional technology tools, such as Turnitin, Respondus, Panopto, and publisher cartridge content (i.e., MyLab, Pearson, etc.) may NOT be fully ADA compliant. Please contact our Disability Office should you require additional assistance utilizing any of these tools.

### **Course Evaluation Policy:**

The student's evaluation of teaching effectiveness is a requirement for all organized classes at UNT Dallas. This short survey will be made available to you at the end of the semester, providing you with a chance to comment on how this class is taught. Therefore, students' evaluations are considered as an important part of student participation in this class.

### **Incomplete Policy**

The grade of Incomplete (I) is reserved for students who have successfully completed the majority of the coursework, but due to circumstances, are unable to complete the rest of the coursework. An incomplete will be granted following the University's policy. If an incomplete is granted, it is the student's responsibility to complete the coursework in accordance with the University policy. If an incomplete is not granted, the student is responsible for all of the work assigned in the course during the current semester.

### **Academic Integrity:**

Academic integrity is a hallmark of higher education. You are expected to abide by the University's Code of Academic Integrity policy. Any person suspected of academic dishonesty (i.e., cheating or plagiarism) will be handled in accordance with the University's policies and procedures. Refer to <a href="UNIVALEMENT Dallas">UNIVALEMENT Dallas</a>' Student Code of Academic Integrity for complete provisions of this code. Refer to the <a href="Student Code of Student Rights">Student Code of Academic Integrity</a> for complete provisions of this code. Refer to the <a href="Student Code of Student Rights">Student Rights</a>, Responsibilities, and Conduct. Academic dishonesty includes, but is not limited to, cheating, plagiarizing, fabrication of information or citations, facilitating acts of dishonesty by others, having unauthorized possession of examinations, submitting work of another person or work previously used without informing the instructor, or tampering with the academic work of other students.

**Web-based Plagiarism Detection:** Please be aware in some online or hybrid courses, students may be required to submit written assignments to Turnitin, a web-based plagiarism detection service, or another method. If submitting to Turnitin, please remove your title page and other personal information.

#### **Online Attendance and Participation:**

The University attendance policy is in effect for this course. Class attendance in the Canvas classroom and participation is expected because the class is designed as a shared learning experience, and because essential information not in the textbook will be discussed on the discussion board. Online presence and participation in all class discussions are essential to the integration of course material and your ability to demonstrate proficiency.

Attendance for this online or hybrid course is considered when you are logged in and active in Canvas, i.e., posting assignments, taking quizzes, or completing Discussion Boards. To maintain financial aid award eligibility, learning activity must occur before the census date of the session or term of the course. Refer to <a href="UNT Dallas' Registrar">UNT Dallas' Registrar</a> for specific dates. If you are absent/not active in the course shell, it is YOUR responsibility to inform the instructor immediately, upon your return, of the reason for your absence if it is to be excused. All instructors must follow university policy 7.005 covering excused absences; however, it is the instructor's discretion, as outlined in the course syllabus, of how unexcused absences may or may not count against successful completion of the course.

#### **Inclement Weather and Online Classes:**

Online classes may or may not be affected by campus closures due to inclement weather. Unless

otherwise notified by your instructor via e-mail, online messaging, or online announcement, students should assume that assignments are due as scheduled.

### **Online "Netiquette":**

In any social interaction, certain rules of etiquette are expected and contribute to more enjoyable and productive communication. Emails, Discussion Board messages, and/or any other forms of written communication in the online environment should use proper "netiquette" (i.e., no writing in all caps (usually denotes yelling), no curse words, and no "flaming" messages (angry, personal attacks). Racial, ethnic, or gender slurs will not be tolerated, nor will pornography of any kind.

Any violation of online netiquette may result in a loss of points or removal from the course and referral to the Dean of Students, including warnings and other sanctions in accordance with the University's policies and procedures. Refer to <a href="UNT Dallas Student Code of Conduct">UNT Dallas Student Code of Conduct</a>. Respect is a given principle in all online communication. Therefore, please be sure to proofread all of your written communication before submission.

### **Diversity/Tolerance Policy:**

Students are encouraged to contribute their perspectives and insights to class discussions in the online environment. However, offensive & inappropriate language (swearing) and remarks offensive to others of particular nationalities, ethnic groups, sexual preferences, religious groups, genders, or other ascribed statuses will not be tolerated. Disruptions that violate the Code of Student Conduct will be referred to the Dean of Students as the instructor deems appropriate.

### **Technology Assistance:**

In order to successfully access the materials in an online or hybrid course, UNT Dallas advises that your computer be equipped with the minimum system requirements listed on the first page of the syllabus.

If you experience difficulty accessing or using components of the course, try using the Google Chrome browser. If you still experience technical difficulties, first, notify your instructor. If the problem is still not resolved, call Student Assistance (Distance Learning) phone at (972)338-5580 (email: <a href="mailto:distancelearning@untdallas.edu">distancelearning@untdallas.edu</a>, see the Online Resources in the syllabus). Also, no matter what browser you use, always enable pop-ups. For more information see:

**UNT Dallas Canvas Technical Requirements** 

Canvas Instructure Supported & Unsupported Operating Systems