University of North Texas at Dallas
Spring 2025
Cognitive Neuroscience, PSYC4350, 3 credit hrs

Department of	Psychology	**School of**	Liberal Arts & Sciences
Instructor Name:	Dr. Heekyeong Park		
Office Location:	Founders Hall 263		
Office Phone:	972-338-1132		
Email Address:	Heekyeong.Park@untdallas.edu Email is the most efficient communication method for this course. Please write your course information (e.g., Cognitive Neuroscience or PSYC4350) in the subject line for efficient communication AND include your name in the message for follow-ups. I will do my best to respond to your email within 24 hours during the week & 48 hours during the weekend or holiday.		
Office Hours:	M/W 8:00 am -10:00 am (in-person) & 11:30 am – 1:30 pm (Zoom) Zoom appointment scheduling link - https://calendly.com/heekyeong-park/15min		
Classroom:	online		
Class Meeting Days & Times:	online		
Course Catalog Description:	A survey of neuroscientific investigations of cognitive processes with neuroimaging data, electrophysiological data, as well as lesion studies in both healthy and clinical populations. It examines the neural underpinnings of the mind and subsequent behavioral outcomes. Topics include an introduction to the brain and research methods of cognitive neuroscience, visual recognition, attention, memory, emotion, language, cognitive control, and consciousness.		
Prerequisites:	PSYC1100, PSYC3310, or PSYC4640 (or Instructor's approval)		
Required Textbook:	Gazzaniga, M. S., Ivry, R. B., & Mangun, G. R. (2019). *Cognitive neuroscience: The biology of the mind* (5th ed.). W. W. Norton & Company. (ISBN-13: 978-0393603170; ISBN-10: 0393603172)		

Access to Learning Resources:	**UNT Dallas Library:** phone: (972) 780-1616 web: http://www.untdallas.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	**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**

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*	**(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-Required Software

You must install the software for assignments within the first week of the semester: **MS-WORD** (included in Office 365). The use of Canvas is required for this course.

Course Overview

Course goal:

Cognitive neuroscience aims to understand the human mind using neuroscientific research methods. In this course, students will learn how neural activity/mechanisms underlie higher mental processes such as attention, memory, language, and cognitive control. Students will gain knowledge of interdisciplinary neuroscience research methods on cognitive processes and understand the mechanisms of how the brain supports cognitive functions. Students will also be able to evaluate complementary study findings and integrate them into a coherent perspective.

Learning Objectives/Outcomes: At the end of this course, the student will be able to

1. Understand neuroscience research methods for cognitive processes
2. Connect the neural underpinnings to cognitive functions
3. Develop critical thinking skills in analyzing, interpreting, and assessing interdisciplinary findings in cognitive neuroscience
4. Communicate cognitive neuroscience findings to an interdisciplinary audience.

Course Progress: While you do not have synchronous class meetings, **the progress of this course is synchronous** (see Course Schedule below). The instructor may revise/modify class materials by the beginning of the corresponding week.

Getting the most out of this course:

Here are some of my tips for succeeding in this course:

Read the syllabus carefully to know class expectations
Read assigned chapters/readings
Attend class consistently and study learning materials
Complete and submit assignments on time

Learn how to navigate the course page and access assignments and exams
Identify important dates and deadlines

Email me or visit my office hours (Zoom/In-person)
Test yourself regularly on content in preparation for exams
Participate in class actively and ask questions during class

Tip - Set aside time each week in your schedule to work on assignments, study for upcoming exams, and complete required reading. We will cover a ton of information for this course, and it is critical that you are well-prepared!

How you will be graded:

Grading Item	Points
Beginning Semester activities	20
Media Commentary (4 * 30pts)	120
Quizzes (4 * 50pts)	200
Discussions (4 * 20pts)	80
Total	**420**

Percentage	Grade
90 <	A
80	B
70	C
60	D
50 >	F

Beginning of the semester activities – One of my favorite aspects of teaching is getting to know my students. To that end, you will have one, Self-Introduction (10 pts) and the Beginning of Term Survey (5 pts) to complete in the first week of the course. These activities will help me get to know you and learn about your expectations and goals for the course. In addition, you will have a syllabus quiz (5 pts)to make sure that you read the syllabus at the beginning of the course. These activities provide an opportunity for you to communicate any questions or concerns you may have about the course.

Media Commentaries – Four news stories (30 pts), or popular press articles that describe results from recent cognitive neuroscience investigations, will be provided for this assignment. These are not original research articles but the media coverages as news stories so that the general public could understand the important research. As a layperson but with sufficient neuroscience knowledge from this course, you should briefly summarize the research in your own words based on the media coverage and then discuss whether the media coverage provided an appropriate description of the work for general public. The commentary should include (1) discussion of the cited work with a relevant topic in class (2) description of the hypothesis and methods used in the original research (3) results, conclusion, and importance of the study & (4) comments on the media coverage of the target research.

Discussions – You will have 4 discussion topics (20 pts) related to the course content. You will be graded on your own post (14 points) and comments on at least two peer discussion postings (6 pts). All discussion days are listed on the course schedule.

Unit Quiz – Did you know that testing yourself is beneficial for your learning? Simply testing yourself on content improves your learning, even if you answer questions incorrectly (Kornell, Hays, & Bjork, 2009; Roediger & Karpicke,

2006). For this reason, you will have 4 quizzes (each worth 50 points) to complete throughout the term. Each quiz will include 25 multiple-choice or short-answer questions about course content covered during the week of the quiz. Each quiz will be completed on the course website. You will have an unlimited amount of time to complete each quiz, and you will be allowed 2 attempts at each quiz (50 pts).

Missed Quiz/Exam - There will be NO make-up exam given (whether it is a unit exam or the final exam) unless rare extenuating circumstances occur (e.g., death of a family member, military service, jury duty, UNT Dallas verified events). In each of these cases, you must contact me prior to the exam date. I will review the document and may allow 3 days of extension from the due date. Please note that missing an exam due to technology-related issues (e.g., Wi-Fi issues, broken computer, app-related issues) or personal schedule issues do not constitute extenuating circumstances.

Course Schedule

This course schedule is subject to change by the instructor. Any changes to this schedule will be communicated via class email or the Canvas announcement. Additional readings and activities may be added. **All assignments should be submitted to Canvas**. **No email submission of an assignment is accepted.** All due time is 11:59 pm of the due date.

Week	**Unit / Chapter**	**Learning Activities & Due Dates**
Week 1 (1/13)	**Unit 1. Backgrounds and Methods** Nervous system-I	Read the syllabus (due: 1/17, Friday) Beginning-of-Term Survey (due: 1/17, Friday) Read Chapter 2
Week 2 (1/20)	Nervous system-II	Read Chapter 2 Self-Introduction (due: 1/24, Friday) **Discussion #1 (due: 1/26, Sunday)**
Week 3 (1/27)	Cognitive neuroscience methods	Read Chapter 3 **Media Commentary #1 (due: 2/2, Sunday)**
Week 4 (2/3)	Review Unit 1	**Quiz 1 (due: 2/9, Sunday)**
Week 5 (2/10)	**Unit 2. Core Process I** Hemispheric specialization	Read Chapter 4
Week 6 (2/17)	Object Recognition	Red Chapter 6 **Discussion #2 (due: 2/23, Sunday)**
Week 7 (2/24)	Attention	Read Chapter 7 **Media Commentary #2 (due: 3/2, Sunday)**
Week 8 (3/3)	Review Unit 2	**Quiz 2 (due: 3/9, Sunday)**
Week 9 (3/10)	**Spring Break**	
Week 10 (3/17)	**Unit 3. Core Process II** Ch 9. Memory-I	Read Chapter 9
Week 11 (3/24)	Ch 9. Memory-II	Read Chapter 9 **Discussion #3 (due: 3/30, Sunday)**

Week 12 (3/31)	Ch 10. Emotion	Read Chapter 10 **Media Commentary #3 (due: 4/6, Sunday)**
Week 13 (4/7)	Review Unit 3	**Quiz 3 (due: 4/13, Sunday)**
Week 14 (4/14)	**Unit 4: Control Process** Ch 12. Cognitive control	Read Chapter 12 **Discussion #4 (due: 4/20, Sunday)**
Week 15 (4/21)	Ch 13. Social cognition	Read Chapter 13 **Media Commentary #4 (due: 4/27, Sunday)**
Week 16 (4/28)	Review Unit 4	**Quiz 4 (due: 5/5, Sunday)**

COURSE POLICIES

***Grading Timeline*:** While it is your responsibility to turn assignments in on time, it is my responsibility to grade and return them in a timely matter. In general, assignments are graded and posted on the course grade on Canvas within seven days of the assignment's due date.

Life Happens:
Things happen. You have a one-time, no questions asked extension on one of the class assignments, EXCEPT quizzes/exams. **This must be used within 24 hours before or after the assignment is due.** I will give you up to 3 days past the original deadline to submit the assignment. To use this, do the following steps:

(1) Email me (see "E-mail" on the first page for guidelines on how to email me).
(2) Feel free to provide an explanation or provide no explanation at all.
(3) Tell me the assignment you would like an extension for.
(4) Wait for an email back from me to finalize the extension.

***Attendance and Participation Policy*:** The University attendance policy is in effect for this course. Please refer to Policy 7.005 Student Attendance at https://www.untdallas.edu/hr/upol. Attendance is mandatory for this class. In addition, I strongly encourage you to regularly check the Course Canvas with assignment due dates, given that you should be present to participate in those activities. If you miss any class activity due to your absence, you miss it. I do not provide the missed activity for those who missed the activity unless it is due to university-approved excuses. If attendance becomes an issue in the course, I reserve the right to factor attendance into your grade.

***Assignment Policy*:** All assignments are to be submitted through our course page on Canvas, including journals, the beginning-of-term assignments, and discussions. All written assignments should adhere to current APA guidelines. I will accept late assignments. However, a late assignment will have 10% deducted from the total score. I will continue to deduct 10% of the grade for each day the assignment is late (e.g., two days = 20% deduction). No assignment will be accepted more than two weeks after its assigned due date.

***Exam Policy*:** I will pull from material discussed during class lectures, the material presented for the Course Canvas, and material from your textbook to create exam questions – anything discussed for the class is fair game for exams, as well as anything covered in your textbook. Your exams will include a

combination of multiple-choice questions and short-answer questions. Exams should be taken as scheduled. There will be NO MAKE-UP EXAMS unless rare extenuating circumstances occur (e.g., death of a family member, military service, jury duty, UNT Dallas verified events, etc.) AND valid documentation is provided (See Policy 7.005 Student Attendance at https://www.untdallas.edu/hr/upol). In each of these cases, you must contact me prior to the exam date. I reserve the right to ask for further supporting documented evidence for granting an exam outside of the exam period. Please note that missing an exam due to traffic, a wifi connection issue, overloaded schedule, etc. is not considered as an extenuating circumstance.

***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 receive the grade. Grades are earned not given.

Important Health-Related Information About this Course: You may be provided with study materials (both in and out of class) and/or instructional content in which people use drugs/treatments and suffer from drug use/treatment, in addition to the nature of drugs/treatments and their effects. It is my goal to scientifically and accurately describe and deliver the knowledge about neurological disorders, treatment options, their uses, and consequences of the use by consulting what is current knowledge in this domain. In any course covering sensitive topics about treatments and drug use, there is a risk of experiencing (a) negative emotion triggered by past and/or current experiences or (b) questions about physician-prescribed treatments/medications. If you are experiencing unpleasant feelings and thoughts because of past or current experiences, or experiences by those close to you, the university has counseling services that can help you understand and navigate these feelings. Please visit the following website to get professional help: https://sa.untdallas.edu/counseling-wellness-center. If you are currently on treatment/prescription medication, do not abandon it without consulting with your physician. I do not have answers pertaining to if you should or should not take a particular treatment/medication.

***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 UNT Dallas' Student Code of Academic Integrity for complete provisions of this code.

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 an assignment draft is submitted to Turnitin for a plagiarism check before the actual assignment submission, you could remove your personal information.

Class Statement Regarding Artificial Intelligence

We have noticed the evolving capabilities of Artificial Intelligence (AI) technologies and their various effects on student writing and content creation. This class does not allow students to use AI technology in the creation of any course content unless the use is explicitly permitted by the course instructor. If the use of AI technology is detected, without specific instructor permission, the student will be deemed in violation of the plagiarism policy.

Classroom Policies:

(1) Please respect your fellow students and the instructor at all times, even if you disagree with them.
(2) You are responsible for tracking your own grade progress (see course requirements and grade scale above to help you keep track of points earned). If you have questions about your grade come to office hours, make an appointment, or contact me via email.

(3) No late work will be accepted unless you have a valid, documented excuse (see guidelines noted above), except for one "Life Happens" extension. If you miss an assignment and you have a valid, documented excuse, notify the instructor as soon as possible via email.
(4) You are responsible for any absence and are required to be accountable for any missed work.
(5) **All students will be treated equally in terms of fairness.** Do not ask for special extensions just for you (e.g., " I want to complete all missed assignments/exams" at the end of the semester, " I need a passing grade" although my grade is short of the cut-off points, etc.). The grade is earned not given in this class.

Additional information for class:

(1) Use of Canvas: Review the course website daily. Visiting the website frequently will familiarize you with the resources available on the site.
(2) All students must be evaluated using the exact same criteria. Do not request additional/unique/special assignments or extra credit to meet your own needs.
(3) The instructor does not bump, round, or otherwise change grades.
(4) The instructor will not discuss the student's performance in other courses or the overall GPA.
(5) Students are expected to be familiar with the academic calendar and the course schedule.

University Policies and Procedures Students with Disabilities (ADA

Compliance):

Chapter 7(7.004) Disability Accommodations for Students:
The University of North Texas at Dallas makes reasonable academic accommodations for students with disabilities. Students seeking accommodations must first register with the Disability Services Office (DSO) to verify their eligibility. If a disability is verified, the DSO will provide you with an accommodation letter to be delivered to the faculty to begin a private discussion regarding your specific needs in a course. You may request accommodations at any time, however, DSO notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet/communicate with each faculty member prior to implementation in each class. Students are strongly encouraged to deliver letters of accommodation during faculty office hours or by appointment. Faculty members have the authority to ask students to discuss such letters during their designated office hours to protect the privacy of the student. For additional information see Disability Services Office. You may also contact them by phone at 972-338-1777; by email at UNTDdisability@untdallas.edu 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 the class meets again and to provide the instructor with 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 prevent 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. Canvas Instructure Accessibility Statement is also provided.

NOTE: 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.

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 UNT Dallas' Student Code of Academic Integrity for complete provisions of this code. Refer to the Student Code of Student Rights, 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.

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.

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: distancelearning@untdallas.edu, 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