University of Texas at Tyler School of Health Professions Department of Rehabilitation Sciences

Communication Sciences and Disorders

COMD 3350 Neurological Foundations of Speech, Language, and Hearing (Fall 2023)

Instructor: Ahmed M. Abdelal, Ph.D., CCC-SLP

Associate Professor and Director of Communication Sciences & Disorders

Office: 126 HPR

Class Meeting Time: Thursday 5:00-7:45 PM (HPR 262)

Office Hours: Tuesday & Thursday 3:30-4:30 PM (Office hours need no appointment and are

first-come-first serve)

I am also available <u>by appointment only</u> (in person or via Zoom) on Wednesday 2:00-4:00 pm, and by email 5 days a week. I make every effort to respond to emails as soon as possible and not later than 24 hours, unless I am attending conferences.

This syllabus is intended for use with the online resources that are available on Canvas. It is important that you refer to it regularly to prepare for classes and keep up with course assignments. You are strongly advised to download and retain a copy of this syllabus and assignment guidelines in case you need them in the future for graduate school purposes.

Prerequisites: COMD 2110/2310, 1306, 2357, and 2358

This course (COMD 3350) builds on the anatomy and physiology knowledge you acquired in the prerequisite courses. Students are expected to demonstrate their prior knowledge during class, and to review related concepts on their own PRIOR to classes.

Important:

I encourage you to ask questions, no matter how simple or "dump" they may sound to you. It is by your questions and inquiries that I can understand you better and provide you with the help you need. We will achieve the best learning outcomes when we communicate well and each of us (you as a student and myself as a faculty) does his/her part as they should. I am available to help you throughout the week. I will be happy to help you in person, via Zoom, or through email.

Course Description

This course is designed to introduce students of communication sciences and disorders to the neuroanatomy and neurophysiology of the systems and networks responsible for programming and production of speech, receptive and expressive language processing, and central auditory processing. The course starts with a basic analytic review of nervous system anatomy and the study of brain circulation. Following that, topic discussions will follow a physiological approach whereby the physiology leads the anatomy. As such, topics will be explored in a process-based manner, whereby the anatomy is discussed within the context of the specific process at hand. These processes include speech cognitive planning, speech motor programming, speech motor activation and coordination; central auditory processing and receptive language processing; and expressive language processing. Related neurocognitive processes will be discussed in context and

based on the nature of individual topics. Upon completion of this course, students will be able to provide comprehensive, cohesive descriptions of the processes of speech motor production, central auditory processing and receptive language processing, and expressive language production.

Required Text: NONE

The instructor will provide written summaries of book chapters and articles that will be assigned and posted online on a weekly basis. Please have a 1.5 or 1-inch binder to keep this content together. This content will be the textbook for the course. You are advised to keep electronic copies of all course content for future use.

The instructor reserves the right to assign any additional readings as deemed necessary to meet student learning outcomes.

Student Learning Outcomes:

The following learning outcomes are based on the following 2020 ASHA Certification Standards (May 2023 Revision): *IV-B, IV-B, IV-D, & IV-C*.

Upon completion of this course students will:

- 1. Provide an overview of major neuron types and neuroglial cells that make up the human nervous system
- 2. Describe The process of neural transmission and explain the nature and functions of major neurotransmitters
- 3. Explain the relationship between genetics and the environment; and describe how experience determines and refines neural connectivity
- 4. Analyze the structure and organization of the human nervous system and explain how they give rise to behavior
- 5. Discuss brain blood circulation and explain neuropathophysiology of stroke and related cerebrovascular disease
- 6. Describe the anatomy and physiology of the auditory central nervous system and the process of sound transduction and auditory perception
- 7. Identify major left and right hemisphere structures responsible for language processing
- 8. Discuss the cerebral and cerebellar structures and networks responsible for planning, initiation, coordination, and refinement of movement and speech production
- 9. Analyze the types of age-related and acquired brain damage, and explain the process of spontaneous brain recovery and nervous system repair
- 10. Discuss the neurobiology of the aging brain and how aging alters behavior, movement and various neurocognitive functions
- 11. Discuss the nature and neural substrates of specific neurodevelopmental disorders, with a special focus on Autism, Down Syndrome

Teaching Method & Course Organization:

Students are required to study all assigned materials BEFORE arriving to class. While studying, you should keep a notebook by your side. In this notebook write down any questions that may come up and list specific concepts and/or areas that are hard for you to understand. Class time will be used for explaining complex concepts, discussion, and expanding on specific areas of the content. To benefit from this teaching method, you must come to class well prepared. Course

content will be presented through various modalities including discussion, student presentations, You Tube videos, images, class quizzes, and hands-on research projects.

During class you will be called upon to answer questions. Inability to answer questions will be counted as lack of class participation. For a student to earn participation points and will affect your grade.

Given the nature of the content and teaching method, your success will depend on the following 3 conditions: (A) regular attendance and regular class participation; (B) reading assigned materials PRIOR to coming to class; and (C) studying and reviewing the materials DAILY.

Three Important Things to Keep in Mind:

This course is based on 1000 points that students must EARN. Your gradebook starts with zero points, and any points you EARN become part of your grade. Thus, instead of saying "I lost X points out of a total exam/assignment grade," it will be more accurate to say, "I EARNED X points." Simply stated, you do not lose something that you have not EARNED.

Another thing is that it is the responsibility of a **professor** to teach students how to think, explain complex concepts, and ensure that students fully understand the material. Meanwhile, it is the **students' responsibility** to communicate their needs effectively by asking questions, requesting clarification of content that they do not understand, and figuring out effective ways for retaining and consolidating what they learn. Strategies for retention of information differ from one person to another. Finding out what works for you is your responsibility. If you use a strategy multiple times and it does not produce the desired results, you should explore DIFFERENT ways.

Lastly, for those taking more than one course with me this semester, different courses have different requirements and expectations. What applies to a course does not necessarily apply to another. If you are taking more than one course with the same instructor, treat each course in the same manner you would if it was taught by another instructor. Thus, if a certain criterion or policy is implemented in one course, do NOT assume that it will be implemented in another course. Likewise, faculty do not coordinate their assignment or exam dates with each other. It frequently happens that students may have more than one exam on the same day. The same applies to multiple classes taught by the same professor. With this said, I will do my best not to schedule more than one exam on the same day for those taking more than one class with me.

As for assignments, if assignments in more than one course have the same due date, that should not present as a problem for a college student. First, as a college student, you are expected to plan ahead for long-term assignments. This is why I make all assignment guidelines and grading rubrics available to you BEFORE classes start. Additionally, I will make assignment folders available for you to submit assignments long before their due dates. Thus, it is totally up to you to plan for assignments and begin working on them early to avoid having to submit them on the same day.

COURSE POLICIES

Professional Conduct

Students are expected to demonstrate professional behavior in class and in school environments. Professional behavior in class includes:

- Arriving on time, completing assigned readings PRIOR to class, being ready to answer questions, and actively participating in all course activities.
- o Communicating effectively by asking questions and requesting help when you need it.
 - This is critical for your success as a student and as a professional. The CORE duty of speech-language pathologist is to teach people how to express their thoughts and needs and realize their full potential as effective communicators. To be prepared for this CORE duty, you must develop your own communication skills by being an ACTIVE participant throughout the course.
- Seeking information about the course and the program directly from the professor, and avoiding the spreading of misinformation about professors, courses, and the program.
 - ➤ Instead of asking the professor, some students may ask another student, who may be equally confused about the information. Doing so will only create more confusion and spread misinformation. PLEASE direct your questions to the professor.
- Following the chain of command: Direct any concerns about a course to the professor who teaches the course. If the professor does not respond within a reasonable amount of time or the response does not effectively address your concern, you should then reach out to the Program Director. If you bypass the professor and go directly to the Program Director or the Department Chair, they will (a) send you back to the professor, or (b) meet with you and the professor. Resolution of any complaint will involve listening to the student's perspective and the professor's perspective.
 - ➤ If you have a concern about any part of a course, please speak only for yourself. Generalizations like "Me and a whole bunch of us..., etc." only complicate the situation and may misrepresent other students' opinions. College students are expected to, and are given every opportunity, to voice their own concerns.
- Avoiding all forms of academic dishonesty

ATTENDANCE POLICY:

Regular attendance and participation are mandatory in this and all CSD courses.

My classes begin and end exactly on time. I am usually in class 10-15 minutes before class starts and I expect you to be there on time. I will start taking attendance a few minutes before class time. Attendance will close at 5:00 PM. For students arriving late, I will not interrupt class to mark them present. If you have an emergency and arrive a minute or two later, it is your responsibility to remind me after class. If you do not inform me at that time, the absence will not be removed. The best way to avoid this issue is to be there right on time.

Because attendance is mandatory, students who miss classes will lose points for each class missed. Missing 1 class during the semester (without a WRITTEN proof of an emergency) will lead to loss of 10% of the total course grade. Each additional class missed without written evidence of an emergency will lead to loss of an additional 10% of the total course grade. Students who miss 2 consecutive classes without evidence of a documented emergency will be reported to the Registrar for removal from the course.

Students are required to engage in class discussions and to answer questions when called upon.

- If you plan to be out for any reason, you do NOT need to notify me ahead of time. All you need is to bring in your written proof of an emergency the next time you come to class.
- <u>A legitimate excuse</u> is one that is due to an emergency (e.g., death in the family, car accident, prolonged illness, court appearance). Students will be responsible for providing written proof of such absence (e.g., obituary, court summons, police report, doctor's letter). I will not ask you for the proof. However, if you do not present one, your absence will NOT be excused.
- Habitual lateness or leaving before class ends will also result in lowering the student's final grade. *Missing 20 minutes of a class twice will be counted as 1absence*. In addition to the impact on your performance, arriving late/leaving earlier is disruptive and shows lack of respect for your fellow classmates.

<u>Important</u>: If you are absent for any reason, please do not ask me what you missed. This is your responsibility. You will need to find out from one of your colleagues.

No Texting or Internet Browsing While Class is in Session:

- In my classes I am very protective of class time. Every minute is precious. The only reason you are in this course is to LEARN, and the only reason I am here is to teach you and to make every class of the course worth your money, commuting, time, and effort. For this reason, engaging in texting, Internet browsing, or chatting is a very serious violation of class rules. I want you to succeed and will do everything I can to enable you to succeed, but you MUST do your part and follow class rules:
- Laptops are allowed ONLY for note taking.
- Please silence your phones. If there is a situation where you must text, it is perfectly okay to step out of the room quietly and send your message or make your call. If you have a serious situation that requires your phone to be on, you can put it on vibrate. However, you will need to inform me in advance.

Class Cancellation

In the event of class cancellation (due to inclement weather or an emergency), please refer to the UT TYLER website for announcements. In the event of an emergency campus closure, a video recording of the lecture will be available online. You will view it and take notes. Any assignments due during that week will NOT be affected by the campus cancelation, as all assignments are submitted online.

Cancelations will be determined by the UT TYLER policy, and I will make no special announcements. It is your responsibility to check the UT TYLER website for weather-related announcements.

Note: All assignments in this course are to be done individually. Submissions will be checked for plagiarism and the UT Tyler academic honesty policy will be strictly enforced.

General Course Assignment Guidelines: Very important

- You are required to keep word copies of each written assignment you submit until the very end of the course.
- All assignments MUST be submitted in Word DOC format and ONLY in the designated folders on Canvas.

- All assignments submitted for this course MUST be ORIGINAL and must be ONLY written for this course and ONLY for this semester. Any assignments submitted in previous courses or previous semesters will receive zero credit.
- Absolutely NO emailed assignments. Assignments must be submitted on Canvas, in their designated folder and by the due date (which is listed in the course schedule grid at the end of this document).
- All written assignments must follow APA Style: i.e., they must be in Word Document form, in double-space, and in Times New Roman font # 12 or one of the APA compatible fonts. To learn how to use APA style documentation, please go to Purdue OWL: https://owl.english.purdue.edu/owl/section/2/10/.

Completing Assignments PRIOR to Class

Students are expected to read ALL assigned materials, view any assigned videos, and complete ALL other assignments before coming to class. The class will focus on (a) expanding your understanding of the content, (b) answering your questions about the material, and (C) explaining any concepts that you may need more help with. You are responsible for the information in assigned chapters, articles, class presentations, discussions, and any other material discussed in class. All of these are content for exams.

Extra Credit and Opportunities to Improve Your Grade:

This course provides the following FOUR opportunities for students to improve their grades DURING the course.

A) Extra credit questions in exams: This course includes 4 exams in total (150 points each). Each exam will include 1 extra credit question that is worth 15 points (10%) of the exam's total grade. Extra credit points for each exam will ONLY apply to the specific exam and will NOT carry to another exam or assignment. Example: If a student earns 165 points, that will constitute 100% for that exam, and the extra points will not carry to another exam/assignment. Meanwhile, a student who earns 135 points AND, in addition, earns the 15 extra credit points will earn a final exam grade of 150 (100%).

B) Opportunity to make up 1 exam of your choice

o To do so, students need to inform the professor at least 1 week before the make-up exam. The make-up exam will NOT be a repeat of the original: However, it will focus on the same content and will have the same level of difficulty as the original. If the grade on the make-up exam is lower than the original grade, the original grade will stay.

C) Partial credit for written assignments that missed the due date

Students who miss an assignment deadline will be given the opportunity to submit the late assignment within 6 days from the due date. However, 21% will be deducted due to missing the deadline. Assignments that are more than 6 days overdue will NOT be accepted for credit. Example: If an assignment is worth 100 points, the student will start with 79 points. Any points missed because of errors will be subtracted from the 79 points.

D) Partial credit for resubmitting assignments that receive 50% or lower

o If a student submits the wrong assignment or earns a grade that is 50% or lower, the student will have the opportunity to resubmit the assignment (within 6 days) for partial credit. As is

the case with late assignments, 21% will be subtracted and the student starts with 79 points. Any points missed because of errors will be subtracted from the 79 points.

Submitting Assignments:

Absolutely NO emailed assignments. Assignments must be submitted on CANVAS, in their designated folder. If the folder is not visible or accessible, please inform me and I will look into it immediately.

Please do not ask me to edit or your written work or "look it over" prior to submitting it. *You* are welcome to seek editing support help from the Writing Center (at the Student Success Center). You are welcome to ask me any specific questions about the assignment, but I do not edit or read them before grading them.

To submit assignments, please go to the Course Assignment folder on Canvas (course menu). In this folder you will find links for submitting each assignment. You will also find detailed guidelines and grading rubrics for each assignment. All written assignments must be submitted in WORD DOC format and as a REGULAR ATTACHMENTS, not through Google Doc or Cloud. Please do NOT copy and paste. If you do, this will change your format and may make your entire assignment unreadable. Also, before uploading the assignment, please verify that you are submitting the right file. Any wrong assignments, or assignments not submitted in the designated folder, will receive zero.

Description of Assignments

Research Project: TWO OPTIONS:

In this course, students have 2 options for this assignment. Each option has its own timeline and procedures. The options are as follows::

- A) Write a research paper and class presentation
 - > This is an individual assignment
- B) Conduct an empirical study, class presentation (Group Assignment)
 - Feam with a group of 3-4 classmates, design, and conduct a study on an approved topic, with the purpose of presenting the study at 2024 National ASHA Convention
 - Valuable opportunity for juniors.

Option # 1: Research Paper: (120)

Students who chose this option write a term paper focusing on one of the topics addressed in this course. The process begins with developing a title and writing a proposal. Once you get the feedback on the title and proposal, you will write the actual paper. The proposal should include (a) a title page; (b) an abstract; and (c) an outline. All must strictly follow APA guidelines. The only piece that can be emailed for approval is the title. Everything else is submitted online. The paper must strictly adhere to APA guidelines. Detailed grading rubrics and assignment guidelines are available on Canvas.

Here are some examples of good topics:

- Speech motor production
- Anatomy and physiology of RECEPTIVE language
- Anatomy and physiology of EXPRESSIVE language

- Neurological bases of stuttering disorder, etc.
- Effect of working memory on language processing
- Effect of attention/hyperactivity disorder (ADHD) on receptive and/or expressive language
- Effects of depression on language processing
- Effects of fetal brain development
- Effect of anxiety on language processing
- Effects of one or more environmental toxins (e.g., lead, nicotine, etc.) on one or more cognitive functions

The BODY of the paper will consist of 1700-2000 words, using a 12 Times New Romans or another acceptable APA font. The paper must follow all APA guidelines. The word count does not include the title page, the abstract, or the reference page. Papers with a body less than 1700 words or exceeding 2000 will not be accepted for credit. This assignment consists of the following parts:

- An outline following one of APA acceptable formats (30 points)
 - This is submitted BEFORE the paper. The only purpose of the outline is to help you plan your paper, break down your ideas into smaller ideas, organize your thoughts, identify your headings, and develop the general framework of the paper.
 - Do NOT attach this to the paper: The outline is ONLY a TOOL.
- The Research Paper, which should consist of the following:
 - o A title page showing the title with all required information
 - o A 100-word abstract stating the purpose and main ideas of the paper
 - o The body of the paper
 - o Reference page

Please refer to detailed guidelines, grading rubric, and example APA paper on canvas. Following and implementing the guidelines and grading rubric is your best guarantee for earning the highest grade for this assignment.

Option# 2: Designing and Conducting a Research Study and Writing a Paper (120)

This is a valuable opportunity for students aspiring to develop their field research skills and be recognized as researchers at local and national conferences.

While the bulk of the work will be conducted during the fall semester, preparations for the ASHA Convention (i.e., submitting the proposal, and designing the poster presentation) will extend into the spring of 2024.

If you take this option, I will join your team as the lead researcher and will mentor you throughout the study and will help you prepare a presentation for the UT Tyler spring symposium. More importantly, if our proposal is accepted by ASHA, I will help you (in the summer) in obtaining funding to travel to the ASHA Convention. Regarding seniors, travel funding will be available only for those who are admitted to the new SLP graduate program, because they will be still UT Tyer students when the Convention takes place.

Due to the nature of field research, there are no specific word count rules for the BODY of the paper. If you choose this option, you need to do the following:

• Form your team, decide on a topic, develop the title, and email it title by the due date

- Meet with me (as needed) to design the study, finetune the topic, develop the timeline, specify the procedures, and develop necessary forms and protocols
- Work with your team to develop the outline and conduct a literature review
- Identify and recruit study participants and the location where the study will be conducted
- Develop the proposal to submit to the ASHA Convention
 - o Call for proposals opens in February 2024
 - o We will also need this proposal to complete the IRB application
- Complete the Institutional Review Board (IRB) application
 - o This is a lengthy document that I prepare to get permission before we can proceed with the study. This will be completed on the IRB website, and I will need a brief meeting with each team to enter names and contact information for each person.
- Work with instructor to conduct the study
- Meet with the instructor as needed to (a) analyze the data and develop an ASHA poster presentation for the Convention
- More details will be shared in class.

Sample Topics for an Empirical Study:

- The effect of vaping on language comprehension
 - Example: Effect on following multistep directions, comprehending information on the paragraph level)
- Effect of a 15-minute fast-pace walk on receptive and expressive language
- Effect of middle ear infections on attention skills
- Impact of clinical depression on social communication (survey or direct testing)
- Effect of a 30-minute brisk walk on speech fluency in children/adults who stutter

More details and examples will be discussed at research planning meetings.

Class Presentation (50 points)

Based on your paper OR study, you will develop a 15-20-minute class Power Point presentation to discuss your work. You will not present anything other than what is discussed in paper/study. The purpose of the presentation is to help you enhance speaking and public speaking skills and consolidate the knowledge you acquired from your research project. Please refer to the presentation grading rubric online.

Editing the First Draft of a Classmate's Paper: (50 points)

After you finish the first draft of your paper, you will post it to a DB forum for one of your colleagues to review it and identify any errors pertaining to APA Style, grammar, organization, accuracy of the content, etc. You will then select the first draft of 1 of your colleagues and edit it. The grade will be based on the number of errors identified and the number not identified. You will have 6 days to implement the feedback from your colleague and post the final draft.

Acceptable Sources for Research Project: (Applies to BOTH options)

ONLY scholarly articles from peer-reviewed scientific journals, books, and documents from Official Institution are acceptable for this assignment. An official institution is a government agency (e.g., CDC), a professional association (e.g., ASHA.org, American Psychological

Association, American Psychiatric Association, etc.), a major university, or a major hospital (e.g., Mayo Clinic; Boston Children's Hospital, etc.).

<u>Valuable Resource</u>: Purdue OWL_provides detailed APA guidelines for developing a research proposal AND model proposals. You will find 2 types of proposal formats and you are welcome to choose either one. However, choosing one type means sticking to it from beginning to end. Here is the link:

https://owl.purdue.edu/owl/research and citation/apa_style/apa_formatting and style_guide/ge_neral_format.html

With this said, here are some recommended search tools:

- American Journal Pediatrics
- <u>www.sciencedirect.com</u> (accessible for free from campus and from your Maxwell Library portal at home).
- Medline (National Library of Medicine)
- American Journal Neuroscience
- ASHA journals <u>www.asha.org</u>

Exams (650 points)

There will be 3 unit exams (150 points each) and a final (200 points) of 4 exams including the final (150 points each). The final will cover more material than the first 3 exams. Makeup exams are allowed only when a student produces a written document proving that s/he missed the exam due to a DOCUMENTED emergency or court duty.

Exams will consist of a computer-based segment and a written segment that will be provided at the time of the exam. Each exam will consist of 2 segments (a) a multiple-choice segment and (b) a short answer segment. Students will start at the regular class starting time and time will NOT be extended for students who arrive late. Students will be able to work on both parts of the exam at the same time during the allocated time. Students can work on both parts of the exam at the same time during the allocated time. Exam time will NOT be extended for students who arrive late. Time will be adjusted for students with documented disabilities who choose to take exams at the Disability Center.

Makeup exams are allowed only when a student produces a written document proving that s/he missed the exam due to a DOCUMENTED emergency or court duty. Exams will be given in class using University iPads. Students who with a learning disability and require extended exam time, must present an official letter from the Office of Disability at the beginning of the course. Also, prior to each exam, they must make arrangements with the Disability Center.

Poster on a Neurological Disorder Related to Communication (100 points)

Students will choose a neurological disorder that has a direct impact on speech, language, or hearing and design an online poster. The poster will consist of 1 Powe Point slide and 1 slide for references. Guidelines, a grading rubric, and an example poster will be provided. There is a potential to present these at the spring symposium, if you are interested.

Online Assignments (50 points)

There will be 2 Discussion Board assignments in this course. First, case study, or a question will be posted, and students will answer the question and/or provide a thoughtful comment that is at

least 150 words in length. Then, the student will read the responses of at least 2 classmates and will provide a response that is at least 100 words in length. Thus, each student will provide a total of 3 meaningful responses (one to the questions/topic I post; and 2 in response to the responses of 2 classmates). Discussion questions/topics will encourage dialogue on a topic can be explored on a personal dimension.

Here are the guidelines:

- The responses MUST be substantial and meaningful: i.e., Comments like "I agree with you," "You are right about this," will not count. Your responses must focus on analyzing the findings of your colleague. You must think deeply about the topic and try to find evidence to either support or contradict the points the presentation makes.
- Your first posting will respond directly to the forum's prompt and MUST be at least 150 words in length. Posts will be entered into a word counter. A post that does not meet the word count rule will receive ZERO. The forum will be opened on a Monday. The initial response is due by 10:00 PM on the Wednesday of week in which the forum opens. The 2 additional responses will be due at 10:00 PM Sunday of the week in which the forum opens.
- Your responses must show good understanding of the course content (lectures, assigned readings, videos, etc.). In your response you should substantiate the points you make with evidence from academic sources (journal articles, documentaries, books, etc.). Then, you must document any sources you use according to APA guidelines. For step-by-step information on how to use APA style, visit Purdue OWL.

Important: To form a well-thought posting, you should first type it as a word document, use the word counter to make sure it meets or exceeds the word count requirement. Posts that are entered as an attachment are not considered discussion and will receive a ZERO. You must use the reply button and enter your responses directly into the discussion window.

<u>Missed Discussion Board Assignments</u> CANNOT be made up under any circumstances (i.e., even if the student has a perfectly legitimate absence). The purpose of DB assignments is to expand your knowledge, engage your analytic skills, and stimulate discussion on topics pertaining to the course content. Therefore, once a discussion ends, contributing to it will be totally irrelevant. Once a DB forum closes, it will not be reopened under any circumstances.

General Written Assignment Guidelines

- The writing must be clear, and the information must be paraphrased in your own words.
- Assignments must have paragraphs. Each paragraph should focus on a single idea. Papers consisting of long blocks of words will lose 10% of the total assignment grade.
- If you take 2 words or more that are attached to each other from a reference, you must use quotation marks and cite the source and page number at the end of what you take. Failure to do so will imply that the wording is your own, which will be an act of plagiarism.
- Your paper should be double-spaced, and in a 12, Times New Roman font. This is the standard font for academic research.
- Please refer to Purdue OWL website (https://owl.english.purdue.edu/owl/resource/56o/oɪ/) for details on how to write in APA style. Also, an example paper in APA style is available at: https://owl.english.purdue.edu/media/pdf/20090212013008 560.pdf
 - For this assignment, no abstract is needed.

Accessing Course Materials on Canvas:

Class Power Point Slides and additional content and resources will be available online at least one day in advance. Please download them before you arrive in class. This will help you minimize note-taking and free more brain energy for taking in more new information. **Note**: You are required to keep track of all of assignment grades, in case of any technology problems. You are also REQUIRED to keep electronic copies of all written assignments that you submit throughout the course.

Grading: This course is based on 1000 points. This is to ensure that you get every fraction of a point that you earn, and that if you make a few mistakes in exams/assignments, your grade will not suffer as much. For example, if you miss 10 questions in one exam, you will still have the chance to score within the "A" range. Meanwhile, if you earn one thousandth of a point, it will be part of your grade.

Grade Distribution and Grading Key

Final Grade Itemizati	on		
Exams	600	Letter Grading	
Research Paper	200	A	100-90%
Online Assignments	50	В	89.99-80%
Peer Review	50	C	79.99-70%
Poster	100	D	69.99-60%
Total	1000	F	<60%

Class Schedule and Assignment Due Dates

Week	Topic	Text	Assignment Due Dates
	-	Reading	
Week 1	-Course Overview	Syllabus	Please read the syllabus and bring
8/24	-Overview of Neural Structure and	Campbell	questions to class
,	Function	Ch 48	
Week 2	-The Cells of the Nervous System	Ch 4	Due by 11:59 PM Wednesday
8/31	Neural Transmission	Ch 8	Email title for Research Paper OR
			Study
Week 3	Neural Transmission and	Ch 8	
9/7	Neurotransmitters	Ch 13	
Week 4	Exam 1 (5:00-6:15 PM)		
9/14	Experience and Refinement of	Ch 56	
	Synaptic Connections		
Week 5	Experience and Refinement of	Ch 56	Due in Assignment Folder by 11:59 PM
9/21	Synaptic Connections	Ch 1 & 4	Wednesday
	-Brain and Behavior & Organization of		-Paper Outline (If doing paper)
	the CNS		-Research Proposal (if doing a
			Study)
Week 6	Brain Circulation &	Appendix-C	
9/28	Cerebrovascular Neuropathology		
Week 7	Exam 2 (5:00-6:15 PM)		
10/5	Language & the Aphasias	Ch 55	

Week 8 10/12	Language the Aphasias	Ch 55	Due by 11:59 PM Wednesday Poster		
Week 9 10/19	-Auditory Processing	Ch 55 Ch 26-28			
Week 10 10/26	Exam 3 (5:00-6:15 PM) Repairing the Damaged Brain	Ch 50			
Week 11 11/02	Organization and Planning of Movement	Chap 30-34	Due by 11:59 PM Wednesday -Research Paper (Only if doing Research Paper) -Literature Rev. due if doing Study		
Week 12 11/09	Diseases of the Peripheral Nervous System	Ch 57			
Week 13 11/16	The Aging Brain -Will be at ASHA Convention: Recorded lecture and lecture quiz will be online	Ch 59	Due by 11:59 PM Wednesday Final Draft of Paper OR Lit. Review due in Assignment folder		
Week 14 11/23	Thanksgiving Break- No classes				
Week 15 11/30	Autism and Other Neurodevelopmental Disorders Affecting Cognition	Ch 62			
12/07	Final Exam		5:45-7:45 PM		

University Policies

- A. **UT Tyler Honor Code**: 1. Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do. Students Rights and Responsibilities To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: http://www.uttyler.edu/wellness/rightsresponsibilities.php
- B. Campus Carry: 1. We respect the right and privacy of students 21 and over who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at http://www.uttyler.edu/about/campus-carry/index.php
- C. UT Tyler a Tobacco-Free University: 1. All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors. Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products. There are several cessation programs available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit www.uttyler.edu/tobacco-free.

D. Academic Honesty Policy: Students will adhere to the highest standards of academic honesty. Anyone caught cheating will earn a "o" for that assignment and will be subject to academic and disciplinary action. Plagiarism (the use of written and oral words or ideas of another person, including another student, without the expressed acknowledgment of the speaker's or writer's indebtedness to that person) will not be tolerated. This includes the use of papers or other materials previously submitted to instructors in other classes, as well as video and audio recordings. Students caught plagiarizing will fail this class and be subject to academic and disciplinary action.

E. Student Standards of Academic Conduct 1. Disciplinary proceedings may be initiated against any student who engages in scholastic dishonesty, including, but not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

a. "Cheating" includes, but is not limited to:

i copying from another student's test paper;

ii using, during a test, materials not authorized by the person giving the test; iii failure to comply with instructions given by the person administering the test; iv possession during a test of materials which are not authorized by the person giving the test, such as class notes or specifically designed "crib notes." The presence of textbooks constitutes a violation if they have been specifically prohibited by the person administering the test;

v using, buying, stealing, transporting, or soliciting in whole or part the contents of an unadministered test, test key, homework solution, or computer program;

vi collaborating with or seeking aid from another student during a test or other assignment without authority;

vii discussing the contents of an examination with another student who will take the examination; viii divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructors has designated that the examination is not to be removed from the examination room or not to be returned or to be kept by the student; ix substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment;

x paying or offering money or other valuable thing to, or coercing another person to obtain an unadministered test, test key, homework solution, or computer program or information about an unadministered test, test key, home solution or computer program;

xi falsifying research data, laboratory reports, and/or other academic work offered for credit; xii taking, keeping, misplacing, or damaging the property of the University of Texas at Tyler, or of another, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct; and

xii misrepresenting facts, including providing false grades or resumes, for the purpose of obtaining an academic or financial benefit or injuring another student academically or financially.

b. "Plagiarism" includes, but is not limited to, the appropriation, buying, receiving as a gift, or obtaining by any means another's work and the submission of it as one's own academic work offered for credit.

c. "Collusion" includes, but is not limited to, the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any section of the rules on scholastic dishonesty. d. All written work that is submitted will be subject to review by plagiarism software.

Additional Examples of academic dishonesty and plagiarism:

- -Copying part or all of a colleague's assignment and submitting it as if it were your own work. In this situation both students will be penalized.
- -Putting information from a book, article, etc. into a written assignment without clearly attributing the information to the source and documenting the source in the body of the assignment.
- -Copying, printing or sharing online quizzes
- -Submitting assignments that were previously used for another course.
- -Sharing information about exams and/or quizzes with other students

These are just examples of acts of dishonesty that lead to failing the course and further disciplinary action.

Assignments will be submitted via the Safe Assign anti-plagiarism online system, which will immediately trace any words a student plagiarizes from any source out there. Any violations will be taken very seriously.

2. The U-T Tyler Writing Center provides professional writing tutoring for all students in all disciplines. If you wish to use the Writing Center, you should plan for a minimum of two hourlong tutorials per assignment: the first to provide an initial consultation and drafting plan, and the second to follow up. Be prepared to take an active role in your learning, as you will be asked to discuss your work during your tutorial. While Writing Center tutors are happy to provide constructive criticism and teach effective writing techniques, under no circumstances will they fix, repair, or operate on your paper.

Location: BUS 202. Appointments: 903-565-5995.

3. Disability/Accessibility Services:

a. In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAAA) the University of Texas at Tyler offers accommodations to students with learning, physical and/or psychological disabilities. If you have a disability, including a non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or you have a history of modifications or accommodations in a previous educational environment, you are encouraged to visit

https://hood.accessiblelearning.com/UTTyler and fill out the New Student application.

b. **The Student Accessibility and Resources** (SAR) office will contact you when your application has been submitted and an appointment with Cynthia Lowery, Assistant Director of Student Services/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at http://www.uttyler.edu/disabilityservices, the SAR office located in the University Center, # 3150 or call 903.566.7079.

4. Grade Replacement/Forgiveness and Census Date Policies:

a. Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census

Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at http://www.uttyler.edu/registrar. Each semester's Census Date is on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

b. Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

c. The Census Date (Sept. 10th) is the deadline for many forms and enrollment actions of which students need to be aware. These include:

i Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit. ii Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)

iii Schedule adjustments (section changes, adding a new class, dropping without a "W" grade) iv Being reinstated or re-enrolled in classes after being dropped for non-payment v Completing the process for tuition exemptions or waivers through Financial Aid

- 5. State-Mandated Course Drop Policy: a. Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the census date (See Academic Calendar for the specific date). b. Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.
- 6. **Student Absence due to Religious Observance**: a. Students who anticipate being absent from class due to a religious observance should the instructor of such absences by the 2nd class meeting of the semester.
- 7. **Student Absence for University-Sponsored Events and Activities**: If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time, the instructor will set a date and time when make-up assignments will be completed.
- 8. **Social Security and FERPA Statement**: It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically. 10. Emergency Exits and Evacuation: a. Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by

University Police, Fire department, or Fire Prevention Services.

F. UT Tyler Resources for Students:

- 1. UT Tyler Writing Center (903.565.5995), writingcenter@uttyler.edu
- 2. UT Tyler Tutoring Center (903.565.5964), tutoring@uttyler.edu
- 3. The Mathematics Learning Center, RBN 4021 (This is the open access computer lab for math students, with tutors on duty to assist students who are enrolled in early-career courses).
- 4. UT Tyler Counseling Center (903.566.7254)