

Neurobiology of Communication
COMD 3350.002, Spring 2019 Syllabus

Course: COMD 3350: Neurobiology of Communication (Neuroscience)

Time: Tues./Thurs. 3:30- 4:50 p.m.

Place: HPR 247

Prerequisite: Undergraduate standing

Instructor: Heather Babin, M.A. CCC-SLP

Office: HPR hallway? haha

e-mail: hbabin@uttyler.edu

Office Hours: Tuesday and Thursday: 4:50-5:30 p.m.; or by appointment

1) Required Text

Bhatnagar, Subhash Chandra. 2018. *Neuroscience for the study of communicative disorders*. Fifth edition. Philadelphia: Wolters Kluwer. (ISBN: 1496331516 9781496331519)

2) Course Description

- a) This course covers the fundamentals of human brain structure and function, primarily related to speech/language processing. It provides: an in-depth review of neuroanatomy/neurophysiology; familiarity with current methods used to probe the neural bases of speech and language function; and historical perspective on how current theoretical views and methodological tools developed. Understanding how the brain processes and represents motor, sensory, and linguistic information will provide valuable insights into higher cognitive functions, as well as an understanding of neurological disorders, such as the aphasias, and the processing specializations of the left and right hemispheres of the brain.
- b) Understanding of the concepts presented in the course will be assessed by means of tests.

3) Course Requirements

- a) upper division standing, or permission of instructor
- b) buy or rent the required textbook as shown above

- c) In order to receive a passing grade in the course, a student must take 4 quizzes, complete the project, and take the final exam. It is also strongly encouraged to attend class. Questions for the quizzes and final will be drawn from several sources: 1) textbook; 2) lectures; 3) Information posted on Canvas. **There will be no early or makeup quizzes or tests.**
- d) Class attendance is expected and students are responsible for any changes announced in class.

4) Grade Calculation

There will be 4 quizzes, a project, and a final exam. The final grade will be based on the quizzes, project, and the final exam as follows:

Average of 4 Quizzes: 40%
Project: 20%
Final Exam: 40%
Total 100%

5) Course Objectives

By the end of the course, the student should be able to identify and/or describe the following:

- The structure and organization of the brain and its relation to communication and auditory functions, including the behavior and importance of neurons;
- How the ear processes sound, and how natural and abnormal processes can alter communication and auditory functions;
- Relevant disorders, and methods to assess their presence; and
- The limits of current knowledge in this area of study, and where the field might advance.

6) FINAL EXAM: Thursday, May 2, 2019, 3:30-5:30 p.m.

7) Course Grades:

Tests: Criterion grading will be used.

- a. A = 90-100
- b. B = 80-89
- c. C = 70-79
- d. D = 60-69
- e. F = <60

8) Class Policies

- a. Our classroom community (population approximately 10) is a small group of the broader University community and beyond. All definable social units develop and maintain a cultural identity. The community culture that will develop in this class is no exception. In order to create and maintain an environment that is harmonious and conducive to learning, you are requested to exercise good citizenship by observing the following rules:
- b. Respectfully regard individual differences, including diverse viewpoints and opinions.
- c. Silence all cell phones and other audible devices when you enter the room
- d. Arrive on time for class. If you are late, please enter and be seated quietly in the back of the room.
- e. Please notify the instructor in advance if you will need to leave class early. Sit near the door so that your leaving will not disturb the class.

Failure to do so will result in the instructor asking you for an explanation.

- f. Do not converse, text, web-surf, etc. during the class or when someone is speaking (including your instructor!).
- g. Recording the class lecture is allowed with the appropriate requested permissions.

9) SUGGESTIONS FOR READING THE TEXTBOOK

- a. *Prior to the lecture:*
 - i. Read through/or skim the chapter (keeping your highlighter or underlining pen, out of sight)
 - ii. Re-read the chapter, looking for key points. (don't reach for that highlighter yet)
- b. *After the lecture*
 - i. On the 3+ reading, this is the time to highlight the key points that are important.
 - ii. There is a very large number of vocabulary and concepts to be learned. It is important to keep up with the information.

10) University Policies

- a. **UT Tyler Honor Code:**
 - i. 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. **Course Withdrawal:** The last date to withdraw from one or more classes is **April 1, 2019**.
- c. **Campus Carry:**
 - i. 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>
- d. **UT Tyler a Tobacco-Free University:**
 - i. 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.

e. **Academic Honesty Policy:** Students will adhere to the highest standards of academic honesty. Anyone caught cheating will earn a “0” 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. **(See next section for University Policy)**

f. **Student Standards of Academic Conduct**

i. 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.

1. “Cheating” includes, but is not limited to:

- a. copying from another student’s test paper;
- b. using, during a test, materials not authorized by the person giving the test;
- c. failure to comply with instructions given by the person administering the test;
- d. 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;
- e. using, buying, stealing, transporting, or soliciting in whole or part the contents of an unadministered test, test key, homework solution, or computer program;
- f. collaborating with or seeking aid from another student during a test or other assignment without authority;
- g. discussing the contents of an examination with another student who will take the examination;
- h. divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructor 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;
- i. substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment;

- j. 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;
 - k. falsifying research data, laboratory reports, and/or other academic work offered for credit;
 - l. 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
 - m. 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.
 - 2. “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.
 - 3. “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.
 - 4. All written work that is submitted will be subject to review by plagiarism software.
- g. **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 hour-long 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.
- h. **Disability/Accessibility Services:**
 - i. 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.

- ii. 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.

i. **Grade Replacement/Forgiveness and Census Date Policies:**

- i. 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. (For Fall, the **Census Date is Sept. 10.**) Grade Replacement Contracts are available in the Enrollment Services Center or at <http://www.uttyler.edu/registrar>. Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.
- ii. 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.
- iii. The **Census Date (January 28, 2019)** is the deadline for many forms and enrollment actions of which students need to be aware. These include:
 1. Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information, approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
 2. Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
 3. Schedule adjustments (section changes, adding a new class, dropping without a "W" grade)
 4. Being reinstated or re-enrolled in classes after being dropped for non-payment
 5. Completing the process for tuition exemptions or waivers through Financial Aid

j. **State-Mandated Course Drop Policy:**

- i. 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).

- ii. 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.

k. Student Absence due to Religious Observance:

- i. Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

l. Student Absence for University-Sponsored Events and Activities:

- i. 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.

m. Social Security and FERPA Statement:

- i. 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.

n. Emergency Exits and Evacuation:

- i. 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.

o. UT Tyler Resources for Students:

- i. UT Tyler Writing Center (903.565.5995), writingcenter@uttyler.edu
- ii. UT Tyler Tutoring Center (903.565.5964), tutoring@uttyler.edu
- iii. 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.
- iv. UT Tyler Counseling Center (903.566.7254)

Course Outline

Topic I: The Structure of the Brain: Neuroanatomy & Neurophysiology

Chapter 1-4

Quiz January 31

Topic II: Language Representation: Speech Science

Aphasias, Right Hemisphere damage, Traumatic Brain Injury, Dementia, Motor Speech Disorders, and etiology
Quiz February 19

NO CLASS February 28, 2019.

Project Presentations March 5 & 7

Spring Break runs March 11-16, 2019.

Topic III: Hearing Science

Chapter 9&10
Quiz March 28

Topic IV: Hemispheric Specialization for Language

Chapter 15-20
Quiz April 25

Final Exam: Thursday, May 2, 2019, 3:30-5:30 p.m.

University of Texas at Tyler Policies 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>

Grade Replacement/Forgiveness and Census Date Policies

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Disability Services

In accordance with federal law, a student requesting accommodation must provide documentation of his/her disability to the Disability Services counselor. If you have a disability, including a learning disability, for which you request an accommodation, please contact the Disability Services office in UC 3150, or call (903) 566-7079.

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HONOR CODE THE UNIVERSITY OF TEXAS AT TYLER

An honorable man, impoverished though he may be in talent, cannot fail to attain success and high standing in the eyes of the world. A dishonorable man, though he is possessed of a multitude of abilities, cannot hope to escape for long the condemnation of his fellow men.
—Robert Wood

The University of Texas at Tyler is committed to providing a setting for free inquiry, excellent teaching, research, artistic performances and professional public service. As a community of scholars, the University develops each individual's critical thinking skills, appreciation of the arts, humanities and sciences, international understanding for participation in the global society, professional knowledge and skills to enhance economic productivity, and commitment to lifelong learnings.

Such a commitment to a preeminent place in higher education also requires the ethical development of the entire UT Tyler community: students, faculty members, staff members, and administrators. The UT Tyler Honor Code is crucial to these ideals. The Honor Code is the means through which to apply the ethical ideal of honorable living to the lives of the UT Tyler community. Therefore, 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.

The purpose of the UT Tyler Honor Code is to foster a commitment to honorable living, and to exhort its community members (students, staff, faculty, and administrators) to adhere not simply to the minimum standard, but to transcend the letter of the code by committing to broader ideals consistent with the spirit of the Code. The honor code has many advantages which serve to

promote a relationship of trust and respect across the entire UT Tyler community. The Honor Code strives to achieve this relationship through the following goals:

- a. To assist the UT Tyler community in developing an understanding of the importance of integrity.
- b. To enable the UT Tyler community to learn and practice ethical principles.
- c. To instill in the UT Tyler community a strong desire to maintain honor in accordance with the Code.
- d. To promote a level of commitment in the UT Tyler community to honorable conduct necessary to meet the ethical challenges faced throughout a lifetime of service to the global community.
- e. To enable the UT Tyler community to develop essential leadership skills necessary to establish an ethical climate within their organizations.
- f. To encourage members of the UT Tyler community to embrace the spirit of the honor code in their lives rather than merely verbalize endorsement.
- g. To affirm that members of the UT Tyler community will not be disadvantaged for having done his or her own work while others have violated the honor code.

Educating students to take their place in the world engenders a serious responsibility for any educational institution. The University of Texas at Tyler recognizes that the future decisions made by these citizens must be grounded in ethics as well as in academic knowledge if these decisions will protect and benefit society.

For these reasons the University of Texas at Tyler takes a proactive stand and adopts an Honor code throughout the campus so that students may be equipped with an ethical framework for their future lives.

Video Link: <https://www.youtube.com/watch?v=nmKsbYwtrco>