Department of Human Services  
SPH 480.001 Neurological Bases of Communication  
Spring 2018

Instructor: Luis E. Aguerrevere Ph.D.  
Office: HSTC 105  
Office Phone: x1153  
Course Time & Location: TR 9:30 to 10:45am. R.E. McGee Business 277  
Office Hours: WR 10:30 to 12:00 PM  
Credits: 3  
Email: aguerrevle@sfasu.edu

Prerequisites:

I. Course Description: (brief paragraph)

The course is designed to give neuro-anatomical/Physiological underpinnings of Speech Communication processes. The course will build from the basic element of neural system – neuron and its function – to consider the organization of Central and Peripheral Nervous system. Specifically, the first 2/3 of the course will review vocabulary and basic concepts regarding structure and function and general principles of neural control of the body. The final 1/3 will deals somato-sensory system and neurological basis of speech communication processes as gleaned from different types of data base – Strokes and diseases, TBI, neurosurgical procedures, modern neuro-imaging techniques. This senior level undergraduate course is expected to serve as a basis for understanding the normative and pathological processes that affect human communication and to provide a foundation for advanced graduate level coursework in speech, language and cognitive functions.

II. Intended Learning Outcomes/Goals/Objectives (Program/Student Learning Outcomes): The complete listing of the standards associated with the PLOs, SLOs, assignments, and assessments are located on the PCOE website.

IIA. This course reflects the following core values of the College of Education:  
• Academic excellence through critical, reflective, and creative thinking  
• Life-long learning  
• Collaboration and shared decision-making  
• Openness to new ideas, to culturally diverse people, and to innovation and change  
• Integrity, responsibility, diligence, and ethical behavior  
• Service that enriches the community.

IIB. This course also reflects the mission of the Dept. of Human Services:

The Department of Human Services prepares undergraduates and graduate students for leadership and service roles in East Texas and the global community. The department is committed to incorporation of community-based, service-learning experiences within its
educational programs to maximize the advancement of students’ personal and professional development.

IIC. This course supports the mission of the Speech-Language Pathology Program:

The mission of the Speech-Language Pathology Program is to prepare knowledgeable professionals committed to enhancing the quality of life of persons with communication disorders. To meet this mission, the program emphasizes the importance of scientific study, critical thinking skills, interdisciplinary collaboration, ethical principles, the responsibility to educate the public about communication disorders, and the importance of continued professional development throughout one’s career.

IID. SACS OBJECTIVES:

This course supports the Communication Sciences and Disorders Program Learning Outcomes (PLO) number five (below). These competencies are measured by successful completion of all course requirements, including examinations, group discussion and activities, written assignments, and quizzes:

SLP Graduate Program Learning Outcomes:

I. Student learner outcome: The students will apply and analyze appropriate knowledge of normal speech, language, and hearing development.
II. Student learner outcome: The students will demonstrate the ability to identify and treat communication disorders.
III. Student learner outcome: The students will be able to apply knowledge of the anatomy and physiology of all the subsystems required for voice, speech, swallowing, language, hearing, and cognition through diagnosis and treatment of the wide variety of etiologies and pathologies found in this field.
IV. Student learner outcome: The students will perform and interpret the results of hearing screenings and evaluations and recognize the implications of audiological diagnostic information as it applies to their scope of practice.
V. Student learner outcome: The students will demonstrate an understanding of the research process and evidence-based practice.
VI. Student learner outcome: The students will demonstrate knowledge of issues related to the profession of speech-language pathology.
VII. Student learner outcome: The students will meet the academic and clinical requirements to obtain state licensure and national certification.

IIE. This course addresses aspects of the following knowledge outcome standard of the CFCC (Council for Clinical Certification of the American Speech-Language Hearing Association (ASHA))

Standard IV-B: The applicant must have demonstrated knowledge of basic human communication and swallowing processes, including the appropriate biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases. The
applicant must have demonstrated the ability to integrate information pertaining to normal and abnormal human development across the life span.

IIF. SPECIFIC LEARNING OBJECTIVES:
At the end of the course, students will be able to
1) Describe the biochemical processes underlying an action potential
2) Describe the basic processes involved in neural transmission from one neuron to another
3) Identify the major divisions of the human central nervous system.
4) Identify the lobes of the brain
5) Provide a list of four functions for each lobe.
6) Summarize the contribution of different lobes for formulation and execution of a Speech Motor Act
7) Identify and summarize the contribution of intra- and inter-hemispheric pathways for speech production
8) Delineate differences between Aphasias, Apraxias and Dysarthrias
9) Identify the Cranial nerves by their Roman numeral designations
10) Identify the significance of each Cranial nerve for Language and Speech functions

III. Course Assignments, Activities, Instructional Strategies, use of Technology:

DESIRE2LEARN
You are required to use Desire2Learn for all course content, materials, student aids, assignments, official grades, lectures and even the syllabus.
To assess desire2learn Enter https://d2l.sfasu.edu
Use the same Login ID and Password that you used for MySFA registration.

LECTURE
Lectures will be posted on Desire2Learn before class. These posted slides should be used as a guide for the review questions and for the exams. However, these are NOT going to be source of knowledge you need to have for the exams.

REVIEW QUESTIONS
Students will be required to complete SELECTED review questions located at the end of the book chapters. Students will be required to complete review questions for all chapters presented in class (see below). Review questions answers must be submitted via D2L. Please see “schedule” to know the review questions you need to do per chapter and when each review question assignment is due. The purpose of the completing these questions is to measure students’ knowledge and understanding of course material, emphasizing the material that relates to the Student Learning Outcomes for the course. The review questions will measure students’ knowledge of the book material covered in approximately one session.
EXAMS
There will be three non-comprehensive exams in the course. The exams will be composed of multiple choice, short-answer and essay questions. THERE WILL BE NO MAKE-UPS.

CASE STUDY
Students will be required to write a 5-7 page -(single spaced-12 times new roman-1 inch margin across the borders) essay based on “a case study for problem solving.” Students will be randomly assigned a case study to analyze. More information will be presented in class.

OR

RESEARCH PARTICIPATION
Every student will be expected to earn 4 hours of research points (R-Points) by participating in Human Neuroscience research projects. Students must sign up for R-Points through the Department of Human Services Sona Systems Software https://sfasuhumanservices.sona-systems.com/Default.aspx?ReturnUrl=%2f. After the student has participated in the study, he or she must describe the experiences in a 2-3 page paper. More information will be presented in class.

ATTENDANCE
Regular, punctual attendance, documented participation, and submission of completed assignments are expected at all classes, laboratories, and other activities for which the student is registered. Based on university policy, failure of students to adhere to these requirements shall influence the course grade, financial assistance, and/or enrollment status. The instructor will maintain record of each student’s attendance based on completion of daily and weekly assignments and will note this information in required reports and in determining final grades. Three (3) or more unexcused absences will result in grade letter drop.

Students may be excused from attendance for reasons such as health, family emergencies, or student participation in approved university-sponsored events. However, students are responsible for notifying their instructors in advance, when possible, for excusable absences. Whether absences are excused or unexcused, a student is still responsible for all course content and assignments. Students with accepted excuses may be permitted to make up work for up one week of absences a summer term, depending on the nature of the missed work. Make-up work must be completed as soon as possible after returning from an absence.

IV. Evaluation and Assessments (Grading):

1. Review Questions = 20pts
2. Exams = 60pts
3. Case Study or Research Participation = 20pts

100 pts
POSTING GRADES
Grades will be posted on Desire2Learn after everyone has completed the quiz, exam or assignment. When grades are posted, an announcement will be posted on Desire2Learn indicating the grades for that assignment or exam have been posted. Please do not e-mail or call inquiring if grades are posted until this announcement is posted. To protect student confidentiality, students’ performance cannot be reported or even discussed over the phone, e-mail, or instant message.
## V. Tentative Course Outline/Calendar:

### LECTURE

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Required Reading</th>
<th>Review Questions?</th>
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<tbody>
<tr>
<td>Jan 16</td>
<td>Course introduction/syllabus review</td>
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<tr>
<td>Jan 18, 23 and 25</td>
<td>Essential neurological Concepts</td>
<td>Chapter 1</td>
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<td>Jan 30, Feb 1</td>
<td>Nerve Cell Physiology</td>
<td>Chapter 5</td>
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<td>Feb 6, 8</td>
<td>Development of the N.S.</td>
<td>Chapter 4</td>
<td>Chapters 1.1-1.9; 1.19 and 5.1-5.6; 5.11</td>
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<tr>
<td>Feb 13,15</td>
<td>Gross Anatomy of the N.S.</td>
<td>Chapters 2</td>
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<td>July 19</td>
<td>Cranial Nerves</td>
<td>Chapter 17</td>
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<td>July 20</td>
<td><strong>Review Day</strong></td>
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<td>July 24</td>
<td><em>Exam for Chapters 1,2,4,5 and 17</em></td>
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<td>Chapters 2.1-2.9; 2.18; 4.18, and 17.2-17.5</td>
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<td>July 25</td>
<td>Visual System</td>
<td>Chapter 12</td>
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<td>July 26</td>
<td>Somatosensory System</td>
<td>Chapter 11</td>
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<td>July 27</td>
<td>Motor System 1 and 2</td>
<td>Chapter 13 and 14</td>
<td>Chapters 11.1-11.10 and 12.1-12.10</td>
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<td>July 31</td>
<td>Motor System 3 and 4</td>
<td>Chapters 15 and 16</td>
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<td>Aug 1</td>
<td><em>Exam for Chapters 9,12, 13, 14, 15 16 and 11.</em></td>
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<td>Chapters 13.3-13.5,14.4-14.8,15.2-1512, and 16.1-16.8; 16.14.</td>
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<td>Aug 2</td>
<td>Common Neurobiological disorders: Children</td>
<td>TBA</td>
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<td>Aug 3</td>
<td>Common Neurobiological Disorders Adults</td>
<td>TBA</td>
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<td>Aug 7</td>
<td>Higher Order Functions: attention and executive functions</td>
<td>TBA</td>
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<td>Aug 8</td>
<td>Aphasias and Dyslexia</td>
<td>TBA</td>
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<td>Aug 9</td>
<td><strong>No Class</strong></td>
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<td><strong>LAST DAY TO COMPLETE R CREDITS OR ESSAY</strong></td>
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<tr>
<td>Aug 10</td>
<td><strong>Final</strong></td>
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Revised May 8, 2017
VI. Readings (Required and recommended—including texts, websites, articles, etc.):


Important Website: http://www.med.harvard.edu/AANLIB/home.html

VII. Course Evaluations:

Near the conclusion of each semester, students in the Perkins College of Education electronically evaluate courses taken within the PCOE. Evaluation data is used for a variety of important purposes including:

1. Course and program improvement, planning, and accreditation;
2. Instruction evaluation purposes; and
3. Making decisions on faculty tenure, promotion, pay, and retention.

As you evaluate this course, please be thoughtful, thorough, and accurate in completing the evaluation. Please know that the PCOE faculty is committed to excellence in teaching and continued improvement. Therefore, your response is critical!

In the Perkins College of Education, the course evaluation process has been simplified and is completed electronically through MySFA. Although the instructor will be able to view the names of students who complete the survey, all ratings and comments are confidential and anonymous, and will not be available to the instructor until after final grades are posted.

VIII. Student Ethics and Other Policy Information: Found at https://www.sfasu.edu/policies

**Academic Accommodation for Students with Disabilities: Policy 6.1 and 6.6**

To obtain disability related accommodations, alternate formats and/or auxiliary aids, students with disabilities must contact the Office of Disability Services (ODS), Human Services Building, and Room 325, 936-468-3004 as early as possible in the semester. Once verified, ODS will notify the course instructor and outline the accommodation and/or auxiliary aids to be provided. Failure to request services in a timely manner may delay your accommodations. For additional information, go to http://www.sfasu.edu/disabilityservices/.

**Student Academic Dishonesty: Policy 4.1**

Abiding by university policy on academic integrity is a responsibility of all university faculty and students. Faculty members must promote the components of academic integrity in their instruction, and course syllabi are required to provide information about penalties for cheating and plagiarism, as well as the appeal process.
Definition of Academic Dishonesty
Academic dishonesty includes both cheating and plagiarism. Cheating includes, but is not limited to:
- using or attempting to use unauthorized materials on any class assignment or exam;
- falsifying or inventing of any information, including citations, on an assignment; and/or;
- helping or attempting to help another in an act of cheating or plagiarism.

Plagiarism is presenting the words or ideas of another person as if they were one’s own. Examples of plagiarism include, but are not limited to:
submitting an assignment as one's own work when it is at least partly the work of another person;
- submitting a work that has been purchased or otherwise obtained from the Internet or another source; and/or,
- incorporating the words or ideas of an author into one's paper or presentation without giving the author credit.

Penalties for Academic Dishonesty
Penalties may include, but are not limited to, reprimand, no credit for the assignment or exam, re-submission of the work, make-up exam, failure of the course, or expulsion from the university.

Student Appeals
A student who wishes to appeal decisions related to academic dishonesty should follow procedures outlined in Academic Appeals by Students (6.3).

Withheld Grades: Policy 5.5
At the discretion of the instructor of record and with the approval of the academic unit head, a grade of WH will be assigned only if the student cannot complete the course work because of unavoidable circumstances. Students must complete the work within one calendar year from the end of the semester in which they receive a WH, or the grade automatically becomes an F, except as allowed through policy [i.e., Active Military Service (6.14)]. If students register for the same course in future semesters, the WH will automatically become an F and will be counted as a repeated course for the purpose of computing the grade point average.

Student Code of Conduct: Policy 10.4
Classroom behavior should not interfere with the instructor’s ability to conduct the class or the ability of other students to learn from the instructional program. Unacceptable or disruptive behavior will not be tolerated. Students who disrupt the learning environment may be asked to leave class and may be subject to judicial, academic or other penalties. This policy applies to all instructional forums, including electronic, classroom, labs, discussion groups, field trips, etc. The instructor shall have full discretion over what
behavior is appropriate/inappropriate in the classroom. Students who do not attend class regularly or who perform poorly on class projects/exams may be referred to the iCare: Early Alert Program at SFA. Information regarding the iCare program is found at http://www.sfasu.edu/judicial/earlyalert.asp or call the office at 936-468-2703.

Additional Information:

To complete Certification/Licensing Requirements in Texas related to public education and other professional settings, you will be required to:

1. Undergo criminal background checks for field or clinical experiences on public school campuses; the public school campuses are responsible for the criminal background check; YOU are responsible for completing the information form requesting the criminal background check. If you have a history of criminal activity, you may not be allowed to complete field or clinical experiences on public school campuses. At that point, you may want to reconsider your major while at SFASU.

2. Provide one of the following primary ID documents: passport, driver’s license, state or providence ID cards, a national ID card, or military ID card to take the TExES exams (additional information available at www.texas.ets.org/registrationBulletin/ <http://www.texas.ets.org/registrationBulletin/>). YOU must provide legal documentation to be allowed to take these mandated examinations that are related to certification/licensing requirements in Texas. If you do not have legal documentation, you may want to reconsider your major while at SFASU.

3. Successfully complete state mandated a fingerprint background check. If you have a history of criminal activity, you may want to reconsider your major while at SFASU.

For further information concerning this matter, contact Katie Snyder Martin at 936-468-1740 or snyderke1@sfasu.edu.

DIVERSITY STATEMENT

In this class, there will be an opportunity for students to learn about each other and gain an appreciation for the gender, ethnic, and cultural diversity. This course will highlight the importance of individual differences by teaching students that every person has strengths and weaknesses. Students will be invited to connect the class with their own background and experiences. At the same time, the instructor will not tolerate disrespectful, hurtful, or intolerant comments/behaviors regarding different backgrounds.

IX. Other Relevant Course Information: The instructor reserves the right to change the syllabus as necessary. You are responsible for keeping up with all changes to the syllabus and for all information presented during class, regardless of whether or not the student attended class.