

CSD 400 - Anatomy and Physiology of Speech and Language
Fall, 2011 (3 credit hours)
1:00-1:50 MWF
Reynolds Center, room C124

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Course Description: Normal anatomy and physiology of speech and language will be presented. Specific breakdowns in anatomical and physiological functioning resulting in communication disorders will be discussed.

Required Materials: Seikel, J. A., King, D. W., & Drumright, D. G. (2010). Anatomy and Physiology for Speech, Language, and Hearing (4th ed.). Clifton Park, NY: Delmar

American Psychological Association (2009). Publication manual of the American Psychological Association (6th ed.). Washington, DC: Author

Course Objectives: This course is designed to provide the undergraduate student in Speech Pathology with a functional knowledge of the anatomy and physiology of speech production. Attention is given to the specific structures, muscles, and function of respiration, phonation, resonance, and articulation. An overview is also provided of the central and peripheral nervous systems. By the conclusion of this course students are expected to know the location and function of the primary structures and muscles of the speech/language mechanism as well as understand how these structures function to produce speech, language, cognition, hearing and swallowing.

Course Structure: This course is divided into sections. Each section will cover the structure (anatomy) and function (physiology) of each body system. Specific breakdowns in anatomical and physiological functioning resulting in communication disorders will be discussed. The systems covered in this course include:

- 1) Basics of Anatomy & Physiology
- 2) Neurology
- 3) Respiration
- 4) Phonation
- 5) Articulation
- 6) Swallowing
- 7) Hearing

Relationship to ASHA Standards: ASHA upholds seven Standards related to academic and clinical training as well as continuing education. This course contributes to completion of Standards III-A, III-B, III-C and III-D. You each have a KASA form on file with the department

to help track your knowledge and skills as related to the Standards as you move toward obtaining your CCC.

Students with Disabilities: It is the policy for Harding University to accommodate students with disabilities, pursuant to federal and state law. Therefore, any student with a documented disability condition (e.g. physical, learning, psychological, vision, hearing, etc.) who needs to arrange reasonable accommodations, must contact the instructor and the Disabilities Office at the beginning of each semester. (If the diagnosis of the disability occurs during the academic year, the student must self-identify with the Disabilities Director as soon as possible in order to get academic accommodations in place for the remainder of the semester.) The Disabilities Office is located in Room 102 of the Lee Academic center, telephone (501) 279-4019.

Assessment Statement

Harding University, since its charter in 1924, has been strongly committed to providing the best resources and environment for the teaching-learning process. The board, administration, faculty and staff are wholeheartedly committed to full compliance with all criteria of the Higher Learning Commission of the North Central Association of Colleges and Schools.

The University values continuous, rigorous assessment at every level for its potential to improve student learning and achievement and for its centrality in fulfilling the stated mission of Harding. Thus, a comprehensive assessment program has been developed that includes both the Academic units and Administrative and Educational Support units. Specifically, all academic units will be assessed in reference to the following Expanded Statement of Institutional Purpose: The University provides programs that enable students to acquire essential knowledge, skills and dispositions in their academic disciplines for successful careers, advanced studies, and servant leadership.

Course Policies:

- Attendance is expected at each class meeting and will be recorded. It is the student's responsibility to sign the attendance sheet at each class meeting. As stated in the Student Handbook, excessive absences can result in being dropped from the course with the grade of "F."
- Students are expected to read assigned material prior to class and be prepared to participate in class discussions. Students who miss class are responsible for content.
- All cell phones must be turned off during class time.
- Written work must be reasonably correct in mechanics (e.g. grammar, punctuation, etc.). Points will be deducted for inadequate work. See note on page 4 re: spelling.
- It is expected that students will adhere to assignment due dates. Late work will not be accepted.
- Submitting work taken directly from another source will be considered plagiarism and no credit will be given on the assignment. Cheating in all its forms is inconsistent with the Christian faith and practice and will result in sanctions up to and including dismissal from the class with a failing grade. Obtaining information from students taking this course during a previous semester or giving information to students in subsequent semesters is considered Academic Dishonesty.

- All exams will be given in the campus testing lab. I encourage you to review the testing lab's policies posted on Moodle. Exams are generally composed of true/false, multiple choice, labeling and fill-in the blank questions.

Grading

Exam #1 – Basics/Neuroanatomy	100 points
Exam #2 – Respiration	100 points
Exam #3 – Phonation	100 points
Exam #4 – Articulation/Resonance	100 points
Exam #5 – Mastication/Deglutition	100 points
Final Exam (Comprehensive, includes Hearing)	300 points
Quizzes x12 – 10 points each (can toss two)	100 points
Clay Models x2 50 points each	100 points
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	1000 points

Final grades will be based upon the percentage of available points earned by the student and determined as follows:

A -	90 – 100%
B-	80 – 89%
C -	70 – 79%
D -	60 - 69%
F -	below 60%

Grades are not gifts; they are earned. The instructor does not *GIVE* grades; rather the student *EARN*S the grade through organization, diligence, planning, and execution. Students are expected to assume individual responsibility for the quality, presentation and timeliness of their own work.

Course Requirements- (must be completed to pass this course):

1. There will be five examinations and a final. The final will be comprehensive.
2. Each student will make a three-dimensional model of a larynx. Clay (Model Magic) is available at WalMart, other stores, or online. Play-Dough is not recommended; it falls apart when dry and you will be sad. Your model should be able to stand on its own. Grading forms are available on Moodle.
3. Each student will make a three-dimensional model of the left cerebral hemisphere (lateral view as illustrated in Figure 11-14 in Seikel.) Grading forms are available on Moodle. Clay models must be turned in at the beginning of class on the day they are due.
4. Each chapter will have at least one accompanying quiz on Moodle. You will have multiple opportunities to take each quiz. It is possible that you can earn a perfect score in this part of the course but that will require diligence on your part.

Ms. Lowry's helpful hints:

Give yourself permission to absolutely LOVE this course. There is nothing that convinces me more of God's sovereignty over this fallen world than learning more and more about His masterpiece – the human body. You are an absolute miracle – the workmanship of His almighty hand. You are a living, breathing, walking “study aid” for this course. If you have negative preconceived notions about this course, let go of them.

An average student should expect to devote 9 hours of time each week to this 3 credit hour course. Approximately three of those hours will be spent in a classroom. Spending the remaining time with the material outside of class time will be necessary if you plan to successfully complete this course.

I strongly suggest that (at the very least) you read the chapter before coming to class and that (for over-achievers) you complete the study exercises found at the end of each chapter and on the CD that accompanies your textbook. Your learning will be enhanced if my lecture on the material is not the first time you are exposed to a given topic. If you are not yet a believer in this concept, give it a shot. I think you'll surprise yourself.

There is a tremendous amount of information in your text – we can't possibly master ALL of it in 15 weeks. Pay attention to the quizzes – they will help guide you toward the information that I consider important in this course.

This course is additive in nature meaning that your understanding of future concepts is built upon understanding of earlier concepts. If you fall behind, catch up! If you're lost, ask yourself if you are dedicating enough time to the material outside of class or if you are expecting to learn everything you need to know for an exam while you are in the classroom. If you are reading your book before class, spending adequate time with the material outside of class and are still lost, see me (earlier rather than later).

In this course, spelling counts. Take the time to learn the correct spelling of each term – if it's spelled wrong, it will be counted wrong. Basic anatomical terms and names of structures do not require capitalization (esophagus, neurons, larynx, palatoglossus, etc.). Structures/diseases named for people (i.e. Broca's area, Parkinson disease, Alzheimer's disease, circle of Willis, etc.) are capitalized.

Make it easier on yourself and “crack the code” of anatomy early in this course. Learn the basic anatomical terms presented in the first chapter and you'll have an easier time later. The first anatomists were Greeks, thus many Greek (and Latin) terms form the basis for anatomical terminology. Your book does a great job of highlighting this in the margins – pay attention.

I am a firm believer that excellent treatment is built on a solid diagnostic foundation which is built on a clear understanding of what's “normal.” You can't reasonably expect to improve your patient's function if you can't identify the problem. Please view this course as foundational (not optional) for your skills as a diagnostician and clinician.

	Topic	Chapter	Due/Activity
Aug 22	Overview/ Introductions	1	
Aug 24	Basic Elements		
Aug 26	Basic Elements	1	
Aug 29	Basic Elements	1	Chapter 1 Quiz
Aug 31	Neuroanatomy	11	Quiz 11a
Sept 2	Neuroanatomy	11	
Sept 5	Neuroanatomy	11	Quiz 11b
Sept 7	Neuroanatomy	11	
Sept 9	Neuroanatomy	11	
Sept 12	Neurophysiology	12	Quiz 11c
Sept 14	Neurophysiology	12	
Sept 16	Neurophysiology	12	Quiz 12
Sept 19	Anatomy of Respiration	2	Brain due
Sept 21	Anatomy of Respiration	2	Exam #1 9/19 – 9/20
Sept 23	Anatomy of Respiration	2	Chapter 2 Quiz
Sept 26			
Sept 28	Physiology of Respiration	3	Bring bottle of water & straw
Sept 30	Physiology of Respiration	3	Do the activity on p.159 before class
Oct 3	Physiology of Respiration	3	Chapter 3 Quiz
Oct 5	Anatomy of Phonation	4	
Oct 7	Anatomy of Phonation	4	Exam #2 10/6-10/7
Oct 10	Anatomy of Phonation	4	Chapter 4 Quiz
Oct 12	Anatomy of Phonation	4	Larynx due
Oct 14	ARKSHA		
Oct 17	Physiology of Phonation	5	
Oct 19	Physiology of Phonation	5	
Oct 21	Physiology of Phonation	5	Chapter 5 Quiz
Oct 24	Anatomy of Artic/Reson.	6	Exam #3 10/24 – 10/25
Oct 26	Anatomy of Artic/Reson.	6	Chapter 6 Quiz
Oct 28	Anatomy of Artic/Reson.	6	
Oct 31	Physiology of Artic/Reson	7	
Nov 2	Physiology of Artic/Reson.	7	
Nov 4	Physiology of Artic/Reson.	7	Chapter 7 Quiz
Nov 7	Physiology of Mastication	8	Exam #4 11/7 – 11/8
Nov 9	Physiology of Mastication	8	
Nov 11	Physiology of Mastication	8	Chapter 8 Quiz
Nov 14	Physiology of Mastication	8	Exam #5 11/16-11/17
Nov 16-18	ASHA		
Nov 28	Auditory Anatomy	9	Chapter 9 Quiz
Nov 30	Auditory Anatomy	9	
Dec 2	Auditory Physiology	10	Chapter 10 Quiz
Dec 5	Auditory Physiology	10	
Dec 7	Course wrap-up		
Dec 9	Course wrap-up		
Dec 12	Final Exam Week		
	Subject to change at Instructor's discretion		