ANATOMY AND PHYSIOLOGY- SPAU/NSC 3344 - Fall 2013

Instructor: Katharine Powers/ kap130730@utdallas.edu
Office Hours: by appointment
Teaching Assistant: Katharine Fitzharris/klf110020@utdallas.edu
Office Hours: Tuesday 2:00-4:00 PM, GR 4.808 or by appointment
Days/Time: T/R 5:30- 6:45pm
Location: CN 1.202

Prerequisites: None

Course Description
This course will serve as a foundation of anatomy and physiology for all aspects of verbal communication, including respiration, phonation, resonance, articulation, hearing, and neuroanatomy.

This course has been designed to ensure that students demonstrate required knowledge and skill as outlined in the Standards and Implementation Guidelines for the Certificate of Clinical Competence in Speech-Language Pathology. The specific standards addressed in this class are: III-A, III-B, III-C.

Student Learning Objectives
Students will:
1. Discuss the respiratory system for communication purposes by (Std. III-A, III-B, III-C)
    a. Listing and describing functions of muscles involved in inhalation and exhalation
    b. Describing skeletal support for respiration
    c. Describing physiological mechanisms involved in breathing for speech

2. Discuss the phonatory system for communication purposes by (Std. III-A, III-B, III-C):
    a. Listing cartilages within the phonatory system
    b. Listing and describing functions of muscles involved in phonation
    c. Describing the physiological processes involved in phonation

3. Discuss the articulation and resonance system by (Std. III-A, III-B, III-C):
    a. Outlining the skeletal system within the articulation and resonance systems
    b. Listing and describing functions of muscles involved in articulation and resonance
    c. Describing physiological processes involved in articulation, swallowing and resonance

4. Discuss the hearing system by (Std. III-A, III-B, III-C):
    a. Describing the physical make up of the outer, middle and inner ear
    b. Describing the physiological process of hearing

5. Discuss neuroanatomy for communication purposes by (Std. III-A, III-B, III-C):
    a. Listing the anatomical landmarks of the brain and brainstem
    b. Listing cranial nerves and discussing their impact on communication

6. Apply above knowledge to describe deficits in the following areas for any one communication disorder: respiration, phonation, articulation, resonance, swallowing, neuroanatomy (Std. III-C).

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

****Lecture Notes**
Syllabus and class lecture notes will be posted on eLearning. It is advised that students print out and bring the PowerPoint handouts to class to aid in note taking. Lecture notes may not contain all pictures.

Course Requirements

(1) Exams
Four exams will be given during the semester. Each exam will be worth 100 points. Make-up exams are only by instructor authorization in extenuating circumstances. Students **must** contact instructor by time of class on exam date to participate in a make-up exam. Students are limited to **one** make-up exam, which will be made available during or immediately following the next class meeting. Students who take exams at the disability services should inform instructor prior to every exam regarding their exam time. All exams must be returned to lecturer immediately following review. If exam is not immediately returned, each day absent will result in 10 points off exam per day.

> **Exam format:** The exam format will include multiple choice, true/false and labeling. At least one essay question will also be included. Exams will be based on lectures, readings and class discussion. In addition, exams may contain information that can only be obtained by attending class.

(2) Assignments
Students will complete four review assignments throughout the semester, one to correspond with each of the four tests given. Review assignments will be worth 25 points each. Assignments will be provided on eLearning and/or during class sessions. Responses must be hand-written and hard copy will be due by the end of class on the class day preceding each exam.

Grading Policy

Acquired knowledge will be assessed via exams, which will cover information presented through lectures, readings, and class discussion.

- Four exams-100 points each
- Four assignments- 25 points each

Final % score will be based on a total score of 500 points. Please note, grades will not be rounded. Therefore an 89.9% is considered a B+.

Final letter grade will be based on the following scale:

A+	**98-100**	**B+**	**87-89**	**C+**	**77-79**	**D+**	**67-69**	**F**	**below 60**
A	**94-97**	**B**	**83-86**	**C**	**73-76**	**D**	**63-66**		
A-	**90-93**	**B-**	**80-82**	**C-**	**70-72**	**D-**	**60-62**		

LINKS

http://www.adobe.com/products/acrobat/readstep2.html [Download Adobe Acrobat]

CLASS SCHEDULE AND READINGS

(Descriptions and timelines are subject to change at the discretion of the instructor)

Date	**Topic**	**Chapter**	**Assignments/miscellaneous**
8/27/13	Introduction/Terminology	1	
8/29/13	Terminology	1	
9/03/13	Neuroanatomy	11	
9/05/13	Neuroanatomy	11	
9/10/13	Neuroanatomy	11	
9/12/13	Neuroanatomy	11	
9/17/13	Hearing	9	lecture by Dr. Fitzharris
9/19/13	Hearing	9, 10	lecture by Dr. Fitzharris
9/24/13	Hearing	10	lecture by Dr. Fitzharris; **Assignment #1 Due**
9/26/13	**Exam #1**		
10/01/13	Respiration	2	Guest speaker Jacqueline Daniels, MS, CCC-SLP
10/03/13	Respiration	2	
10/08/13	Respiration	2, 3	
10/10/13	Respiration	3	
10/15/13	Respiration	3	**Assignment #2 Due**
10/17/13	**Exam #2**		
10/22/13	Phonation	4	
10/24/13	Phonation	4	
10/29/13	Phonation	4	
10/31/13	Phonation	5	
11/05/13	Phonation	5	**Assignment #3 Due**
11/07/13	**Exam #3**		
11/12/13	Articulation	6	
11/14/13	Articulation	6	**Term Paper Due**

11/19/13	Articulation	6	
11/21/13	Articulation	7	
12/03/13	Swallowing	8	
12/05/13	Review		**Assignment #4 Due**
12/10/13	**Exam #4 (Final)**		

ASHA STANDARDS ADDRESSED IN THIS CLASS: How knowledge is conveyed and how knowledge and skill acquisition will be demonstrated

Standard III-A

The applicant must demonstrate knowledge of the principles of biological sciences, physical sciences, mathematics, and the social/behavioral sciences.

Specific knowledge will be demonstrated in this class in the areas of human anatomy and physiology pertaining to speech, language, hearing and swallowing.
Knowledge will be conveyed via class lectures and readings.
Acquisition will be demonstrated via class discussions, exams and required projects.

Standard III-B

The applicant must demonstrate knowledge of basic human communication and swallowing processes including their biological, neurological, acoustic, psychological, developmental, linguistic and cultural bases.

Specific knowledge will be demonstrated in this class in the areas of human anatomy and physiology pertaining to speech, language, hearing and swallowing.
Knowledge will be conveyed via class lectures and readings.
Acquisition will be demonstrated via class discussions, exams and required projects.

Standard III-C

The applicant must demonstrate knowledge of the nature of speech, language, hearing, and communication disorders and differences and swallowing disorders, including the etiologies, characteristic, anatomic/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates.

Knowledge will be conveyed via class lectures and readings.
Acquisition will be demonstrated via class discussions, exams and required projects.

Students will demonstrate the following skills:

1. Ability to name and describe functions of muscles/cartilages involved in respiration, phonation, articulation, swallowing and hearing, as measured by: successful completion of assignments, exams and projects

2a. Ability to identify and name structures involved in phonation, articulation, swallowing and hearing, as measured by: successful completion of assignments, exams and projects

2b. Ability to identify and name structures of the central and peripheral nervous systems that play a role in speech, language and auditory processing, as measured by: successful completion of assignments, exams and projects

3. Ability to understand and describe the physiology of respiration, phonation, swallowing and hearing, as measured by: successful completion of assignments, exams and projects

UT Dallas Syllabus Policies and Procedures
The information contained in the following link constitutes the University's policies and procedures segment of the course syllabus.

Please go to http://go.utdallas.edu/syllabus-policies for these policies.

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