

HESP 305 ANATOMY AND PHYSIOLOGY OF THE SPEECH AND SWALLOWING MECHANISMS
SPRING 2006

Instructor: Wei Tian, B.M., Ph.D.
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Lecture times: Tue & Thu 9:30 AM-10:45 AM
Lecture location: Susquehanna Hall 1117
Lab sessions:
Lab location:
Office hours: Tue & Thu 4-5 PM or by appointment
Special needs: Students are invited to speak with the instructor regarding specific course needs.

Course website:

Textbooks

Required:

Zemlin, W. R. (1998). Speech and Hearing Sciences: Anatomy and Physiology, 4th Ed. Boston: Allyn and Bacon. ISBN 0138274371.

Recommended:

Netter, F. H. (2003). Atlas of Human Anatomy, 3rd Ed. ICON Learning Systems, Terterboro, NJ.

Other recommended books

Kent, R. (1997). The Speech Sciences. San Diego Singular Press.

Seikel, King and Drumright, Anatomy and Physiology of Speech and Hearing. San Diego: Singular Press.

Borden, G. J., Harris, K. S., and Raphael, L. J. (2002). Speech Science Primer: physiology, acoustics, and perception of speech. Baltimore: Lippincott Williams & Wilkins.

Course Objectives

Upon completion of this course, the student will be able to:

- Describe the anatomical structures involved in respiration, phonation, and articulation
- Describe the anatomical structures involved in swallowing
- Understand neuroanatomy and describe the basic neurophysiology of speech, language and swallowing
- Explain the physiological processes of respiration, phonation, articulation, and swallowing

Exams and Grading

The final grade will be based on the 3 examinations, 11 quizzes, and class/lab attendance.

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Quizzes	11% (1% per quiz)
Lab attendance	4% (1% per lab)
Exam 1	25%
Exam 2	25%
Final exam	35% (accumulative: 30% covers the content after the second exam)

A+	100-98%	B+	89-87%	C+	77-79%	D+	67-69%
A	95-97%	B	84-86%	C	74-76%	D	64-66%
A-	90-94%	B-	80-83%	C-	70-73%	D-	60-63%
F	0-59%						

The acceptable reasons for missing an exam include documented illness by physicians or appropriate authorities, and any other reasonable emergency situation. Please notify the instructor ASAP so that a make-up exam may be considered. If you anticipate missing a class due to religious holidays, or other meetings, please contact the instructor at least one week in advance for alternative arrangements.

Undergraduate students' highest score: 99.18

A+	>=972	B+	>=863	C+	>=763	A	>=892
A	>=942	B	>=833	C	>=734	B	>=793
A-	>=892	B-	>=793	C-	>=694	C	>=694

Graduate students all in A+ range.

Course Outline

Date	Topic	Chapter	Quiz/Exam	Lab
Jan 26	Syllabus review			
Jan 31	Introduction and nomenclature	1		
Feb 2	Introduction and nomenclature	1	Quiz 1	
Feb 7	Respiratory system introduction	2		
Feb 9	Framework of breathing mechanism	2	Quiz 2	
Feb 14	Musculature of breathing mechanism (Lab 1)	2		
Feb 16	Musculature of breathing mechanism	2	Quiz 3	
Feb 21	Mechanic of breathing	2		
Feb 23	Exam 1		Exam 1	
Feb 28	Phonation system introduction	3		
Mar 2	Cartilaginous framework of the larynx	3	Quiz 4	
Mar 7	Membrane and ligaments of the larynx	3		
Mar 9	Muscles of the larynx	3	Quiz 5	

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Date	Topic	Chapter	Quiz/Exam	Lab
Mar 14	Larynx (Lab 2)	3		
Mar 16	Laryngeal physiology	3	Quiz 6	
Mar 28	Phonation mechanism	3		
Mar 30	Exam 2	4	Exam 2	
Apr 4	Craniofacial bones	4		
Apr 6	Vocal tract	4	Quiz 7	
Apr 11	Articulators (Lab 3)	4		
Apr 13	Articulators	4	Quiz 8	
Apr 18	Swallowing anatomy			
Apr 20	Swallowing mechanism		Quiz 9	
Apr 25	Craniofacial embryology			
Apr 27	Nervous system introduction	5	Quiz 10	
May 2	CNS (Lab 4)	5		
May 4	PNS	5	Quiz 11	
May 9	ANS	5		
May 11	Review			
May 15	Final exam 8-10 AM		Final exam	

Attendance Policy

Class/lab attendance and participation are required and will influence the final grade. The acceptable reasons for missing a class/lab or an exam/quiz include documented illness by physicians or appropriate authorities, and any other reasonable emergency situation. Please notify the instructor directly ASAP so that a make-up exam may be considered. If you anticipate missing a class due to religious holidays, please contact the instructor at least one week in advance for alternative arrangements.

Special Needs

If you are a student who requires accommodations in class/lab or exam/quiz, please contact me at the beginning of the semester with a certificate from the Disability Support Service, and appropriate accommodations will be made.

Academic Integrity

"The University of Maryland, College Park has a nationally recognized Code of Academic Integrity, administered by the Student Honor Council. This Code sets standards for academic integrity at Maryland for all undergraduate and graduate students. As a student you are responsible for upholding these standards for this course. It is very important for you to be

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aware of the consequences of cheating, fabrication, facilitation, and plagiarism. For more information on the Code of Academic Integrity or the Student Honor Council, please visit <http://www.studenthonorcouncil.umd.edu/whatis.html>."

----- The Student Honor Council