

EdPsy 320 "Speech & Language Science I"

Prof. Ron Channell

128 TLRB

Fall 1985

378-6457

Office hours: 11-12 MWF; 8-9 T-Th or (preferred) by appointment.

Overview: This course is the first half of a one-year study of the anatomy, physiology, and instrumentation of speech & language. It focuses mainly on respiration, phonation, and prosody. {Next semester's class, EP 321, focuses on articulation and neural control of speech & language.} We'll have 26 sessions, from 9-10:20 T-Th, of lecture & lab mixed.

Goals:

You'll learn how to understand scientific research pertaining to speech & language. For example, given an article related to speech from a recent issue of the Journal of Speech & Hearing Research you should give an interpretation as to what occurred, why, and what it might mean to clinical practice.

You'll also learn about speech-and-language-related anatomy, physiology, and instrumentation. You should end up knowing enough to ace the relevant portions on the Master's or ASHA exams {if you ace this class}.

Texts: The major one is...Zemlin, W. (1983) Speech and hearing science: 2nd Ed. Englewood Cliffs, NJ: Prentice-Hall. It will also be used for 321.

Liebman, M. (1984) Neuroanatomy made easy and understandable: 2nd Ed. Baltimore: University Park Press. Will be used mostly in 321 but can serve as a reference during 320.

Time Requirements: Plan on at least six hours outside class per week. Part of this will be spent reading, outlining, and learning Zemlin. Part may involve looking up aspects of anatomy, journal articles, etc. on your own to complement the descriptions given in Zemlin. Part will be spent on learning the lectures.

Tentative Class Calendar:

<u>Date</u>	<u>Lecture and Lab. Topic</u>	<u>{Pages in Zemlin}</u>
Background		
Sept 5	Orientation to class, defining anatomy, physiology, science.	{1-36}
10	Planes of location and direction, types of tissues	
12	Neurons	
17	Neurons, nerves	
19	Muscle	
24	Myoneural connections	
26	Reflexes	
Sept 30, Oct 1	***exam 1 in testing center	
Respiration		
Oct 3	respiratory skeleton, trachea, lungs, blood supply	{39-119}
7	muscles of neck, anterior thorax, back, & abdomen	
10	resp. for speech & life, capacities & volumes, development	
15	physics of respiration, for respiratory assessment	
17	physics, instrumentation cont'd.	
21, 22	***exam 2 in testing center	

Phonation

{123-237}

Oct	24	laryngeal cartilages
	29	ligaments & membranes, intrinsic muscles (half)
	31	intrinsic muscles (half), extrinsic (suprahyoid) muscles
Nov	5	extrinsic (infrahyoid) muscles, phonation theories
	7	loudness & pitch
	12	vocal qualities & registers
	14	physics of phonation
	18,19	***exam 3 in testing center

Resonation

{254-295}

Nov	21	Cavities of speech, skull bones
	26	skull bones, cont'd
	28	*Thanksgiving Holiday, no class held*
Dec	3	intro. to pharyngeal, velar muscles
	5	tongue, mandibular muscles

***final exam is Wednesday, Dec. 11, from 7 a.m. to 10 a.m.

Exams: We will have four exams. The first three will be about 50 questions (multiple choice, fill-in, labeling, and short answer), and will be given in the testing center on the dates listed above (and the day before). Each will take roughly an hour and a half and be worth a possible 100 points. The fourth exam will have about 100 questions (of the same types) and will be given during the final exam period. Half of the final will be on the last fourth of class and half will be from the first 3/4 of the class. It will be worth a possible 200 points and take three hours.

Grading: Exam scores will be recorded as a percentage of the high score in the class. Thus if the high score on an exam were 80, the person scoring 80 would get 100%; a person with a (raw) score of 72 would get 72/80 or 90% recorded. The grading scale used (on these percentage scores) is 95-100% for an A, 90-94% A-, 87-89% B+, 83-86% B, 80-82% B-, 77-79% C+, 73-76% C, 70-72% C-, 67-69% D+, 63-66% D, 60-62% D-, and below 60%, an E. No "extra credit" is possible; no exam scores will be dropped. Class attendance is optional though highly recommended {both text & lecture material will appear on exams}.