

**DEPARTMENT OF SPEECH PATHOLOGY AND AUDIOLOGY
ITHACA COLLEGE
ANATOMY AND PHYSIOLOGY OF SPEECH SLPA-21200-01
FALL, 2009 - Revision**

Instructor: Dr. Douglas Cross
Office: 306 Smiddy Hall
Phone: 274-3073
Website for Anatomy and Physiology: www.ithaca.edu/cross/courses
Office Hours: TBA

TEXTS:

Seikel, J., King, D., and Drumright, D. *Anatomy and Physiology for Speech, Language, and Hearing*, Fourth Edition, Singular Publishing Group, 2005.

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, and articulation. An overview is also provided of the central and peripheral nervous systems. Detailed description of the hearing mechanism is provided in the course *Basic Audiology* and thus is not covered in this course. By the conclusion of this course students are expected to know the location and function of the primary structures and muscles of the speech mechanism as well as understand how these structures function to produce speech.

COURSE STRUCTURE: This course is divided into four sections. These are 1) BASICS OF ANATOMY AND PHYSIOLOGY, 2) RESPIRATION, 3) PHONATION AND, 4) ARTICULATION. Both the anatomy (structures) of the system and physiology (function) of that system are covered for each section.

EXAMINATIONS AND GRADING: There will be four examinations. The fourth examination is the FINAL EXAMINATION given on the scheduled final examination date. The final exam is not cumulative. The format for all exams is multiple choice, fill in the blanks, and label drawings and will cover the information pertinent to the corresponding section of the course. Each exam is worth one fourth of your final grade average. Specific exam dates are not provided in this syllabus since rate at which material is covered varies. Students can get a reasonable idea of when exams will occur by following the lecture outline on the syllabus. A minimum of one week notice will be given before each exam.

Exam scores will be posted via my web site using individual secret student four digit number that they select before the first exam. No other identifying information will be provided.

MISSED EXAMINATIONS: There will be no make-up for missed exams unless the student meets one of the following criteria.

1. The student presents the instructor with a legitimate excuse no less than one week prior to the exam date. The instructor will be the sole determiner of whether the excuse is legitimate. Catching flights, going home, other exams on the same day, etc. are not considered legitimate excuses.
2. The student presents the instructor with written verification of illness (from a doctor) or a death in the family.

If a student misses an examination and meets one of the criteria h/she will schedule a make-up examination with the instructor within one class period following the original exam date. The format for all make-up exams is essay and short answer.

If a student misses an examination and does not fall under the above criteria h/she will receive a score of zero for the exam.

STUDENT CONDUCT: Students are expected to conform to the code of ethics and refrain from giving or receiving information during an examination. If the instructor or the teaching assistant determines that an individual willingly exchanged information with another student or from an electronic device during an exam both students will receive grades of zero for that exam and will be referred to the College Judicial Board for judicial action.

CLASS ATTENDANCE: The attendance policy for course lectures is consistent with the Ithaca College Attendance policy. Attendance in weekly labs is voluntary. The text for this course is very thorough. Students are not required to learn everything in the text from cover to cover. My lectures do not follow the text outline so students will need to attend class to know what is required and emphasized.

LABS: The labs for this course are voluntary and are used to supplement information given during lectures and to address any questions student might have about the material. Physical models and DVD supplements to topics discussed in class will be used. All labs are conducted by teaching assistant(s). The teaching assistant will keep a record of who attends labs each week.

ELECTRONIC DEVICES: Use of recording devices (such as tape recorders) and computers is permitted during lectures and labs. All cell phones and other electronic devices not used to record lectures or take notes **MUST** be turned off prior to each lecture. No electronic devices are allowed to be turned on, used, or in sight during exams.

READINGS FROM THE TEXT AND COURSE LECTURES: The text for the course is very thorough. We will also cover a great deal of information during the semester. The text contains information that is extremely pertinent to the practice of speech pathology and audiology. However, I **DO NOT** lecture directly from the text. I suggest you use the text as a reference for material presented in class. Take your notes in class and then refer to the text to fill in what you missed or that needs further clarification. The student is strongly encouraged to read the syllabus and follow course outlines on my web site to determine the information. Focus your attention on the material in the text that coincides with the material presented in lecture.

WEB SITE: I have a web site that presents this syllabus, lecture materials, and exam grades for each of my classes. I strongly suggest students use these materials as a study guide. My web site is www.ithaca.edu/faculty/cross. Click on "Courses" and then "Anatomy and Physiology of Speech".

STUDENTS WITH DISABILITIES

In compliance with Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act, reasonable accommodation will be provided to students with documented disabilities on a case by case basis. Students must register with the Office of Academic Support Services and provide appropriate documentation to the college before any academic adjustment will be provided.

LECTURE OUTLINE

OVERVIEW CHAPTER 1, 11 (pp. 527-529; 531-540)

Course outline, tests, and requirements
 Frames of reference and vocabulary
 Overview of the speech and hearing processes
 Muscle tissue and function
 The Motor Neuron

RESPIRATORY ANATOMY: CHAPTER 2

Overview of respiration
 Structure of the chest wall
 Muscles of inhalation
 Muscles of exhalation
 Passive forces of respiration

RESPIRATORY PHYSIOLOGY CHAPTER 3

Capacities and volumes
 Measurement of respiration
 Processes of quiet breathing (passive forces)
 Processes of forced breathing/speech (active forces)
 Pressure and volume requirements for speech
 Breathing and linguistic emphasis
 Frequency and duration of breathing

EXAM #1

PHONATORY ANATOMY CHAPTER 4

Overview of phonation/voice
 Cartilages and bony structures of the larynx
 Intrinsic muscles of the larynx/vocal folds
 Extrinsic muscles of the larynx
 Cavities of the larynx

PHONATORY PHYSIOLOGY CHAPTER 5

The larynx and swallowing
 Vocal fold vibration
 Mechanics of vocal control for pitch, loudness, and linguistic stress

EXAM #2

ARTICULATORY ANATOMY AND PHYSIOLOGY CHAPTERS 6,7

Overview of the human vocal tract
 Pharyngeal Cavity
 The Oral Cavity
 Lips and cheeks
 Tongue

Exam #3

ARTICULATORY ANATOMY AND PHYSIOLOGY CHAPTERS 6,7 (Continued)

Jaw

Hyoid bone

Dentition

Nasal Cavity

FINAL EXAM**DOCUMENTATION OF SPEECH-LANGUAGE PATHOLOGY KNOWLEDGE AND SKILLS WITHIN THE CURRICULUM****Anatomy and Physiology of Speech: SLPA 21200**

Provide the course number and title for the academic and clinical course(s), practicum experience(s) and other source(s) of experience that provide students opportunity to acquire knowledge and skills across the SLP curriculum.

Basic Communication and Swallowing Processes (Standard III-B)	Academic Course Title and #	Clinical Course Title and #	Practicum experience Title and #	Labs Title and # Or description	Research Title and # Or description	Other Title and # Or description
Biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases	SLPA 212 Anatomy and Physiology of Speech					