

CMSD 4120 / 6120

ANATOMY & PHYSIOLOGY OF SPEECH, VOICE, & HEARING

FALL 2002. M,W,F 9:05 – 9:55 AM MILLER PLANT SCIENCES, RM. 2401 (3 HRS)

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Office Hours: Wednesday, 10 am -12 pm & Friday, 10 am - 11:30 am.

Please feel free to drop-in and visit with me or the GA during posted office hours in order to ask questions, seek tutoring or discuss any concerns regarding the class. Questions via e-mail are also welcomed. If you cannot attend any of the posted office hours, other meeting times may be scheduled by appointment only.

LISTSERV

Check these e-mails for class announcements, speechphys-L@listserv.uga.edu

WebCT

- Open your preferred web browser.
- Go to the following URL: <https://webct.uga.edu/> . Select the tab “**Login to my WebCT**”. You must have the a “**UGA MyID**” to access the new version of WebCT. If you already have an ARCHES e-mail account, there is nothing you need to do . Your ARCHES ID is now your “UGA MyID”.
- For those students who do not have an ARCHES account, you can create a “UGA MyID” at <http://www.uga.edu/myid> .

REQUIRED TEXTBOOKS & SUPPLIES

1. Zemlin, W.R. (1998). *Speech and Hearing Science: Anatomy and Physiology*, (4th edition). Allyn & Bacon Publishing.
2. Access to a computer and the Internet.

COURSE OVERVIEW & OBJECTIVES

CMSD 4120 / 6120 is a lecture-style course designed to provide the student with a basic yet thorough understanding of the structural organization (anatomy), function (physiology), and neural control of the human vocal tract during speech production (neural

sensorimotor control). Select non-speech behaviours will also be discussed, including gestures, chewing, and swallow. There are no pre-requisites for this course. CMSD 4120 is also cross-listed with LING 4120, through the linguistics department.

The objectives for this class include the following:

- Ability to comprehend basic principles of anatomy & physiology as it pertains to the human vocal tract and correct usage of standard terminology.
- Understand and demonstrate the ability to analyze, synthesize and evaluate the importance of relations that exist between vocal tract muscular systems, and vocal tract structural tissues (cartilage, bone, connective).
- Demonstrate the ability to analyze and synthesize how the relationships that exist between muscle activity and articulator movement pertain to the concepts of valving and geometric shape changes in the human vocal tract.
- Be able to analyze and evaluate the selection, sequencing and timing of articulatory systems to produce intelligible speech.
- Be able to describe the selection and sequencing of systems involved in non-speech behaviours such as chewing, swallowing, and facial gestures.
- Appreciate the comparative diversity of human vocal tract anatomy and physiology as it pertains to vocalization in different age group populations and genders.
- Be able to relate your knowledge of normal anatomy and physiology of the human vocal tract to appreciate more fully the pathophysiology of various speech and non-speech disorders that are due to musculoskeletal abnormalities, brain injury, congenital abnormalities and progressive disease processes.

GRADING & ASSESSMENT PROCEDURES

- A 50 minute exam will be given approximately every three weeks throughout the semester. A total of 6 exams will be administered, each worth 50 points. All exams are objective in format (i.e., multiple choice, fill-ins, matching, brief essays, perhaps some lab rounds, etc.). Exam questions will be derived equally from lectures, outlines, textbook readings, and any outside readings. This means that attendance in class is important and will benefit you on exam days.
- There is technically no final exam, but on the day and time of your normally scheduled final exam you will take Exam # 6 during the first 50 minutes of the period.
- If you are satisfied with your performance in the class, then you are done after completing Exam #6.
- **If you are not satisfied with your grade, then you have the choice of taking an Optional Replacement Test worth 50 pts during the second hour of the scheduled final exam period.**
- **If you select the replacement option, I will exchange your lowest exam grade with that from the Optional Replacement Test. If the optional test grade is lower than your original exam score, then you will retain your original score. In other**

words, there is no penalty for trying to improve your grade by taking the replacement test option.

- The Optional Replacement Test will be broadly cumulative.

4120 / 6120 Exam Dates – Fall 2002	
Exam 1 (50 pts)	September 6 th
Exam 2 (50 pts)	September 25 th
Exam 3 (50 pts)	October 11 th
Exam 4 (50 pts)	October 30 th
Exam 5 (50 pts)	November 20 th
Exam 6 (50 pts)	December 11 th - 8-9am
<i>*Optional Test</i> (50 pts)	December 11 th – 9:15 – 10:15 am

COURSE PROJECT FOR STUDENTS ENROLLED IN CMSD 6120

As a group, you will prepare and author a comprehensive web page of links to speech and hearing sites on the internet. Each link should have a brief description as to it’s content and quality. You will use a web authoring software package such as Netscape Communicator to actually create and organize your website. Be as creative with the aesthetics of the site as you want to be. We will meet during the first week of class as a group to discuss the details of this project.

- This project is worth 50 pts and will be graded on:
 - The website’s aesthetic creativeness and design features (10 pts),
 - The clarity and thoroughness of link descriptions (10 pts), and
 - The organization of the website (20 pts).
- Each person will receive the same grade for the project, **so it is important that each person work to contribute equally to the completion of the project.**
- To encourage each person to pull their own weight, the final 10 pts of the project will be derived in the following manner:
 - Each member will complete a short written assessment of each others’ effort and contribution to the project.
 - You will then rate each person in the group on a scale of 1 to 10 where 1 = no effort or contribution and 10 = contributed equally to the project’s completion.
 - This rating decision must be based on your written assessment of their effort and contribution on the project. Please be objective in your rating.
 - I will average the ratings for each person and add the average ratings score (rounded up to the next whole number) to each person’s final project grade.

Final Grades for 4120

- Your final grade for this course will be based on a grand total of **300 points** summed across your 6 highest exam scores.
- Point totals will be translated into letter grades as follows:
 1. 270-300 pts = A
 2. 240-269 pts = B
 3. 210-239 pts = C
 4. 180-209 pts = D
 5. 000-179 pts = F

Final Grades for Graduate Students in 6120

- Your final grade for this course will be based on a grand total of **350 points** summed across your 6 highest exam scores and the group project.
- Point totals will be translated into letter grades as follows:
 1. 315-350 pts = A
 2. 280-314 pts = B
 3. 245-279 pts = C
 4. 210-244 pts = D
 5. 000-209 pts = F

COURSE POLICIES SPECIFIC TO THIS CLASS:

- Those students with documented special needs (such as cognitive, learning or physical handicaps), please see me during the first few days of class so that we may discuss your case and plan any modifications to the course that may be necessary.
- A grade of C or better is required in order for this course to count toward your completion of an undergraduate degree in communication sciences and disorders.
- There are no extra-credit assignments provided.
- There is no official attendance policy for this course. Being in class everyday is your responsibility.
- Make up quizzes and exams will only be given in cases of documented illnesses and/or emergencies, and are at the discretion of the instructor.
 1. In case you are suddenly ill or have an emergency, please let me know your status within 72 hours of the missed quiz or exam date by e-mail or in person.
 2. Any notification after the 72 hour period will not be accepted and you will not be able to make up the missed exam or quiz.

- Please refer to your current student bulletin and the Fall 2002 Schedule of Classes for details about drop/add, course withdrawal policies and procedures, and any other general UGA academic policies.
- The University of Georgia's Policy on Academic Honesty will be STRICTLY followed for this course. In summary, all students are responsible for maintaining the highest standards of honesty and integrity in every phase of their academics. The penalties for academic dishonesty are severe and ignorance is not an acceptable defense. All students are responsible for informing themselves about UGA's academic honesty standards before performing any academic work. You can familiarize yourself with the UGA Academic Honesty Policy by referring to the following web page for details:
http://www.uga.edu/ovpi/academic_honesty/academic_honesty.htm
- As recommended by *UGA's Office of Vice President for Instruction*, a couple of examples of academic dishonesty specific to this course are offered:
 1. Copying another person's answers during a written exam.
 2. Flagrant plagiarism of material or ideas for submitted written assignments.

SOME FRIENDLY SUGGESTIONS TO HELP YOU SUCCEED!

- Download the notes from WebCT and review them prior to class.
- Visit my office hours if you are confused or need further explanations.
- Do the readings ahead of time. This way the stuff I lecture on isn't brand new to you.
- During class, use the periods of time when I stutter and block to catch up on writing your notes. This usually works great. (I come with "built-in" pauses for you guys!)
- Study your materials a little everyday.
- ASK QUESTIONS IN CLASS. There is NO such thing as a stupid or silly question, so..... Please ask if something related to the lecture is not clear in your mind.
- Develop study groups to help quiz each other and fill-in pieces of information from lecture or the readings you may have missed.
- Spend time reviewing past material before tackling new information. This course is additive in that your understanding of new concepts depends on your understanding of past material.
- Relate new information as much as possible to something you've already learned.
- Draw LOTS of your own pictures and flow charts.
- Make up your own analogies and real-world examples to help you remember the material as you study. (These tend to stick with you for the long haul)
- **Last, (but not least), if your having trouble with the content, get help from me, the GA or one of you classmates ASAP! Please, don't wait !**

WEB-SITES FOR HELP AND INFORMATION

- CMSD Homepage: <http://www.coe.uga.edu/csd/>
- Student Resources for WebCT: <https://webct.uga.edu/www/student.html>
- Student Electronic Services: <http://www.uga.edu/ses/>
- Division of Academic Assistance: <http://www.uga.edu/daa/>
- Important Dates for Students: <http://www.reg.uga.edu/or.nsf/public/acalendar>
- UGA Libraries: <http://www.libs.uga.edu/>
- University Computing and Networking Services: <http://www.uga.edu/ucns/>
- Computer Lab Sites @ UGA: <http://www.uga.edu/ucns/sites/>
- Lastly, it's important to have fun and play too: <http://www.uga.edu/recsports/>

4120 / 6120 Topic Schedule and Readings

- Topic dates are flexible and strongly influenced by the pace of the class. The course syllabus is a general plan for the semester. Deviations announced to the class by the instructor (either verbally, through listserv e-mails and/or through postings on the course website) may be necessary.
- I will post “**specific**” pages to read for each chapter on the course website, weekly. Be sure to check the course website regularly for updates.
- Generally, you are responsible to study and know ALL of the figures for the exams.
- Dates that are **bolded** signify exam dates.
- **Note:** Midpoint Withdrawal Deadline is Tuesday, October 15, 2002.

Class Dates	Topic	Zemlin Chapters
August 19, 21, 23, 26, 28, 30. September 2 (<i>Labor Day</i>), 4, 6 , 9, 11.	<ul style="list-style-type: none"> • Basic Elements of Anatomy. • Muscle physiology and biomechanical principles. • Some basic molecular neurobiology and essentials of neural signaling. 	Ch. 1 & Ch. 5 (p. 381 - 400)
September 13, 16, 18, 20, 23, 25 , 27, 30 October 2, 4, 7, 9.	<ul style="list-style-type: none"> • Anatomy & Physiology of Respiration. 	Ch. 2
October 11 , 14, 16, 18, 21, 23, 25, 28, 30 . November 1 (<i>Fall Break for The Game</i>)	<ul style="list-style-type: none"> • Anatomy & Physiology of Phonation. 	Ch. 3
November 4, 6, 8, 11, 13, 15, 18, 20 , 22, 25 27 & 29 (<i>Turkey Holiday</i>)	<ul style="list-style-type: none"> • Anatomy & Physiology of Articulation. 	Ch. 4
December 2, 4, 6, 9 (<i>Last day of class</i>)	<ul style="list-style-type: none"> • Neuroanatomy & Neurophysiology. 	Ch. 5
Exam # 6 and Optional Replacement Test Wed, December 11, 2002 8:00 - 11:00 am		