

# Anatomy and Physiology of the Speech Mechanism 90 (01:615:391)

Spring 2016

<b>Instructors:</b>	<a href="#">Leah B. Helou</a> , PhD, CCC-SLP Adrianna Shembel, M.A., CCC-SLP
<b>Office Hours:</b>	By appointment
<b>Prerequisites:</b>	LING 201
<b>Course Website:</b>	Access via <a href="http://sakai.rutgers.edu">sakai.rutgers.edu</a> ( <a href="#">Sakai Course Site</a> )
<b>Course Meeting Time:</b>	Online, asynchronous

## Communication Etiquette/Rules of Engagement:

EMAIL: Email should only be used for personal emergencies and issues, such as illnesses preventing you from completing an assignment, special accommodation requests, etc. Any questions that would typically be asked in the traditional classroom setting by raising your hand in front of other students should be asked via the *Chat Room* (for content-related questions) and/or *Forum* (for housekeeping questions); I will explain this further. If you do need to contact us, the fastest and most reliable way to reach us is to send one email (not two separate emails) to our personal email accounts: [leah.helou@gmail.com](mailto:leah.helou@gmail.com) and [adriannashembel@gmail.com](mailto:adriannashembel@gmail.com). One of us will respond to your email within 48 hours during the work week. When emailing, please always sign off with your first and last name so that we can easily search for emails as needed.

APPOINTMENTS: Requests to meet virtually by appointment should be made formally, via email. When writing to request a virtual appointment, please do the following:

- Specify what you wish to discuss and the amount of time you are requesting to meet
- Propose at least 3 time/day options that you are available to meet
- Note your preference regarding the format of our meeting (e.g., Google Hangout, Skype, phone, instant messaging/chat)
- Include your first and last name.

ACCESSIBILITY: We will make every effort to respond to all correspondence within 48 hours.

## Office Hours:

Weekly office hours will be conducted using Sakai's *Chat Room* tool. One or both of the instructors will be online and available on **Tuesdays at 7pm**. Students are expected to use this opportunity to ask questions specific to the course content and materials, be visible to the instructors (think *class participation*), and "listen in on"/engage with other questions and discussions raised by peers. You are welcome and expected to answer your peers' questions to the best of your ability. Time and day of the chat sessions are subject to change in order to best accommodate the maximum number of students.

## Course Description:

This course introduces students to the anatomy (structure) and physiology (function) of the systems and processes involved in speech production. The course focuses on the respiratory, phonatory, articulatory, resonatory, and nervous systems and will examine the contributions of each system to spoken communication. Anatomical structures involved in linguistic communication are placed in the context of all the body systems involved in speech production. This course covers prerequisite content required for students planning to

pursue a higher-level degree in the speech and hearing sciences, including speech pathology and audiology, and emphasizes clinically-relevant information.

### Department Learning Goals:

Students will extend their understanding of theoretical linguistics into other domains of research; apply the techniques of linguistics that they have learned in the core courses to new topics. Students will investigate language in a broader context.

### Learning Goals:

The learning goals for this course support 2014 ASHA Speech Language Pathology Certification Standards and will be assessed through written exams and quizzes.

Learning Goal	ASHA Standard	Method of Assessment
Label the structures used for speech production in the respiratory, phonatory, articulatory, resonatory, and nervous systems.	IV-B	Written Quizzes & Exams
Demonstrate knowledge of the anatomy and physiology of structures used for respiration, phonation, articulation, and resonance.	IV-B	Written Quizzes & Exams
Demonstrate knowledge of the structures and pathways used by the nervous system for speech production	IV-B	Written Quizzes & Exams
Demonstrate knowledge of the structures and pathways used by the nervous system for speech production	IV-B	Written Quizzes & Exams
Demonstrate knowledge of how the nervous system coordinates respiration, phonation, and articulation	IV-B	Written Quizzes & Exams

### Required text:

Seikel, J. Anthony, Douglas W. King, & David G. Drumright. 2010. *Anatomy and Physiology for Speech, Language, and Hearing*. 4th edition. Delmar. ISBN: 9781428312234.

### Assessments and Grading Policies:

#### QUIZZES (25%)

9 weekly reading quizzes will be administered. Your lowest quiz grade will be dropped. Each quiz covers information from the PowerPoint notes and assigned chapters, and will include a variety of formats including but not limited to: multiple choice, matching, fill-in-the-blank, and diagram-labeling questions.

All quizzes are generated from randomly-drawn question pools of similar questions. Each quiz question is presented one at a time, and **once you have submitted your response for a question, you may not return to that question.** We maintain a “closed-book” policy for the quizzes for two reasons. First, the quizzes cover material you are expected to know in graduate programs for Speech-Language Pathology. You should know the material well enough to succeed on your quizzes without referring to notes or the textbook. Second, the quizzes are quite long, and although Sakai lets you know how many questions remain in the quiz, it does not let you know how many points each question is worth. If you spend five minutes looking up answers to a 1-point multiple choice question, you will have less time to spend on later questions, including those with much higher point values. If you have prepared well for the quiz, you should easily be able to complete it in the allotted time; *if you struggle to complete it in the allotted time, this may be a sign that you should be reviewing the materials more before taking the quiz.*

## Quizzes must be completed without helping or receiving help from others.

Each quiz will be available for three days and **may be opened at any time from 12:01 AM Wednesday morning until 11:55 PM Friday night**. Once you open a quiz, you will have a limited time to complete your work; depending on the quiz, you will have from 30 to 45 minutes to finish the quiz. If you do not complete the quiz within the allotted time, your quiz will close automatically and be submitted for grading.

*Your scores on quizzes will demonstrate that you have completed the assigned reading and have comprehended the material. You are **strongly** encouraged to prepare for the quizzes by answering the assigned study questions and using the supplemental study materials on the textbook's companion website. Moreover, it is strongly encouraged to engage in your homeroom groups to fully synthesize the information. Use your quiz scores to identify topics that you might need to review more carefully before the next exam. As a class, scores on quizzes will keep us apprised of your overall progress.*

## EXAMS (50%)

This course includes a midterm and a final exam, each of which contributes 25% toward your final grade. Exams may include multiple-choice, matching, fill-in-the-blank, diagram-labeling and short answer questions.

**Exams are “closed book” and students will be expected to be physically present for them (i.e., exams are not web-based).** The address and link to the map for the Satellite lab, where exams will be held, is here: <https://oit-nb.rutgers.edu/facility/satellite-lab>. Students will be expected to present identification at the time of testing. You must sign up for the midterm exam spot by Wednesday, January 27<sup>th</sup> using the *Sign-Up* function in Sakai. We will be sharing the testing room with another class. Therefore, you are not guaranteed the option of swapping to another session, so be sure to plan accordingly.

### Midterm Dates:

Wednesday, March 9	9:30 AM – 11:30 AM
Thursday, March 10	9:30 AM - 11:30 AM
Thursday, March 10	6:30 PM – 8:30 PM

### Final Dates:

Monday, May 9	3:00 PM – 6:00 PM
Tuesday, May 10	5:00 PM – 8:00 PM
Wednesday, May 11	9:00 AM – 12:00 PM

*Your scores on exams will demonstrate your sustained work effort and comprehensive knowledge of the course material.*

## HOMEROOM GROUP WORK AND PARTICIPATION (25%)

You will be randomly assigned to 1 of 10 groups, each consisting of 4-5 group members (see *Site Info* in Sakai for list). You will meet with your group on a **weekly** basis. It is the group's responsibility to identify a time when all members can meet each week (we recommend using something like Doodle Calendar). A designated group leader within each group will be responsible for finalizing the group's weekly meeting time, orchestrating group discussions, and delegating responsibilities.

*Structure and Goals.* During weekly meeting, group members will review material, address questions, and clarify topics using the *Study Guide* documents in Sakai and any other study tools the group finds helpful. The purpose of the study guide is to provide study questions and activities (e.g., creating VoiceThread videos) to guide you and to offer study tips. However, it is up to you and your group to find and use methods that work the best. Group members will also identify course content needing further clarification or discussion that they would like addressed during weekly *Chat Room* office hours. Of note, group members will be asked to create

VoiceThread videos throughout the semester. If you have concerns with recording yourself, please contact one of the instructors via email.

*Mode of Communication.* Weekly communication can be in the form of Google Hangout, Skype, VoiceThread, phone, or good-old-fashioned face-to-face meetings. If you find your schedule conflicts with that of your group members, it is your responsibility to contact students in the class within the first week using the *Forums* tool in Sakai to switch groups with another student. If you are having trouble finding times to meet regularly with multiple groups, this may not be the class for you.

*Peer Evaluation.* Peer evaluation will contribute to 25% of your final grade. Each week you will complete a brief peer assessment for each member in your group (found under each week's content module in Sakai) after the group meets that week. Peer evaluation will be based on 5 categories: (1) quality of work and organization, (2) accuracy of work and content, (3) creativity and originality, (4) enthusiasm and commitment to learning, and (5) teamwork.

### **Academic Integrity Policy:**

**Cheating:** You are expected to be familiar with and abide by Rutgers University's Academic Integrity Policy. Any collaboration with other students to answer questions in reading quizzes or the exams is a violation of Rutgers' Academic Integrity Policy.

**Plagiarism:** Plagiarism is the use of another person's words, ideas, or results without giving that person appropriate credit. To avoid plagiarism, every direct quotation must be identified by quotation marks or appropriate indentation and both direct quotation and paraphrasing must be cited properly according to the accepted format for the particular discipline or as required by the instructor in a course. Some common examples of plagiarism are:

- Copying word for word (i.e. quoting directly) from an oral, printed, or electronic source without proper attribution.
- Paraphrasing without proper attribution, i.e., presenting in one's own words another person's written words or ideas as if they were one's own.
- Submitting a purchased or downloaded term paper or other materials to satisfy a course requirement.
- Incorporating into one's work graphs, drawings, photographs, diagrams, tables, spreadsheets, computer programs, or other nontextual material from other sources without proper attribution.<sup>1</sup>

Students caught cheating or committing plagiarism will be penalized, as per Rutgers policy.

All students in this course must agree to the following Honor Policy:

*By my honor, I agree that I will complete all exams without helping or receiving help from others, and without referring to my notes, textbook, or other resources.*

### **Attendance, Participation, and Student Responsibility Policies:**

*Attendance.* Because all work will be completed asynchronously for this course, there is no formal attendance policy. However, students are expected to participate in weekly office hour chat sessions, and class engagement will be assessed through frequent quizzes. All exams and quizzes are available for multiple days.

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<sup>1</sup> <http://academicintegrity.rutgers.edu/academic-integrity-policy/> Updated with the University's current language on July 13, 2012 and web link was corrected on Sept. 13, 2015. S. Lawrence.

Please take note of the availability periods on the attached schedule and plan accordingly. Except for documented cases of illness or religious observance, no credit will be awarded for late work.

*Participation.* Your peers will evaluate your level of participation in the class using the weekly peer assessment tool. However, *we also reserve the right to make participation in the Chat Room, Forum, and other Sakai course tools graded, to count toward your overall participation grade.*

*Student Responsibility.* Each student is responsible for monitoring his/her grades and checking the accuracy of the grades throughout the semester. *It is the student's responsibility to contact both of the instructors via email within one week of the posted grade, to inform instructors of any discrepancy.* Additionally, course information on the Sakai website will be updated frequently. It is your responsibility to stay up to date on course material

### **Accommodations for Special Needs:**

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

### **Student-Wellness Services:**

#### **Just In Case Web App**

<http://codu.co/cee05e>

Access helpful mental health information and resources for yourself or a friend in a mental health crisis on your smartphone or tablet and easily contact CAPS or RUPD.

#### **Counseling, ADAP & Psychiatric Services (CAPS)**

**(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901 / [www.rhscaps.rutgers.edu/](http://www.rhscaps.rutgers.edu/)**

CAPS is a University mental health support service that includes counseling, alcohol and other drug assistance, and psychiatric services staffed by a team of professional within Rutgers Health services to support students' efforts to succeed at Rutgers University. CAPS offers a variety of services that include: individual therapy, group therapy and workshops, crisis intervention, referral to specialists in the community and consultation and collaboration with campus partners.

#### **Violence Prevention & Victim Assistance (VPVA)**

**(848) 932-1181 / 3 Bartlett Street, New Brunswick, NJ 08901 / [www.vpva.rutgers.edu/](http://www.vpva.rutgers.edu/)**

The Office for Violence Prevention and Victim Assistance provides confidential crisis intervention, counseling and advocacy for victims of sexual and relationship violence and stalking to students, staff and faculty. To reach staff during office hours when the university is open or to reach an advocate after hours, call 848-932-1181.

#### **Disability Services**

**(848) 445-6800 / Lucy Stone Hall, Suite A145, Livingston Campus, 54 Joyce Kilmer Avenue, Piscataway, NJ 08854 / <https://ods.rutgers.edu/>**

Rutgers University welcomes students with disabilities into all of the University's educational programs. In order to receive consideration for reasonable accommodations, a student with a disability must contact the appropriate disability services office at the campus where you are officially enrolled, participate in an intake interview, and provide documentation: <https://ods.rutgers.edu/students/documentation-guidelines>. If the documentation supports your request for reasonable accommodations, your campus's disability services office

will provide you with a Letter of Accommodations. Please share this letter with your instructors and discuss the accommodations with them as early in your courses as possible. To begin this process, please complete the Registration form on the ODS web site at: <https://ods.rutgers.edu/students/registration-form>.

### **Scarlet Listeners**

**(732) 247-5555 / <http://www.scarletlisteners.com/>**

Free and confidential peer counseling and referral hotline, providing a comforting and supportive safe space.

### **Important: Is an online course right for you?**

An online course requires different skill sets for success than a traditionally-delivered course. The format is not for everyone. In particular, you must be more responsible for managing your own success in an online course, such as by ensuring you have the time and resources to complete the work, completing the assigned study questions, using the supplemental textbook materials, and contacting me early for help with challenging material.

The material covered in this class will require a great deal of memorization and comprehension of challenging concepts. We will provide study questions and activities (e.g., VoiceThread videos) to guide you and will offer study tips, but it is up to you to find and use the methods that work best for you.

*Students who are most successful in online courses tend to be independent, organized, disciplined, and flexible.* If you wouldn't describe yourself this way, rethink taking this course or take some extra time to set yourself up for success before we get started; it's a lot of material. This course is designed to have the same workload as a traditional, face-to-face class – approximately nine hours of work per week – but instead of simply showing up for lectures, you will demonstrate your work effort primarily through your success on the frequent quizzes and the cumulative exams.

In addition to your weekly group meetings, this class allows for you to interact with your classmates in chat room office hours and discussion forums on the course website. It is important that we all be mindful of how our written words can be interpreted by others and that we be respectful and courteous in our interactions.

Please consider carefully whether your learning style and work traits are conducive to success in an online environment, and contact me if you have any questions or concerns. The University of Missouri offers [this self-assessment](#) for evaluating your potential for success in an online course, as well as these useful [Tips for Academic Success in Online Study](#).

### **Course Evaluations:**

Anonymous and open evaluations of this course are welcome at any time. The sooner we become aware of a problem, the sooner it can be addressed.

### **Weekly Schedule:**

<b>Week</b>	<b>Topics &amp; Reading</b>	<b>Assignments</b>
1  Semester begins  Tues Jan 19	Syllabus	Course introduction quiz (mandatory and must be retaken until 100% is achieved)
2  Mon Jan 25	“Basic Elements of Anatomy”  Chapter 1	Quiz 1  * Wed. Jan 27 <sup>th</sup> : Early class add/drop period ends

<b>Week</b>	<b>Topics &amp; Reading</b>	<b>Assignments</b>
3 Mon Feb 1	“Anatomy of Respiration” Chapter 2	Quiz 2
4 Mon Feb 8	“Physiology of Respiration” Chapter 3	Quiz 3
5 Mon Feb 15	“Anatomy of Phonation” Chapter 4	Quiz 4
6 Mon Feb 22		
7 Mon Feb 29	“Physiology of Phonation” Chapter 5	Quiz 5
8 Mon Mar 7	<b>Midterm (Ch 1-5)</b>	See above in the EXAMS section for more details.
<i>Mon Mar 14</i>	<i>Spring Break</i>	
9 Mon Mar 21	“Anatomy of Articulation & Resonance” Chapter 6	* Mon April 4 <sup>th</sup> is the last date to withdraw from a course
10 Mon Mar 28	pp. 267-273; 283-298; 307-362	Quiz 6
11 Mon Apr 4	“Physiology of Articulation & Resonance” Chapter 7	Quiz 7
12 Mon Apr 11	“Neurons & Neuromuscular Function” Chapter 11: 521-540 Chapter 12: 647-669	Quiz 8
13 Mon Apr 18	“Nervous System” Chapter 11: p 540-594 Chapter 12: 669-695	Quiz 9
14 Mon Apr 25	“Cranial Nerves” Powerpoint only	
15 (Mon May 2)	<i>Official Final Exam period May 5-11</i>	See above in the EXAMS section for more details.

