

Anatomy and Physiology of the Speech Mechanism 90 (01:615:391)**Spring 2023**

Professor: Ann Marie Olson, Sc.D. ,CCC-A, FAAA
Email: annmarie.olson@rutgers.edu
Office Hours: online Tuesday 7:30pm or by appointment
Prerequisites: LING 201
Course Website: Access via <https://rutgers.instructure.com/courses/212084>
Meeting Time: Online, asynchronous

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. We 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.

Course Delivery:

This course is fully online and meets asynchronously. You can review lectures, videos and other course activities at anytime but you are required to complete assignments by the posted deadlines. Your weekly activity and submissions will impact your course grade. For more information about course access or support, contact OIT Help Desk; help@oit.rutgers.edu; 833-OIT-HELP (833-648-4357). In addition to contacting the OIT Help Desk please alert me as soon as possible if you run into any problems using Canvas.

Learning remotely presents new challenges. For assistance with learning how to address these challenges, please consult the resources available here: https://rlc.rutgers.edu/remote_instruction.

Required text:

Seikel, J.A., King, D.W., Drumright, D.G. (2021). Anatomy and Physiology for Speech, Language and Hearing (Sixth Edition) Plural Publishing. ISBN13: 978-1-63550-279-4

Online Study Group (Voluntary):

Jasmine Ferrer, a current Senior and former student of this course will hold weekly online study groups. This study group is 100% voluntary and will reinforce material for each week's lecture. More information including when the study group meets will be posted by Tuesday January 31. Jasmine's email is: jcf149@scarletmail.rutgers.edu Sign up is required to attend the study group. You may choose to attend one, a few or all of the study group sessions. Please do not hesitate to contact her for any study group related questions. Any course related questions should be submitted in the discussion or sent directly to Dr. Olson. Attending the study group does not contribute to your final grade but will help you in further understanding the material.

Department Learning Goals for this Course:

This course supports the learning goals of Rutgers' Linguistics' Department including the student's ability to reason about language scientifically, demonstrate knowledge of universal patterns in language and identify what someone knows when they know a language.

Learning Goals:

The learning goals for this course support [2020 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-C	Written Quizzes & Exams
Demonstrate knowledge of the anatomy and physiology of structures used for respiration, phonation, articulation, and resonance.	IV-C	Written Quizzes & Exams
Demonstrate knowledge of the structures and pathways used by the nervous system for speech perception	IV-C	Written Quizzes & Exams
Demonstrate knowledge of the structures and pathways used by the nervous system for speech production	IV-C	Written Quizzes & Exams
Demonstrate knowledge of how the nervous system coordinates respiration, phonation, and articulation	IV-C	Written Quizzes & Exams

Important Dates:

The class begins on 1/17/23 and ends on 5/1/23. Final exam week is 5/4 – 5/10. The last day to drop this class without a W grade is 01/26. There will be a scheduled midterm and final online exam. There will be a window of days (including the weekend) to take these exams. See schedule for more information.

Communication Etiquette/Rules of Engagement:

EMAIL: Any general course related questions should be asked in the discussion forum. However, if you have a specific or personal concern that you would like to discuss privately please do not hesitate to email me. I will respond to your email within 24 hours during the work week and the next business day on weekends and holidays. When emailing, please include **LING391** in the subject line and always sign off with your first and last name so that I can easily search for emails as needed.

Student Support Hours:

Student support hours (aka weekly office hours) are **Tuesdays at 7:30pm**. I will be online and available on Tuesdays at 7:30pm. If students do not request a meeting before 7:30 on Tuesdays then another meeting time will need to be arranged. Students can use the appropriate (content-related) discussion forum on Canvas to ask general questions throughout the week. Student attendance and/or participation in student support hours is voluntary. Time and day of the chat sessions are subject to change in order to best accommodate the maximum number of students.

Assessments and Grading Policies:

Assessment	%
Quizzes:	30%
Exams (Midterm & Final)	40%
Participation, Assignments & Discussions	30%
Total	100%

QUIZZES (30%)

9 weekly unit 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.

You are strongly encouraged to complete each quiz without the use of other resources. However, you are allowed to use your textbook, class notes and other resources EXCEPT for another student. Quizzes are designed to enhance your learning and help you prepare for the midterm and final exams.

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

Each quiz **may be opened at any time from 12:01 AM Monday morning until 11:55 PM Sunday 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 me apprised of your overall progress and areas that may need revision or reinforcement.*

EXAMS (40%)

This course includes an online midterm and final exam, each of which contributes 20% toward your final grade. Exams may include multiple-choice, matching, fill-in-the-blank, and diagram-labeling..

Exams are “closed book” and timed. Each student must complete the exam independently. Exams will be available during the allocated exam week. See the class schedule for details.

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

HOMEWORK AND CLASS DISCUSSIONS: (30%)

1. Homework: There will be 3 homework assignments. Students should complete each assignment individually.
2. Class Discussion. Requirements include:
 - a) During the first week: 1. state your academic status: junior, senior, etc 2. Area of career interest (i.e: SLP, Aud, teacher, scientist, other) 3. Reason why you are interested in future profession related to this course (or why you are taking this course) 4. What do you hope to gain from this *online* course? This can be a video or text posting in the Week 1 Introduction Discussion Board.
 - b) Topics and deadlines for additional discussion posts will announced in Canvas.

Extra Credit Opportunity: (max of 2 point toward final grade)

Students can complete one of two extra credit opportunities.

1. Volunteer for a Rutgers' Linguistic Research study. At time of participation, you must specify with the lab coordinator that you would like your participation to count toward extra credit for this class. Experiments are offered through the Linguistics Department experimental management system (sona) website. <https://rutgerslinguistics.sona-systems.com/> You will receive 1 point for every half hour of research participation with a maximum of 2 extra credit points.
2. Write a two page article summary on a pre-determined speech-related topic. Please contact Dr. Olson before the last week of class to discuss a topic.

COURSE GRADING SCALE:

Grade	Range
A	90-100
B+	85-89
B	80-84
C+	75-79
C	70-74
D	60-69
F	Below 60

Grading and Feedback:

Homework assignments and quizzes/exams that require manual grading will be available 7-10 days after the submission deadline.

Discussion Board:

Discussion boards are a way to share information and knowledge with your classmates. I may comment on discussion postings as part of student assignments. Grades for student discussion will be available 7-10 days after the submission deadline.

Questions posted in the “Course-Related Discussion” will be answered within 24-48 hours. Students are encouraged to answer a classmates question if they are able to. Submissions to “Course-Related Discussion” is voluntary and does not contribute to your final grade. `

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.

All students are expected to know, understand and abide by the Academic Integrity Policy. These short and engaging videos will help explain the policy, the difference between the types of violations and possible sanctions for students found responsible for violating the policy. In addition, students will be introduced to the Honor Pledge which asks students to verify that they have not received or provided unauthorized assistance on an assignment or examination. The link below reviews Rutgers’ academic integrity violations and outcomes. <https://nbprovost.rutgers.edu/academic-integrity-students>

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.¹

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.

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: [Getting Registered | Office of Disability Services \(rutgers.edu\)](#)

Student-Wellness Services:**Counseling, ADAP & Psychiatric Services (CAPS)**

(848) 932-7884 / 17 Senior Street, New Brunswick, NJ 08901 / 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/

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 8489321181.

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.

Tips for success:

An online course requires different skill sets for success than a traditionally-delivered course. 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. powerpoints, 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. 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 the optional 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.

Weekly Schedule:

Week	Topics & Reading	Assignments <i>Due Sunday by 11:55pm</i>
Semester begins Tues Jan 17	Syllabus	<ul style="list-style-type: none"> Course introduction quiz (mandatory and must be retaken until 100% is achieved) Student introductions via Discussion
Mon Jan 23	“Basic Elements of Anatomy” Chapter 1	Quiz 1
Mon Jan 30	“Anatomy of Respiration” Chapter 2	Quiz 2
Mon Feb 6	“Physiology of Respiration” Chapter 3	Quiz 3
Mon Feb 13	“Anatomy of Phonation” Chapter 4	Studyware Activity: Ch 4, Crossword
Mon Feb 20		Quiz 4
Mon Feb 27	“Physiology of Phonation” Chapter 5	Quiz 5
Mon Mar 7	Online Midterm (Ch 1-5)	Midterm (time window to be determined)
Mon Mar 14	<i>Spring Break (March 12-19)</i>	
Mon Mar 20	“Anatomy of Articulation & Resonation” Chapter 6	Studyware Activity: Ch 6, Crossword
Mon Mar 27		Quiz 6

Week	Topics & Reading	Assignments
Mon Apr 3	“Physiology of Articulation & Resonation” Chapter 7	Quiz 7
Mon Apr 10	“Neurons & Neuromuscular Function” Chapter 11: Chapter 12:	Quiz 8
Mon Apr 17	“Nervous System” Chapter 11: p Chapter 12:	Quiz 9
Mon Apr 24	“Cranial Nerves”	Studyware Activity: Ch 12, Image Labeling
Mon May 1 (regular classes end)	No Additional Material Reading Days: Tues & Wed May 2-3	
Final Exam period May 4-10	Online Final Exam (Ch. 6,7,11,12 & Cranial Nerves)	Final Exam time window to be determined