

LONGWOOD UNIVERSITY-PCSD 450

Spring 2023

<i>Instructor: Shelly Graves, M.S., CCC-SLP</i>	<i>Class begins: January 11, 2023</i> <i>Class end: May 5, 2023</i>
<i>E-mail: gravessm@longwood.edu</i>	<i>Last day to add/drop: Jan. 19, 2023 (5pm ET)</i> <i>Last day to withdraw with no academic penalty (all tuition will apply): Mar. 29, 2023</i>

Course Description

PCSD 405: Speech Science provides an introduction to speech science theory, instrumentation, and measurement. Emphasis on normal speech perception and production. 3 credits.

Pre-requisite: CSDS 307 Phonetics, CSDS 313 Anatomy and Physiology of Speech and Hearing Mechanisms, and CSDS 361 Introduction to Audiology and Hearing Science.

Note: Successful completion of this course or other SLP online courses will not guarantee admission to graduate school. Your performance in these courses will not affect your undergraduate GPA, unless you are enrolled in a bachelors' program at Longwood University. If you are transferring this course to another university, you should contact that university to understand the impact of your grade(s) on your GPA at that university.

Required Resources

- Reliable, High Speed Internet
- Computer with Webcam
- Microsoft Office: All assignments in this course must be completed as Microsoft Word document and submitted as Microsoft Word (or PDF).
 - As a Longwood student, you have access to a free download of Microsoft Office 365 (Word, Access, Excel, PowerPoint, etc.) via your Live Mail account. This includes PC and MAC users. Simply log on to Live Mail and click on the Office 365 tab at the top of the page to access the download. Other software packages are available to Longwood students at discounted prices.
<http://www.longwood.edu/usersupport/student-resources/>
- Microsoft PowerPoint Viewer, if you do not have Microsoft Office. (Windows: <http://www.microsoft.com/en-us/download/search.aspx?q=PowerPoint%20viewer> Mac: Built in "Quick Look" can be used to view PowerPoint documents.)
- Windows Media Player and will be necessary in order to view the video clips. It is available as a free download from www.microsoft.com.
- Adobe Acrobat Reader. (<http://get.adobe.com/reader/>)

LONGWOOD UNIVERSITY-PCSD 450

- Ability to save documents as PDF.
- Ability to scan/copy and save images. There are some assignments that required drawings to be submitted. Some assignments may be easier to complete by hand and then scanned in and submitted.
- Submit assignments as Microsoft documents or PDF as required by the assignment. Examples of accepted formats are: .doc; .docx; .pdf.

In Canvas, under the *Start Here* module, please review additional information pertaining to minimal technical requirements and skills, required applications and resources.

CANVAS

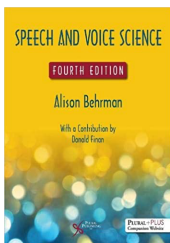
- CANVAS™ will be the venue for this class. All instruction, announcements, course documents, assignments, assessments, and class discussions will take place on CANVAS. <https://CANVAS.longwood.edu>

Respondus LockDown Browser + Monitor

- Respondus LockDown Browser + Monitor is an online proctoring and cheating deterrent software. The assessments for this course are open book/notes. At this time, this course does not utilize this feature.
- Other Longwood courses may utilize this tool. Basic information regarding Respondus LockDown Browser + Monitor is provided in Canvas.

Text

Textbook (required)



Speech and Voice Science, 4th Edition

Author: Behrman, A.

Publisher: Plural Publishing

ISBN-13: 978-1635503227

ISBN-10: 1635503221

You may purchase text used.

Note: Additional required readings and materials are provided through Canvas and are not limited to those indicated in the course syllabus. You may find that texts from Anatomy and Physiology, Phonetics, and Audiology are good resources.

IPA Symbols: There are assignments and assessments that require broad IPA transcription. Students must utilize **Typit.org** (IPA Full function <https://ipa.typeit.org/full/>)

LONGWOOD UNIVERSITY-PCSD 450

for IPA font, versus using a font installed on your computer. This ensures that the instructor will be able to view your transcription across various platforms. **If assignments or assessments include unreadable transcription, the associated question will be counted incorrect.**

Course Objectives

This course will enable students to develop knowledge and skills in speech science that will serve as a foundation for the clinical disorders classes in graduate school and for your practice as a speech-language pathologist. In addition, the information on the science of speech is pertinent to a variety of other professions, such as special education, audiology, and health-related professions.

Below are course objectives and learning activities with corresponding Council of Academic Accreditation in Audiology and Speech-Language Pathology Standards [CAA]

Student Outcome: Upon successful completion of the course, students should be able to ...	Learning Activities	CAA Standard
1. Explain the physics of sound, including nature of sound and the concepts of pressure, frequency, and intensity. Describe the normal auditory capabilities with respect to auditory sensitivity, loudness and pitch perception and binaural hearing.	<ul style="list-style-type: none"> • Lab Assignment 1 • Quiz 1 	Standard 3.1 B Acquire and demonstrate knowledge of basic human communication and swallowing processes, including their biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases. Acquire and demonstrate knowledge of the nature of speech, ... hearing, and communication disorders and differences.... Including ... characteristics, anatomical/physiological, acoustic ... correlates.
2. Explain the process of normal and disordered respiration and how it relates to speech production.	<ul style="list-style-type: none"> • Lab Assignment 2 • Module 2 Discussion Assignment • Quiz 2 	
3. Explain the process of normal and disordered phonation and how it relates to speech production.	<ul style="list-style-type: none"> • Lab Assignment 3 • Module 3 Discussion Assignment • Quiz 3 	
4. Explain the process of normal articulation and resonance and how these influence speech production and perception. Analyze spectrograms.	<ul style="list-style-type: none"> • Lab Assignment 4 • Module 4 Discussion Assignment • Quiz 4 	
5. Explain the processes of speech perception.	<ul style="list-style-type: none"> • Lab Assignment 5 • Module 5 Discussion Assignment • Final Exam 	
6. Identify the instrumentation used in the study of speech.	<ul style="list-style-type: none"> • All Lab Assignments 	

Student Resource Links

- Speech-Language Pathology Prerequisites Online:
<http://www.longwood.edu/continuingeducation/for-credit-courses/speech-language-pathology-prerequisites-online/>
- Academic Success: <http://www.longwood.edu/academicsuccess>
- Disability Resources: <http://www.longwood.edu/disability>
- Digital Education Collaborative: <http://www.longwood.edu/dec>
- User Support Services: <http://www.longwood.edu/usersupport>
- Graduate and Distance Education Student Support:
<http://www.longwood.edu/usersupport/student-resources/graduate-and-distance-education-student-support/>

Review the *Start Here* module in Canvas for additional student support services and learning tools.

University and Class Policies

- **Honor Code**
 - Students are expected to abide by the Longwood University Honor Code at all times. Suspicion of any violation will be investigated and university policy will be followed. The link for the honor code can be found at:
<http://www.longwood.edu/studentconduct/honor-code/>
 - Please be advised that future speech-language pathologists and audiologists are bound by the American Speech-Language-Hearing Association (ASHA) Code of Ethics (ASHA is the national accreditation agency). This code of ethics applies to any persons applying for membership to ASHA and should be adhered to by students aspiring to be speech-language pathologists and/or audiologists. The Code of Ethics can be found at: <https://www.asha.org/Code-of-Ethics/>
- **Accessibility Resources Office**
 - If you have a disability and require accommodations, please meet with your instructor early in the semester to discuss your learning needs. If you wish to request reasonable accommodations (note taking support, extended time for tests, etc.), you must register with the Accessibility Resources Office (<http://www.longwood.edu/accessibility/>), Brock Hall, (434) 395-2391 prior to those accommodations being implemented. The office will require appropriate documentation of disability. All information is kept confidential.
- **Mental Health Resources**
 - Stress and anxiety are very typical reactions to college life and many students have experienced significant benefits from participating in counseling. Longwood's [Counseling and Psychological Services \(CAPS\)](#)

LONGWOOD UNIVERSITY-PCSD 450

(<http://www.longwood.edu/caps/>), located in the Health and Fitness Center, is available to all students at no cost. Appointments can be scheduled by phone (434) 395- 2409, during the hours of 8:15 a.m. -5:00 p.m. Monday-Friday. **Resident Education Coordinators (RECs)** and **Resident Advisors (RAs)** are additional resources to students. For emergency situations, please call (911) or contact the **Longwood University Police Department** (<http://www.longwood.edu/police/>) at (434) 395-2091.

- **Reporting of Crimes and Sexual Misconduct**
 - In accord with its history and mission, Longwood University believes that each individual should be treated with respect and dignity and that any form of crime or violence is incompatible with Longwood's commitment to the dignity and worth of the individual. Longwood University is committed to providing a healthy living, learning and working environment which promotes personal integrity, civility and mutual respect. If you have been the victim of a crime or sexual misconduct we encourage you to report this. If you disclose this to a faculty member or employee (with the exception of our Limited Reporting and Confidential Reporting Resources; for example, the **Counseling and Psychological Services (CAPS)** (<http://www.longwood.edu/caps/>) staff, they are required by law to notify the appropriate University officials. The faculty member or employee cannot maintain complete confidentiality and is required to report the information that has been shared. Please know that all reported information is treated with discretion and respect and kept as private as possible. For more information about your options at Longwood: <http://www.longwood.edu/titleix>
- **Respect for Religious Diversity**
 - The Instructor will accommodate adjustments to due dates that conflict with a student's religious observation, if informed in writing by the end of the first week of class.
- **Adding/Dropping a Course**
 - Students may make schedule adjustments (adds and/or drops) for face-to-face, off-campus, online, and hybrid courses:
 - until 5:00 p.m. on the sixth day of classes for fall and spring full term courses.
 - until 5:00 p.m. on the third business day after the officially stipulated begin date in an abbreviated term, intersession or summer courses of at least three weeks.
 - until 5:00 p.m. of the officially stipulated begin date for any courses which are less than three weeks in duration. If the first meeting time of such a course is after 3 p.m., then a student has until noon of the business day following the officially stipulated begin date to add/drop the course.
- **Withdrawing from a Course**
 - Students may withdraw from individual classes with a grade of "W" (not computed in the GPA) until 5:00 p.m. on the 35th day of regularly scheduled classes. After that date, withdrawals from individual classes are not permitted except for medical or other non-academic emergencies. A student who withdraws, for medical reasons,

LONGWOOD UNIVERSITY-PCSD 450

from a class after the 35th day of regularly scheduled classes must, by noon of the last class day, have a letter sent to the Dean of the student's college by the student's personal physician, detailing the nature of the illness and recommending withdrawal for medical reasons. In extenuating circumstances not related to academic performance, the Dean may grant a withdrawal from an individual course if a written request from the student is received by noon of the last class day. If the Dean approves the request, the Dean will send a copy of the request or letter to the Office of the Registrar and all affected grades for that semester will be noted as "W" on the student's transcript. The Dean will notify the student's faculty members of any grade changes.

- **Protecting Intellectual Property**

- Content and materials for this course are for your learning only and should not be shared with others outside of the class. This includes the materials located within the learning management system, information sent to you through email, and/or content provided to you through webcasting with your professor. You may not share your course connection information (login or password), your content received through Canvas, or any videos sent to you that are specifically for this course. This includes sharing postings or recordings made by the instructor or students without permission of the originator.
- When you are attending a course through web-conferencing (for example, Zoom), there should not be other persons interacting with the system or attending the session.
- Any violation of this policy can result in disciplinary action. Faculty or students may report those who violate University policies regarding intellectual property to the Office of Student Conduct and Integrity.

- **Plagiarism**

- The content (including the organization and the specific wording) of articles whether online, in textbooks, or in journals is the intellectual property of the author. As such, students in this course are expected to demonstrate respect for intellectual property by carefully following acceptable practices for giving authors credit for their work.

Students will be expected to follow APA guidelines for citation and referencing for all written work (including discussion forums, reports, and presentations) which reports, describes, or explains the work of others. The following sites contain information on how to use the APA citation style:

- https://owl.purdue.edu/owl/purdue_owl.html
- <http://www.apastyle.org/>
- <https://www.library.cornell.edu/resrch/citmanage/apa>

- These are not the only sites available. Each student may locate other sites providing information on the APA citation format. The APA citation format is the expected referencing style for both Speech-Language Pathology and Audiology. **References are expected on ALL assignments, using APA style. 5 Points will be deducted from each assignment for failure to use APA style.**

- **Correspondence**

LONGWOOD UNIVERSITY-PCSD 450

- Interaction between learners and the instructor is an important component to the success of online learning. Learners can expect timely responses from the instructor (generally within one to two business days). Communications which are sent after noon on Friday or on weekends/holidays may be addressed on the next business day. Every effort will be made to review and grade written assignments within 10 days. Instructor will communicate with students through Canvas and email.

Below are communication requirements.

- **Announcements:** Please check Canvas daily and review announcements.
 - **Discussion Board:** A number of ungraded discussion forums will be utilized throughout the semester (i.e. Student Lounge, Module Q & A). Students are required to *review all* ungraded discussion board forums daily. If you have a general question pertaining to the course materials, assignments, etc., please post those questions to fellow students and/or instructor within the appropriate Discussion Board forum so that others may also benefit from your question and answer.
 - **Email:** You must use your Longwood email for communication with instructor. Students are responsible for checking email daily.
 - For individual, private messages, you should send your instructor an email through the course page in Canvas. Instructors receive a large amount of email and sometimes messages get overlooked. If your instructor has not responded to your email within 48 hours, please resend the original email.
 - When you send an email please:
 - Include **PCSD 450_Last Name_First Name-Subject of Email** in the subject heading of the email.
 - Be as specific as possible.
 - Example of a poor message: "I don't understand question 6 on the exam. Please explain the answer."
 - Example of a good message: "This is Mary Brown. I am in PCSD 450 and I have a question regarding Exam 3. I got the following question wrong. <include copy of question> Could you please explain the correct answer?"
 - **Technical Difficulties:** There are often numerous questions received pertaining to technical difficulties. If you are having technical difficulty, please contact Longwood Technical Support help@longwood.edu. If they are unable to assist you, you may please post your difficulties to a discussion forum. Often times, other students have had the same problem and may have a solution.
- **Policy on Late Assignments**
 - Students are expected to submit course work by the required date. It is important that you notify the instructor as soon as possible if you are experiencing any problems with an assignment. If emergency, extenuating circumstances arise, adequate documentation must be submitted to the instructor for consideration. Adaptations to

LONGWOOD UNIVERSITY-PCSD 450

the schedule are at the discretion of the instructor. Submission of documentation does not guarantee that an adaptation will be granted.

- In the event that a student incurs an unexcused absence and fails to notify the instructor, all assignments turned in later than the due date/time will be penalized by 10% per late day. Students have up to 5 days to submit past due assignments.
- Attempting to submit work very close to the closing time may result in assignments not being uploaded into the Canvas system. Such instances are not considered technical difficulties. It is each student's individual responsibility to submit work within the stipulated time frame.
- **Assurance Statement**
 - All students are required to review the Honor Code, Code of Ethics, and On-line policies, signing an assurance statement attesting to this fact and assuring they are keeping their virus software up-to-date. This assurance statement is posted in Canvas. Please submit this statement the first week of class via Canvas.

Course Requirements

Below is a summary of additional course requirements that contribute to fulfilling the course objectives. **Each of these requirements is further explained within course material presented within Canvas.**

- **Use of Canvas**

This course is taught in an online format through Canvas. Each student is responsible for verifying his or her access to *Canvas PCSD 450*. Announcements, lessons, assignments, discussions, additional references, handouts, and other information will be provided through Canvas.
- **Learning Modules**

The course is divided into seven (5) learning modules. Each module contains 2-3 weeks of instruction. Each module has a start date, an end date, and due dates. Once a module is made available, you may work through it, submitting assignments, labs, quizzes, etc. in the order in which they are presented in the module. Items due may be submitted at any point prior to the due date.

 - At the start of each new module, you are encouraged to pay particular attention to the readings and items due. This will give you a general idea of how long it will take you to complete the work and ensure the timely completion and submission of all assignments. The advantage of distance education is the flexibility for your study time. You should plan to invest at least 10 hours of study time per week to accomplish all required tasks. Some students may require more time.

LONGWOOD UNIVERSITY-PCSD 450

- **Introductory Activities** (20 points)

The following introductory assignments are due the first week two weeks of class. Check course calendar for specific due dates as some are due the first week and some the second week.

- Participation Quiz (2 points)
- Course Overview Quiz (10 points) contains questions pertaining to the syllabus, course policies and course navigation. It is mandatory that this quiz be taken repeatedly until 100% accuracy is achieved.
- Introduce yourself (5 points) via a discussion board post.
- A signed Assurance Statement (5 points)
- Mathematics and Phonics Skills Assessments (2 points)
Due to the importance of having a solid foundation in basic math and phonetics skills to be successful in this course, students are to take the Mathematics and Phonetics Skills Assessments. Your performance on them will identify concepts you will need to review to be successful in the course.

- **Discussion Assignments** (50 points total)

There will be five (5) graded discussion assignments (10 points each) throughout the semester. For each assignment, students are required to complete **one initial posting** to a specific topic **AND one response posting** to another student's initial posting that is of interest to them. Directions/rubric for completing discussion assignments are provided under the *Start Here* module in Canvas.

- **Lab Assignments** (250 points total)

There are five (5) labs (50 points each), one assigned for each module. These assignments do take some time to complete. Students are encouraged to review them when beginning a module and plan accordingly.

- **Quizzes** (200 points total)

There will be four (4) quizzes throughout the semester. (Information in Module V will be assessed only in the final exam.) The quizzes are timed. While you may use your book, notes, etc., you will not do well if you do not have a good understanding of the material.

- **Final Exam** (100 points)

The Final exam is cumulative. It is not timed and is open-book.

LONGWOOD UNIVERSITY-PCSD 450

Assignment Summary

Grades will be assigned on an earned point basis: Total number of points divided by total points received.

Grade will be based on the following:

▪ Participation Quiz	2 points
▪ Course Overview Quiz	10 points
▪ Introduce Self in Discussion Board Post	5 points
▪ Assurance Statement	5 points
▪ Math & Phonetics Skills Assessments (2 x 1 point each)	2 points
▪ Discussion Assignments (5 x 10 points each)	50 points
▪ Lab Assignments (5 x 50 points each)	250 points
▪ Quizzes (4 x misc. points)	200 points
▪ Final Exam (1 x 100 points)	<u>100 points</u>
Total:	624 points

All assignments, labs, quizzes/ exams are due by 11:49pm ET (Eastern Time) on the date noted within the Course Calendar (located at the back of the syllabus and noted within Canvas course). Once a module has been made available, all assignments, quizzes, etc. may be submitted at any time prior to the due date.

Assignments and quizzes are considered late after the designated due date/time. In the event that a student incurs an unexcused absence and fails to notify the instructor, all assignments turned in later than the due date/time will be penalized by 10% per late day. Students have up to 5 days to submit past due assignments.

Make-up exams for excused absences are only allowed in extreme cases with appropriate written documentation. In case of emergency or illness, you are to notify the instructor before the scheduled exam if at all possible. It is up to the instructor's discretion as to whether students will be allowed to take an exam past the due date.

Grading will occur once the due date of item due has elapsed. The instructor reserves the right to make alterations to the course schedule as needed to accommodate the class.

LONGWOOD UNIVERSITY-PCSD 450

Grading Scale

Grades are earned, not gifts. The instructor does not give grades; rather the student earns the grade through organization, diligence, planning, and execution. Students are expected to assume individual responsibility for the quality, presentation, and timeliness of their own work.

- Grades are assigned based on how the student's overall performance aligns with the established rubrics. Therefore, it is imperative that students review the grading rubrics before submitting assignments.
- Individual requests for extra credit will not be honored. Any extra credit opportunities offered at the discretion of the instructor will only be offered to the entire class as optional credit opportunities.
- The grading scale below reflects the grade that will be earned based on the percentage of total points earned.

A	94-100%
A-	90-93.9%
B+	88-89.9%
B	83-87.9%
B-	80-82.9%
C+	78-79.9%

C	73-77.9%
C-	70-72.9%
D+	68-69.9%
D	63-67.9%
D-	60-62.9%
F	0-59.9%

LONGWOOD UNIVERSITY-PCSD 450

Tentative Course Calendar

Dates	Reading 4 th Ed. of Text	Items Due
Module I: Introduction to Acoustics		
Week 1 Jan 11-15	Chapter 1	Due Friday, January 13th <input type="checkbox"/> Participation Quiz Due Sunday, January 15th <input type="checkbox"/> Course Overview Quiz <input type="checkbox"/> Introduction-Breaking the Ice!
Weeks 2, 3 & 4 Jan 16-Feb 5	Chapter 2 Chapter 3	Due Sunday, January 22nd <input type="checkbox"/> Assurance Statement <input type="checkbox"/> Math Skills Assessment <input type="checkbox"/> Phonetics Skills Assessment Due Sunday, Feb 5th <input type="checkbox"/> Module I Discussion Assignment <input type="checkbox"/> Lab 1 <input type="checkbox"/> Quiz 1
Module II: Respiration		
Weeks 5 & 6 Feb 6-19	Chapter 4	Due Sunday, February 19th <input type="checkbox"/> Module II Discussion Assignment <input type="checkbox"/> Lab 2 <input type="checkbox"/> Quiz 2
Module III: Phonation		
Weeks 7, 8 & 9 Feb 20-Mar 12	Chapter 5 Chapter 6	Due Sunday, Mar 12th <input type="checkbox"/> Module III Discussion Assignment <input type="checkbox"/> Lab 3 <input type="checkbox"/> Quiz 3
Module IV: Articulation and Resonance		
Weeks 10, 11, 12 & 13 Mar 13-Apr 9	Chapter 7 Chapter 8 Chapter 9	Due Sunday, April 9th <input type="checkbox"/> Module IV Discussion Assignment <input type="checkbox"/> Lab 4 <input type="checkbox"/> Quiz 4: Part 1 <input type="checkbox"/> Quiz 4: Part 2 Spectrogram Analysis
Module V: Speech Perception		
Weeks 14 & 15 Apr 10-23	Chapter 10 Chapter 11	Due Sunday, April 23rd <input type="checkbox"/> Module V Discussion Assignment <input type="checkbox"/> Lab 5
Weeks 16 & 17 April 24-May 5		Due FRIDAY, May 5th <input type="checkbox"/> Final Exam (Comprehensive)

****All assignments, labs, quizzes/exam are due by 11:59pm ET (Eastern time) on the date noted above.*** Once a module has been made available, all assignments, quizzes, etc. may be submitted at any time prior to the due date.