

**SLHS 2156Q**

**Speech and Hearing Science**

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**Semester:** Summer 2026

**Course Format:** Online Asynchronous

**Meeting Dates:** Summer Session 1 (June 1, 2026 – July 2, 2026; 5 weeks)

**Instructor:** Matt Phillips, MA, CCC-SLP

**E-Mail:** matthew.phillips@uconn.edu

**Student Hours:** By appointment over Zoom

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**About Your Instructor**

Matt Phillips is a certified, licensed speech-language pathologist and PhD student at Michigan State University. He works as a speech-language pathologist at the Sisskin Stuttering Center where he provides telehealth speech therapy to children, teenagers, and adults who stutter using an Avoidance Reduction Therapy for Stuttering (ARTS®) framework. Matt completed his clinical fellowship at Creative Development, LLC., a private practice in Simsbury, CT where he worked with children across the developmental spectrum, with a focus on children from infancy through age 5. At UConn, he has previously taught SLHS 2156Q (this class!) and SLHS 4254 (Introduction to Language Disorders in Children) as an adjunct professor.

**Course Description**

SLHS 2156Q is a 3-credit course that provides an overview of acoustics related to speech, voice, and hearing. We will learn about the human (“psychological”) correlates of the physical correlates of sound (“acoustics;” e.g., frequency/pitch, amplitude/loudness, etc.) and how these constructs are relevant to clinicians, such as audiologists and speech-language pathologists.

**What is a Q Course?**

From the UConn General Education Oversight Committee:

Q courses are those that require knowledge and use of mathematics and/or statistics at or above the algebra level as an integral part of the course. Q courses should include the following attributes:

1. Mathematics and/or statistics at or above the basic level must be integral and used throughout the course
2. Courses must include use of basic algebraic concepts such as: formulas and functions, linear and quadratic equations and their graphs, systems of equations, polynomials, fractional expressions, exponents, powers, and roots, problems solving and word problems. Formal abstract structures used in symbolic logic and other algebraic analyses are acceptable
3. Courses should require the student to understand and carry out actual mathematical and/or statistical manipulations, and relate them to whatever data might be provided in order to draw conclusions. **Merely feeding numerical data into a computer or a calculator to obtain a numerical result does not satisfy this requirement.** Technology should be viewed as a tool to aid understanding and not as a driver of content.
  - a. *NB.* As per the highlighted section above, it will be important that you complete the work following the guidelines provided for each assignment. Calculators may be used when permitted to fulfill certain functions. ChatGPT or other AI systems/LLMs are never allowed to complete assignments; please see the section labeled “A note on artificial intelligence” below.

### **Course Objectives**

When you have completed this course, you will be able to:

1. Describe and understand the relationships between the acoustic and psychological correlates of sound.
2. Conduct mathematical operations relating to speech and hearing sciences by hand.
3. Understand characteristics of simple and complex sound waves.
4. Explain how content related to this class informs clinical practice in communication sciences and disorders.

### **Course Meetings**

This course is delivered in an online asynchronous format, meaning there are no set course meeting times. Course lectures and assignments are to be viewed and completed at a time of your choosing. **However, please note that there are assignment deadlines**

**throughout the semester – it is not the case that all assignments can be submitted at the end of the semester.**

### Student Hours

I will hold student hours (also called “office hours”) by arrangement. Please email me to set up a time to meet. Student hours will be conducted over Zoom.

### *What are student hours?*

The term “student hours” (or “office hours”) refers to time that is set aside by instructors specifically for their students to stop by and ask questions. You are welcome to arrange office hours if you have any questions about course content, assignments, or reviewing course material. You are also welcome to set up a meeting to discuss related interests or issues, such as the broader field of speech-language pathology. This time is for you, and you do not need to have an “emergency” to schedule a meeting.

### Course Materials

A textbook is **not** required for this course. However, you may want to rent, borrow, or buy *Introduction to Sound: Acoustics for the Hearing and Speech Sciences* by Charles E. Speaks for additional information. No content required for quizzes or exams will come exclusively from the textbook without being discussed in class.

### What Will You Be Graded On?

| Assignment                    | Points                      | Course Grade Percentage (rounded) |
|-------------------------------|-----------------------------|-----------------------------------|
| Get To Know You Questionnaire | 10                          | 5%                                |
| Introductory Discussion Post  | 10                          | 5%                                |
| SLP Q&A Questions             | 10                          | 5%                                |
| Problem Sets                  | 60<br>6 PS x 10 points each | 30%                               |
| Midterm                       | 50                          | 25%                               |
| Guest Speaker Project         | 60                          | 30%                               |
| <b>Total</b>                  | <b>200</b>                  | <b>100%</b>                       |

Get To Know You Questionnaire (10 points)

- Tell me about yourself and get a free 5% towards your course grade!

Introductory Discussion Post (10 points)

- Introduce yourself to your classmates in case it's helpful to connect and collaborate!

SLP Q&A Questions (10 points)

- Submit whatever questions you have about applying to graduate schools, what it's like to be an SLP, or anything related to the field so I can record something as applicable to you as possible!

Problem Sets (60 points)

- Throughout this course you will be assigned several problem sets comprised of practice problems. These problem sets may be a combination of open-ended, multiple choice, or math problems, and are designed to help you apply and understand key course content. These problem sets will be graded on correctness, completion, and effort. Answer keys for each problem set will be posted 1-2 days after they are due for you to review.

Midterm Exam (50 points)

- The Midterm Exam will be opened on June 17th and must be completed by June 21<sup>st</sup> at 11:59pm. I will release a study guide for the Midterm on June 10<sup>th</sup> with concepts to know before taking the exam. The midterm exam will be open note, although you must complete it independently (i.e., do not consult with your classmates). Since this exam will be available over a 5-day period, I may not be available to answer questions over email as you have them although I will try my best to respond as quickly as possible. Additionally, I will not respond to any questions related to course content on the midterm exam after Tuesday, June 16<sup>th</sup> at 8pm EST so everyone has the same opportunity to have their questions answered and does not receive an unfair advantage while taking the exam.

Guest Speaker Project (60 points)

- I believe it is important to make each course as clinically relevant as possible, especially for students who are interested in becoming speech-language pathologists or audiologists. As part of this class, we will host a guest speaker: Christian Terwilliger. Christian is a computer engineering student at the Rochester

Institute of Technology. He is also deaf and utilizes bilateral cochlear implants. Christian will record a virtual Q&A with Matt or will be available for a live Zoom meeting, based on class interest and availability. Prior to his presentation, each student is required to submit questions for Christian to answer. After Christian's guest presentation, you will be required to write a short reflection based on what he shared. The point of this assignment is to (1) reflect upon the lived experience of a person with a communication difference/disorder and (2) consider how speech science can be relevant to clinical practice.

### **Grading System**

Grades will be based on a point accumulation system. Your letter grade will be computed from the total number of earned points divided by the number of total possible points (200). For example, if you earn 165 points, your grade would be:  $165/200 = 82.50 = B-$ . Final grades will not be rounded and no additional extra credit opportunities will be available.

Here is a breakdown of scores and letter grades:

|    |            |    |            |
|----|------------|----|------------|
| A  | 93.00-100  | C  | 73.0-76.99 |
| A- | 90.0-92.99 | C- | 70.0-72.99 |
| B+ | 87.0-89.99 | D+ | 67.0-69.99 |
| B  | 83.0-86.99 | D  | 63.0-66.99 |
| B- | 80.0-82.99 | D- | 60.0-62.99 |
| C+ | 77.0-79.99 | F  | <60        |

### **How To Succeed in an Online Asynchronous Summer Course**

The format of this course being an online asynchronous summer course leads to some unique benefits and challenges. A major benefit is that you can complete the course content and materials with a more flexible schedule, since lectures are posted ahead of time and are available for your viewing throughout the course. However, given that this is a 5-week summer course, the schedule is much more condensed than a fall or spring semester course. Therefore, it is important that you keep up with the course schedule and stay organized, as there is less time to catch up on missed work. Here are a few quick tips to succeed in this class:

- Review the course schedule early and often, to ensure that you understand when things are due.

- Asynchronous classes provide flexibility for when you complete course content, but there are still deadlines to pay attention to!
- If you have any questions or are confused about course content, please ask sooner rather than later! A lot of the course content builds on itself, and there isn't a ton of time to catch up during a 5-week summer class.
- I am happy to grant extensions on assignments as needed and as feasible. However, as noted above, please keep in mind it's tough to provide many extensions during a 5-week summer class.
- Even though this is an asynchronous class, try to set a semi-structured schedule and stick to it! Even if it's just an hour or two on certain days of the week.
- Feel free to reach out to your classmates to collaborate with on assignments and ask each other questions!

## **CLASS POLICIES**

1. While this is an online asynchronous course, please feel free to ask questions either in the Discussion Board or over email! Discussions are always welcome and I strongly feel that discussions are where the best learning occurs!
2. **Due Dates.** All due dates listed in the Course Schedule are in Eastern Standard Time unless otherwise specified. The instructor reserves the right to make changes to deadlines throughout the semester. All changes will be communicated in an appropriate manner.
3. **Late Policy.** Assignments submitted after the deadline will incur a 10% penalty per day it is late. With that being said, I understand that life happens. If you think you will need an extension to complete an assignment, please reach out to me at least 48 hours in advance. In the event of an emergency, please contact me for an extension as soon as possible. I would rather have you complete and submit high quality work at a later date than you submit work that is rushed. If you've made it this far into reading the syllabus – thank you! You're among the few who have read this thing. Send me an email with the subject line *chocolate chip cookies* by 06/04/2026 for a bonus 3 points on your midterm exam!
4. **Communication.** Communication with me related to this course should be conducted via email. If you are emailing me regarding this course, please include "SLHS 2156Q" in the subject line so they don't get lost. I check my email between the hours of 9am and 5pm. I aim to respond to your email within 1 business day. Please keep this timeline in mind when asking about assignments: if you email me

at 10pm for an assignment due at 11:59pm, I probably won't see it until the following day!

5. **Planned Absences.** If you have a planned absence you know about in advance (e.g., religious obligation/holiday, legal/medical appointments, family obligations, etc.), please reach out to me as soon as possible so we can make sure you have a way of accessing and making up missed material as necessary.
6. **Accommodations.** Students with disabilities who wish to have accommodations are encouraged to set up a time to meet with me as soon as possible to ensure these accommodations are implemented in a way that facilitates your success in this class. The Center for Students with Disabilities (CSD) engages in an interactive process with each student and reviews requests for accommodations on an individualized, case-by-case basis. If you have a documented disability for which you wish to request academic accommodations and have not contacted CSD, please do so as soon as possible. The CSD is located in Wilbur Cross, Room 204 and can be reached at 860-486-2020 or at [csd@uconn.edu](mailto:csd@uconn.edu). Detailed information regarding the process to request accommodations is available on the CSD website at [www.csd.uconn.edu](http://www.csd.uconn.edu).
7. **Grade Appeal.** In the event a student believes a grading error has occurred on any exam, quiz, or assignment, a request for the instructor to review the grade must be made within 1 week of the date that grades were posted for that assignment. The instructor will regrade the portion of the assignment in question, which may result in a higher or lower final grade. After an assignment has been regraded, the final grade is non-negotiable.
8. **Copyright.** My lectures, notes, handouts, recordings, and displays are protected by state common law and federal copyright law. They are my own original expression and I've recorded them prior or during my lecture in order to ensure that I obtain copyright protection. Students are authorized to take notes in my class; however, this authorization extends only to making one set of notes for your own personal use and no other use. Students are not authorized to record the delivery of class content unless specifically granted permission from the course instructor. If you are so authorized to record my lectures, you may not copy this recording or any other material, provide copies of either to anyone else unless you are an approved notetaker by the UConn Center for Students with Disabilities, nor make commercial use of them without prior permission from me.

9. **Subject To Change Statement.** Information contained in the course syllabus and corresponding schedule is subject to change with advanced notice, as deemed appropriate by the instructor.

### **Academic Integrity and Misconduct**

This course expects all students to act in accordance with the Guidelines for Academic Integrity at the University of Connecticut. Because questions of intellectual property are important to the field of this course, we will discuss academic honesty as a topic and not just a policy. If you have questions about academic integrity or intellectual property, you should consult with your instructor. Additionally, consult UConn's [guidelines for academic integrity](#)

Academic misconduct includes, but is not limited to, (1) creating and/or submitting work in an unauthorized manner (i.e., plagiarism, etc.), (2) influencing any member of the UConn academic and research community improperly (i.e., threats, bribery, etc.) and (3) submitting the same work in more than one course without permission from the instructors. Any student(s) involved in academic misconduct, including those who provide conscious assistance in committing the act of misconduct, will be held equally accountable and subject to the consequences outlined by the Student Code.

All work submitted in this course must be your own, completed in accordance the University's academic regulations. You may not engage in unauthorized collaboration or make use of ChatGPT or other AI composition software. The instructor reserves the right to use the anti-plagiarism and AI-detection software.

It is important that the work you complete is your own. Academic misconduct may occur when you misrepresent someone else's work as your own. This can take many forms, such as plagiarism or receiving assistance that is not allowed on assignments (e.g., using your cellphone while taking a quiz or exam). If you have been found to be in violation of the Code of Conduct, consequences will be incurred commensurate to the severity of the infraction, ranging from at a minimum a grade of 0 for the assignment in question, and potentially an "F" grade in the course. All instances of academic misconduct shall be reported to the UConn Office of Community Standards which may levy additional consequences, up to expulsion from the University.

### ***A note on artificial intelligence:***

Artificial intelligence, such as ChatGPT, can be very useful. For example, it can be a great clinical tool to generate stimuli for your clients (e.g., “write a story at a 2<sup>nd</sup> grade level about the Hulk that contains a lot of /s/ sounds)! It can also be helpful for coming up with topics for assignments. With that being said, the use of artificial intelligence to complete assignments is strictly prohibited in this course. The use of artificial intelligence will follow the same guidelines described above, including a 0 on the assignment in question, a referral made to the UConn Office of Community Standards, and potentially an “F” grade in the course.

### **Student Responsibilities and Resources**

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important resources, which include:

- The Student Code
  - Academic Integrity
  - Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Credit Hours and Workload
- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment, and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

### **Documented Disability**

The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020, or <https://csd.uconn.edu/>.

Blackboard measures and evaluated accessibility using two sets of standards: the WCAG 2.0 standards issued by the World Wide Web Consortium (W3C) and section 508 of the Rehabilitation Act issued in the United States federal government (Retrieved March 24, 2013 from Blackboard's website).

### **Student Technology Training**

Student technology training is now available in a new HuskyCT short course created by students for students. It will prepare you to use the IT systems and services that you will use throughout your time at UConn, whether learning online or on-campus. It is available at [https://lms.uconn.edu/ultra/courses/\\_80016\\_1/cl/outline](https://lms.uconn.edu/ultra/courses/_80016_1/cl/outline).

### **Policy Against Discrimination, Harassment, and Related Interpersonal Violence**

The University is committed to maintaining an environment free of discrimination or discriminatory harassment directed toward any person or group within its community – students, employees, or visitors. Academic and professional excellence can flourish only when each member of our community is assured an atmosphere of mutual respect. All members of the University community are responsible for the maintenance of an academic and work environment in which people are free to learn and work without fear of discrimination or discriminatory harassment. In addition, inappropriate amorous relationships can undermine the University's mission when those in positions of authority abuse or appear to abuse their authority. To that end, and in accordance with federal and state law, the University prohibits discrimination and discriminatory harassment, as well as inappropriate amorous relationships, and such behavior will be met with appropriate disciplinary action, up to and including dismissal from the University. Additionally, to protect the campus community, all non-confidential University employees (including faculty) are required to report sexual assaults, intimate partner violence, and/or stalking involving a student that they witness or are told about to the Office of Institutional Equity. The University takes all reports with the utmost seriousness. Please be aware that while the information you provide will remain confidential, it will not be confidential and will be shared with university officials who can help. More information is available at [equity.uconn.edu](http://equity.uconn.edu) & [titleix.uconn.edu](http://titleix.uconn.edu)

### **Resources of Students Experiencing Distress**

The University of Connecticut is committed to supporting students in their mental health, their psychological and social well-being, and their connection to their academic experience and overall wellness. The university believes that academic, personal, and

professional development can flourish only when each member of our community is assured equitable access to mental health services. The university aims to make access to mental health attainable while fostering a community reflecting equity and diversity and understands that good mental health may lead to personal and professional growth, greater self-awareness, increased social engagement, enhanced academic success, and campus and community involvement. Students who feel they may benefit from speaking with a mental health professional can find support and resources through the Student Health and Wellness-Mental Health (SHaW-MH) office. Through SHaW-MH, students can make an appointment with a mental health professional and engage in confidential conversations or seek recommendations or referrals for any mental health or psychological concern. Mental health services are included as part of the university's student health insurance plan and also partially funded through university fees. If you do not have UConn's student health insurance plan, most major insurance plans are also accepted. Students can visit the Student Health and Wellness-Mental Health located in Storrs on the main campus in the Arjona Building, 4th Floor, or contact the office at (860) 486-4705, or <https://studenthealth.uconn.edu/> for services or questions.

### **Accommodations for Illness or Extended Absences**

Please take care of yourself if you are feeling ill. If illness prevents you from participating in class, it is your responsibility to notify your instructor as soon as possible. You do not need to disclose the nature of your illness, however, you will need to work with your instructor to determine how you will obtain the content information and/or complete required work during your absence. If life gets in the way (serious illness, personal issues, etc.) that prompt an extended absence, please email the Dean of Students ([dos@uconn.edu](mailto:dos@uconn.edu)) to request support.

### **Evaluation of Course Experience**

Students will be given an opportunity to provide feedback on their course experience and instruction using the University's standard procedures, which are administered by the Office of Institutional Research and Effectiveness (OIRE).

The University of Connecticut is dedicated to supporting and enhancing teaching effectiveness and student learning using a variety of methods. The Student Evaluation of Teaching (SET) is just one tool used to help faculty enhance their teaching. The SET is used for both formative (self-improvement) and summative (evaluation) purposes.

### **Helpful Resources**

#### APA Guide

- [https://owl.purdue.edu/owl/research\\_and\\_citation/apa\\_style/apa\\_style\\_introduction.html](https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_style_introduction.html)

#### SLP/AuD/PhD Graduate School Finder

- <https://find.asha.org/ed/#sort=relevancy>

#### UConn Mental Health Resources

- <https://shs.uconn.edu/>

#### University Writing Center

- [www.writingcenter.uconn.edu](http://www.writingcenter.uconn.edu)

#### UConn Plagiarism Resources

- <http://lib.uconn.edu/help/writing/plagiarism-resources/>

### **ASHA Clinical Certification Standards**

This course addresses program outcomes that pertain to the following:

**Standard IV-B.** The applicant must have demonstrated knowledge of basic human communication and swallowing processes, including the appropriate biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases. The applicant must have demonstrated the ability to integrate information pertaining to normal and abnormal human development across the life span.

**Standard IV-C.** The applicant must have demonstrated knowledge of communication and swallowing disorders and differences, including the appropriate etiologies, characteristics, and anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates in the following areas:

- Voice and resonance, including respiration and phonation
- Hearing, including the impact on speech and language