

“The beautiful thing about learning is that no one can take it away from you.” — B.B. King



SYLLABUS
COMD 457: Introduction to Hearing & Speech Science
University of Wisconsin-Stevens Point
Fall 2023
Tuesday/Thursday 2-3:15 pm
Room 229, CPS

Professor: Dr. Rachel Craig
Office: 046B, CPS
Phone: 715-346-4018
e-mail: rcraig@uwsp.edu
Office Hours: 10 AM - 12 PM on Mondays & Wednesdays, or by appointment.

Prerequisites and Co-requisites:

- CSD 260, 264, 345, & 351;
- OR consent of instructor

Course Description per the UWSP course catalog:

Measurement of sound; application of acoustic principles to human hearing; anatomy and physiology of the hearing mechanism; introduction to psychoacoustics. Acoustic and physiologic elements of speech production and perception.

Required Textbooks:

Emanuel, D. C., & Letowski, T. (2009). *Hearing Science*. Baltimore: Lippincott Williams & Wilkins.
Behrman, A. (2023). *Speech and voice science* (4th ed.). Plural Publishing.

Additional required readings will be available on the course Canvas site or online. Please check Canvas regularly.

E-mail Communication: I will typically reply within 1 day, but it may be slightly longer if your email does not require an urgent reply. I cannot guarantee that I will check or respond to email during evenings and weekends (I may be out of town, or busy with family responsibilities). If you believe that you are delayed on an important matter because I have not replied to your email within 2 business days, then you are responsible for contacting me in person or over the phone (leave a voicemail message if I do not answer).

Course Objectives:

1. Students will demonstrate knowledge of the physical characteristics of sound and will apply that knowledge to some examples of sound in the environment, and to normal and disordered hearing.
2. Students will demonstrate knowledge of the anatomy and physiology of the peripheral and central auditory system and will apply that knowledge to some examples of normal and disordered hearing.

Course Objectives Continued:

3. Students will demonstrate basic knowledge of sound perception (i.e., psychoacoustics) in humans, and will apply that knowledge to some examples of normal and disordered hearing and perception.
4. Students will recall the anatomy and physiology of the speech mechanisms as a basis for learning the concepts of speech science.
5. Students will demonstrate understanding of sound, acoustics, speech perception and speech production.
6. Students will describe theories of speech perception.
7. Each student will describe why the science of speech production and perception is related to clinical practice.

Instructor’s Objectives:

In order to help you achieve the above objectives, I will do the following:

1. Prepare classes that include a mix of lecture and learning activities that are designed to engage you in the material and facilitate your learning;
2. Explain difficult concepts to the best of my ability;
3. Be available during office hours to answer questions or discuss the material;
4. Provide a non-threatening environment in which it is acceptable to learn by trying new ideas, and to not always have the “right” answer.
5. If you come to me telling me you read this, you will be awarded two points of extra credit on your final exam for reading the syllabus.

Course Requirements:

Exams: There will be three exams throughout the semester and one final exam. Exams are closed-book, closed-notes, and will be mostly multiple-choice with some short answer. **The final exam is comprehensive.**

In-Class Assignments: On some days (approximately 8-12 throughout the semester), there will be in-class assignments where you will be asked to review and/or apply information that has been recently covered. These will not be announced ahead of time, and they cannot be made up. You will be required to turn in your assignment at the end of class. It will be graded as a 1 if it is completed, and as a 0 if it is incomplete or not turned in. You will be graded on the percentage of possible 1 grades that you earn, and you are allowed one free 0 grade without penalty.

Grading:

Your final grade is determined by averaging your *percent correct* (*not* total number of points) on the following components. I’ll calculate your final grade using the following weighting scale:

- In-class assignments (total) 10%
- Exams I, II, and III 21.67% for each exam
- Final Exam 25%

Grading Scale:

UWSP Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	F
Percentage	92-100	90-91.9	88-89.9	82-87.9	80-81.9	78-79.9	72-77.9	70-71.9	68-69.9	60-67.9	<60

Grading and Making Up Exams:

If you believe a mistake has been made in recording one of your grades, please bring it to my attention as soon as possible, and **no later than BEFORE the final examination begins.** If you believe there is a mistake in your final exam grade, please bring it to my attention *as soon as possible*.

Exams will not be returned to you, but you are welcome to come to my office hours (or email me to make an appointment) to look at your exam. If you do not understand *why* you earned a particular grade or a particular number of points, you may ask me politely in order for you to better understand what you did wrong. Please do not request a change to your grade. I will automatically (even without you asking) consider the possibility of a grade change, and if I believe that a change is warranted, I will make the change. If you believe I made a mistake in adding points, please feel free to politely bring it to my attention.

If you believe you will need to miss an exam, you must notify me **as soon as possible.** Exams may only be made up for excused reasons such as major illness or family emergency, and please be prepared to provide documentation whenever possible. (I understand that Student Health Services does not provide notes excusing students from class). A make-up exam may be different from the regular exam, but will cover the same content.

In general, in-class assignments may not be made up, but you are allowed one free “0” grade with no penalty. If you have extenuating circumstances (such as hospitalization or ongoing major family emergency) that may cause you to miss multiple classes and in-class assignments during the semester, please see me and we may be able to arrange a make-up plan.

Please understand that assignment and exam schedules are intended to foster equal opportunity for each student in the class. Out of respect to your classmates, please act and plan responsibly to meet the same requirements as everyone else.

Please refer to the Division of Student Affairs for a description of your rights and responsibilities:
<http://www.uwsp.edu/stuaffairs/Pages/default.aspx>.

Please refer to UWSP Academic Affairs and Dean of Students Offices for other information pertaining to academic conduct; in particular, see the University handbook, especially chapter 5 regarding classroom activities: <http://www.uwsp.edu/acadaff/Pages/handbook.aspx>.
<http://www.uwsp.edu/AcadAff/Handbook/CH5-6%2011-12.pdf>
<http://www.uwsp.edu/dos/Pages/Information%20for%20Students.aspx> (Dean of Students)

Regarding the Use of Computers/Tablets & Assorted Electronics/Devices During Class:

In general, computers/tablets may be used as note-taking devices. However, if this privilege is abused (e.g., g-chat, other assorted non-class activities, or if these devices become a distraction to students and/or the instructor), this privilege may be revoked at any time by the instructor. Phones are expected to be off/silent and not used during class! If you are using any other sort of electronics/device, check with the instructor regarding the policy.

Professionalism:

This class is part of your training for your professional career. Professional behavior and attitude are expected. This includes, but is not limited to, respect and tolerance of others, and acting responsibly and with integrity.

For examples of Codes of Ethics for Speech and Hearing Professionals, see:

American Academy of Audiology Code of Ethics

<http://www.audiology.org/resources/documentlibrary/Pages/codeofethics.aspx>

Or

American Speech-Language Hearing Association Code of Ethics

<http://www.asha.org/policy/ET2010-00309/>



Academic Misconduct:

Academic misconduct will not be tolerated, and the UWSP Student Misconduct procedures will be followed for any instances of academic misconduct.

Students with Disabilities:

If any student has a documented disability and requires accommodations in meeting these requirements, please see me as early as possible in the semester to discuss accommodations. Please note that I cannot apply accommodations retroactively to a class requirement that you've already completed. Thus, if you are unsure whether or not you need an accommodation, it is best to discuss the possibility with me beforehand, and we can then decide the best way to proceed. I do recommend scheduling an appointment with the UWSP Disability Resource Center to discuss possible accommodations.



Religious Observances:

I will accommodate religious beliefs according to UWS 22.03 if you notify me within the first 3 weeks of the semester regarding specific dates with which you have conflicts.

“In the event of a medical emergency, call 911 or use red emergency phone. Offer assistance if trained and willing to do so. Guide emergency responders to victim.

In the event of a tornado warning, proceed to the lowest level interior room without window exposure. See www.uwsp.edu/rmgt/Pages/em/procedures/other/floor-plans for floor plans showing severe weather shelters on campus. Avoid wide-span rooms and buildings.

In the event of a fire alarm, evacuate the building in a calm manner. Meet across the street in the parking lot of the Multi-Activity Center. Notify instructor or emergency command personnel of any missing individuals.

Active Shooter – Run/Escape, Hide, Fight. If trapped hide, lock doors, turn off lights, spread out and remain quiet. Follow instructions of emergency responders.

See UW-Stevens Point Emergency Management Plan at www.uwsp.edu/rmgt for details on all emergency response at UW-Stevens Point.”

Commitment to Inclusion and Equity/COVID-19

I would like to build a learning environment for students that supports different thoughts, perspectives, and experiences, and honors your identities (including race, gender, class, sexuality, religion, ability, etc.). I also understand that the current crisis of COVID, economic disparity, and health concerns could impact the conditions necessary for you to succeed. My commitment is to be there for you and help you meet the learning objectives of this course. If you feel like your performance in the class is being impacted by your experiences outside of class, please do not hesitate to come and talk with me. I want to be a resource for you!

The University of Wisconsin-Stevens Point recognizes that this is a difficult time which may be filled with uncertainty as we move forward with the academic year. Your safety, health, and well-being, as well as that of our faculty and staff are our primary concern and I want to be able to support you in any way that I can.

The University understands that at this time you may be facing some obstacles that would make it difficult to meet your academic goals. Please use the Student Resources page on the UWSP Coronavirus (COVID-19) website for information and resources on basic needs such as housing, food, financial aid, and medical and mental health. The webpage also offers information on official University communications, access to technology, and student services.

You are not alone, and together we will navigate these extraordinary and difficult times.

Revised from Marquette Raynor Memorial Libraries



** All photos obtained from the public domain. **

The course schedule is listed on the next page. This schedule is tentative and subject to change; however, the schedule for exams will not change.

Day	Date	Topic	Required <i>Textbook</i> Reading (Additional required readings may be posted on Canvas).
T	September 5	Introduction to course, instructor, students, & expectations, (begin content)	Review syllabus; Behrman 1.3
Th	September 7	Waves, pressure, wavelength	Emanuel pgs 89-93, 96; Behrman 3.1-3.5
T	September 12	Velocity, impedance, sound pressure & intensity	Emanuel 98-102; Behrman 3.6
Th	September 14	Taxonomy of sounds	Emanuel pgs 102-106; Behrman 3.7, 7.6
T	September 19	Absorption, reflection, refraction, reverberation	Emanuel pgs 107-116 ; Behrman 3.8
Th	September 21	Diffraction, interference	Emanuel pgs 116-118
T	September 26	Catch-up/review	
Th	September 28	Exam I	
T	October 3	Doppler effect, SNR, Acoustic systems, Resonance	Emanuel pgs 119-127; Behrman 3.9
Th	October 5	Decibels	Emanuel Chapter 7
T	October 10	Decibels	
Th	October 12	Outer ear	Emanuel Chapter 8
T	October 17	Middle ear	
Th	October 19	Inner ear & CN VIII	Emanuel Chapter 9
T	October 24	Catch-up/review	
Th	October 26	Exam II	
T	October 31	Respiration 1	Behrman Chapter 4
Th	November 2	Respiration 2	
T	November 7	Phonation 1	Behrman Chapter 5 & 6.4
Th	November 9	Phonation 2	
T	November 14	Articulation 1 (Vowels)	Behrman Chapter 7
Th	November 16	Catch-up/review	
T	November 21	Exam III	
Th	November 23	No class: Happy Thanksgiving!	
T	November 28	Articulation 2 (Consonants)	Behrman Chapter 8
Th	November 30	Theories of Speech <i>Production</i>	Behrman Chapter 10
T	December 5	Theories of Speech <i>Perception</i>	Behrman Chapter 11
Th	December 7	Applications & Speakers	
T	December 12	Applications & Speakers	
Th	December 14	Catch-up/review	
Wed	December 20, 10:15am- 12:15pm	Final Exam	Comprehensive Exam, CPS 229