UNIVERSITY OF WISCONSIN—STEVENS POINT **COMMUNICATION SCIENCES AND DISORDERS** Electroacoustics and Instrumentation Calibration (CSD 855), Fall 2019

LAB (UWSP): Mondays 2:00-400pm; 018

INSTRUCTOR: Rachel Craig, Au.D. **GRADUATE ASSISTANT:** Danny DiBenedetto, B.A.

OFFICE LOCATION: CPS 046B; Hours: Wednesdays 9-12

E-MAIL: Rachel.Craig@uwsp.edu

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CSD 303 or CSD Major or Consent of instructor **Prerequisites:**

Scale:

UW – SP Letter Grade	А	A-	B+	В	B-	C+	С	C-	D+	D	F
Percentage	100- 92.00	91.99- 90.00	89.99- 88.00	87.99- 82.00	81.99- 80.00		77.99- 72.00	71.99- 70.00	69.99- 68.00	67.99- 60.00	<60
UW – Madison Letter Grade	А	А	-В	В	В	-C	С	C-	-D	D	F

Required textbook, software, and other course materials:

- Rosen, Stuart and Howell, Peter. (2013). Signals and Systems for Speech and Hearing, 2nd ed. Brill Academic Pub, ISBN-13: 978-90-04-25243-1
- Recommended: Decker, T. Newell and Carrell, Thomas D. (2004). Instrumentation: An Introduction for Students in the Speech and Hearing Sciences, 3rd ed. Mahwah, NJ: Lawrence Erlbaum. ISBN-10: 0-8058-4681-6
- Readings will include other relevant materials not covered in the textbooks and will be posted in respective Modules and/or Files on Canvas.

Attendance:

Lecture content will be complementary to labs. Students are therefore strongly encouraged to attend all lectures and labs.

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

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.

Definition of Academic Misconduct:

From the UWSP Handbook, Chapter UWSP 14, August 2016, pages 10 - 20 http://www.uwsp.edu/AcadAff/Handbook/CH5-6%2011-12.pdf

UWSP 14.03 Academic misconduct subject to disciplinary action.

- (1) Academic misconduct is an act in which a student:
- (a) Seeks to claim credit for the work or efforts of another without authorization or citation;
- (b) Uses unauthorized materials or fabricated data in any academic exercise;
- (c) Forges or falsifies academic documents or records;
- (d) Intentionally impedes or damages the academic work of others;
- (e) Engages in conduct aimed at making false representation of a student's academic performance; or
- (f) Assists other students in any of these acts.
- (2) Examples of academic misconduct include, but are not limited to: cheating on an examination; collaborating with others in work to be presented, contrary to the stated rules of the course; submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas; stealing examinations or course materials; submitting, if contrary to the rules of a course, work previously presented in another course; tampering with the laboratory experiment or computer program of another student; knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

Students with Disabilities:

If any student has a documented disability and requires accommodations in meeting these requirements, please see me <u>as early as possible in the semester</u> to discuss accommodations. Please note that <u>I cannot apply accommodations retroactively to a class requirement that you've already completed.</u> 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.

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.

CSD 855 LAB SCHEDULE

Five assessable labs are in bold; best four is worth 25% each for CSD 855 (100pts)

SP Date	Madison Date	Topic	Room
14-Sep	16- Sept	Signal characterization and analysis using Praat	Remote
21-Sep	23-Sep	Sound level meters	018
		Permissible ambient noise levels	
28-Sep	30-Sep	No lab	
5-Oct	7-Oct	No lab	
12-Oct	14-Oct	No lab	
19-Oct	21-Oct	Digital Signal Processing (DSP)	Remote
26-Oct	28-Oct	Snap circuits – fun with electricity	018
		Multimeters	
2-Nov	4-Nov	Oscilloscopes	018
9-Nov	11-Nov	Calibration of tone audiometer	TBD
16-Nov	18-Nov	Calibration of short duration signals – implications for AEPs and OAEs	018
23-Nov	25-Nov	Thanksgiving week- no lab	
2-Dec		Group Presentations (combined Madison and SP session)-Know your instruments!	Remote

KASA (Knowledge & Skills Acquisition)/CFCC (Council For Clinical Certification) 2020 Standards completed in this course.

A4. Principles, methods, and applications of acoustics, psychoacoustics, and speech perception, with a focus on how each is impacted by hearing impairment throughout the life span

Students in this course will demonstrate competency by obtaining a passing grade on preand post-class quizzes and final exam.

A5. Calibration and use of instrumentation according to manufacturers' specifications and accepted standards

Students in this course will demonstrate competency by obtaining a passing grade on preand post-class quizzes, final exam, and the lab component of the course by performing and submitting reports on calibration of audiometers.

A6. Standard safety precautions and cleaning/disinfection of equipment in accordance with facility-specific policies and manufacturers' instructions to control for infections/contagious diseases

Students in this course will demonstrate competency during all of the lab components of this course by including specific safety and cleaning procedures undertaken before operating instruments.

B4. Utilizing instrument(s) (i.e. sound-level meter, dosimeter, etc.) to determine ambient noise levels and providing strategies for reducing noise and reverberation time in educational, occupational, and other settings

Students in this course will demonstrate competency by obtaining a passing grade on preand post-class quizzes, final exam, and the lab component of the course by conducting noise level surveys in and around campus and submitting a report.

C7. Selecting, performing, and interpreting a complete immittance test battery based on patient need and other findings; tests to be considered include single probe tone tympanometry or multifrequency and multicomponent protocols, ipsilateral and contralateral acoustic reflex threshold measurements, acoustic reflex decay measurements, and Eustachian tube function.

Students in this course will demonstrate competency by obtaining a passing grade on preand post-class quizzes and final exam.

F12. Evaluating acoustics of classroom settings and providing recommendations for modifications

Students in this course will demonstrate competency by obtaining a passing grade on preand post-class quizzes, final exam, and the lab component of the course by conducting noise level surveys in and around campus and submitting a report.

"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 widespan 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."