

**UNIVERSITY OF WISCONSIN—STEVENS POINT**  
**COMMUNICATION SCIENCES AND DISORDERS**  
**Electroacoustics and Instrumentation Calibration (CSD 855), Fall 2018**

**LAB (UWSP):** Wednesdays 3-5pm; 051  
**INSTRUCTOR:** Rachel Craig, Au.D.  
**Graduate Assistant:** Amanda Cegelske, B.S.  
**OFFICE LOCATION:** CPS 046B; Hours: Wednesdays 9-12  
**E-MAIL:** Rachel.Craig@uwsp.edu  
**Prerequisites:** CSD 303 or CSD Major or Consent of instructor

**Scale:**

<b>UW – SP</b> Letter Grade	A	A-	B+	B	B-	C+	C	C-	D+	D	F
<b>Percentage</b>	100-92.00	91.99-90.00	89.99-88.00	87.99-82.00	81.99-80.00	79.99-78.00	77.99-72.00	71.99-70.00	69.99-68.00	67.99-60.00	<60
<b>UW – Madison</b> Letter Grade	A	A-B		B	B-C		C	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>

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.

**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 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.

**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)\*\*

Date	Topic	Room
12-Sep	Introduction and exercises - frequency / logs / dB	051
19-Sep	<b>Signal characterization and analysis using Praat</b>	051
26-Sep	Sound level meters	051
3-Oct	Permissible ambient noise levels	051
10-Oct	<b>Digital Signal Processing (DSP)</b>	051
17-Oct	Snap circuits – fun with electricity	051
24-Oct	Make your own loudspeaker	051
31-Oct	<b>Multimeters</b>	051
7-Nov	<b>Oscilloscopes</b>	051
14-Nov	<b>Calibration of tone audiometer</b>	018
21-Nov	TBD	
28-Nov	Calibration of short duration signals – implications for AEPs and OAEs	018
5-Dec	Group presentations	TBD

**ASHA standards addressed by this course for lecture and lab (Knowledge and Skills Acquisition -- KASA):**

Knowledge assessed through written or oral exam Upon successful completion of this course, the student will:	ASHA Reference	Assessed through
Instrumentation and bioelectrical hazards	A13	Assignments and Exams
Physical characteristics and measurement of electric and other non-acoustic stimuli	A14	Assignments and Exams
Universal precautions and infections/contagious diseases	A21	Assignments and Exams
Principles, methods, and applications of acoustics (e.g., basic parameters of sound, principles of acoustics as related to speech sounds, sound/noise measurement and analysis, and calibration of audiometric equipment), as applicable to: Occupational and industrial environments Community noise Classroom and other educational environments Workplace environments	A23	Assignments and Exams
The use of instrumentation according to manufacturer's specifications and recommendations	A24	Assignments and Exams
Determining whether instrumentation is in calibration according to accepted standards	A25	Assignments and Exams

“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](http://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](http://www.uwsp.edu/rmgt) for details on all emergency response at UW-Stevens Point.”