

**COURSE SYLLABUS**  
**CSD 835: Research Methods, 3 s.h.**  
**University of Wisconsin Joint AuD Program**  
**Fall 2020**  
**MW 1:00-2:15**

**Class format will vary: There will be some online Zoom meetings at the regular class time, and also asynchronous recorded lectures.**

**Instructors:** Dr. Rebecca Warner Henning, Professor of Audiology

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**Office Hours:** Monday and Wednesday 2:30-3:30, and by appt. Office hours will also be available during the regular class time if we are not meeting (or if we are not meeting for the entire class time) on that day. All office hours will be via Zoom. If you would like to arrange a phone call instead of meeting over Zoom, please let me know and we will arrange it.

**E-mail communication:** You are expected to check your school e-mail account at least once per weekday for any important class announcements. I typically reply to emails within two business days or sooner. I cannot guarantee that I will check email on evenings and weekends, so please plan ahead to avoid last-minute weekend or late-night “emergencies.”

**You are not permitted to turn in an assignment late because you are waiting for a reply from me.**

If you’ve emailed me with reasonable advance notice (see later in this paragraph), but I haven’t replied within the timeframe given above, there is a chance I did not receive your message. Please check your sent-mail to see if it was actually sent, and try re-sending it or sending another email. If you are emailing a question within 1-2 days or less of the assignment’s deadline, then I may not have time to reply/answer before the deadline. (I will try to reply, but I often have multiple urgent matters that come up at the same time). If I do not reply before the deadline, then you should submit your assignment by the deadline, using your best judgment to answer your question.

**Required Readings:**

Orlikoff, Schiavetti, & Metz, *Evaluating Research in Communication Disorders*, 7<sup>th</sup> edition

Publication Manual of the American Psychological Association, 7<sup>th</sup> edition; can get by with the 6<sup>th</sup> edition if you also use the following source for 7<sup>th</sup> edition updates:

[https://owl.purdue.edu/owl/research\\_and\\_citation/apa\\_style/apa\\_formatting\\_and\\_style\\_guide/apa\\_changes\\_7th\\_edition.html](https://owl.purdue.edu/owl/research_and_citation/apa_style/apa_formatting_and_style_guide/apa_changes_7th_edition.html).

Additional required readings will be available on the class Canvas site.

**Optional Reading:**

Valente, M., Sarli, C.C., Valente, L.M., Amlani, A. M., Oeding, K, & Finnell, J., et al. (2011). *The Audiology Capstone: Research, Presentation, and Publication*. New York: Thieme Medical Publishers.

### Course Description and Objectives:

This is a research course designed for future clinical audiologists. Clinical audiologists must have competency in research methods for several purposes:

- Clinicians must be able to critically evaluate and interpret research in order to use evidence-based practice. This course will include activities and assessments that require you to critically appraise, interpret, and synthesize the literature, especially as it applies to clinical audiology practice.
- Clinicians should be prepared to participate on a research team or conduct clinical outcomes research. Many AuD clinical audiologists who work at academic medical centers, at universities, and for equipment or device manufacturers are involved in research teams. Your capstone project will help prepare you for this type of work, and this course will take you through the initial steps of planning your capstone project.

### Course Format and Expectations:

- This class will sometimes meet online via Zoom at the designated time (1:00-2:15 pm), and sometimes will have required asynchronous activities (typically recorded lectures) instead of or in addition to class meetings.
- **When attending a synchronous class, you are expected to be attentive and engaged in the course.**
  - If you expect you will be unable to attend or focus on a synchronous course session (for example, if you are ill, or caring for someone who is ill, or caring for a dependent, etc.), please email me ahead of time if possible (or if it's not possible to email me ahead of time, then email me as soon as you reasonably can) to request an excused absence from the class. Zoom meetings will be recorded unless prevented by technical problems, and you can watch the recording at a better time. Please also read the bullets below about excused absences.
  - **Please do not try to attend a Zoom course while you are driving, or while you are doing anything else that requires your full attention for safety!** Please plan your schedule so you can attend class from an environment that allows you to pay attention to class. See the information in the previous and following bullets about requesting an excused class absence if necessary.
  - Although excused absences may be necessary more often than usual due to the pandemic, I expect they will still be reserved for circumstances such as illness, caring for someone who is ill, personal or family emergency, etc. Otherwise, you should plan to attend class regularly, and excused absences should NOT be requested or used for routine or controllable circumstances like vacation, work, convenience, or errands.
- Although I highly recommend you participate with video whenever possible in any synchronous Zoom sessions, if your video will create repeated or disruptive distractions for others during the session, please disable your own video while the distraction is present, or for the entire session if necessary. It is NOT very distracting (so no need to disable video) if a family member or pet occasionally or calmly appears in the background; however it IS visually distracting if, for example, you keep getting up and down or moving around a lot, or if you move your camera a lot, or if your pet repeatedly jumps all over you throughout class, or if a family member keeps asking you questions. I understand these things may happen, but please disable your own video if they occur for longer than a brief time.

- In general, please mute your own audio unless you are speaking. There may be some occasions when, due to a faster pace of the discussion, it may be better to leave your audio un-muted, but most of the time it works best if everyone except the current speaker has their audio muted.

### **Student Requirements:**

#### Personal situations and/or difficulty meeting course requirements:

If you are concerned that extenuating personal or family circumstances may affect your ability to meet these requirements, please discuss this with me (or with the graduate advisor or another faculty member on your home campus with whom you feel comfortable) so that we can be aware of the situation and figure out alternative arrangements if needed. It is far better to be proactive about discussing possible difficulties than to wait until your performance in the class has already suffered. I will not probe you for in-depth personal information if you would prefer not to share it; however, you will likely need to provide some type of documentation to at least one faculty member and/or to the disability services office on your home campus (if applicable to your situation) if alternative arrangements, such as extended deadlines or different exam dates, are needed.

**You must complete all of the following in order to pass this course.**

#### Class Attendance:

You are responsible for attending synchronous class sessions (typically via Zoom) unless you discuss (an) excused absence(s) with me, preferably ahead of time if possible. **See the information earlier in this syllabus under “Course format and expectations” for more information about absences.**

Repeated **unexcused** absences will, at the least, result in a meeting to discuss and troubleshoot any barriers you are experiencing to attending class, and if the problem remains unresolved, may result in an improvement plan to meet ASHA’s professionalism competency. **If you are concerned that a family or personal situation will cause you to miss class repeatedly, please discuss this with me proactively so we can discuss some possible solutions, rather than waiting until you have repeated unexcused or unexplained absences.**

#### Written Assignments:

See the assignments information in Canvas for complete descriptions and grading information. **All assignments must be completed at a satisfactory level in order to pass the class. Even if you otherwise have a passing average in the class, if you have not satisfactorily completed all assignments, then you may not pass the class.** I will inform you if any of your assignments are not satisfactorily completed. If your performance on an assignment indicates that you have not met the required competency level (according to the course objectives and ASHA standards), you may be required to revise or re-do the assignment. Depending on the situation, revisions or “re-dos” may or may not result in an improved grade.

#### Exams:

There will be two exams in this class. If your performance on an exam indicates that you have not met the required competency level (according to the course objectives and ASHA standards), you may be required to complete a make-up assignment or exam in order to demonstrate competency.

Although a make-up assignment or exam may be used to demonstrate competency, it will not necessarily result in an improved grade on the exam.

**Academic Misconduct:**

If students are caught cheating or plagiarizing on any assignments, the UW System Student Misconduct procedures will be followed. Academic misconduct, depending on the severity, may result in a requirement to re-do or revise the assignment, or a reduced or failing grade on the assignment, or a failing grade in the class.

**Students with Disabilities:**

If any student has a disability and requires reasonable accommodations to meet these requirements, you must contact the disability services office on your home campus to arrange for accommodations.

**Religious Observances:**

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

**Grading:**

More information about assignments and grading procedures is provided in the separate description for each assignment, as well as in the general grading information document. You are responsible for understanding and following all of that information.

**Assignments will receive the following weights:**

Exam I: 18% of class grade  
Exam II: 18% of class grade

**Research project written assignments:**

- Lit. search, research question, & variables 6% of class grade
- Peer review 10% of class grade
- Introduction next version 14% of class grade
- Final introduction 14% of class grade

Homework assignments in total: 20% of class grade

**Grading Scale:**

|                                     |        |         |         |         |         |         |         |         |         |         |     |
|-------------------------------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----|
| <b>UW – SP</b><br>Letter Grade      | A      | A-      | B+      | B       | B-      | C+      | C       | C-      | D+      | D       | F   |
| <b>Percentage</b>                   | 100-92 | 91.9-90 | 89.9-88 | 87.9-82 | 81.9-80 | 79.9-78 | 77.9-72 | 71.9-70 | 69.9-68 | 67.9-60 | <60 |
| <b>UW – Madison</b><br>Letter Grade | A      | A-B     |         | B       | B-C     |         | C       | C-D     |         | D       | F   |

### **ASHA Standards:**

This course fulfills the requirement of **ASHA CCC-A standard #A13**: Student demonstrates knowledge of “principles of research and the application of evidence-based practice (i.e., scientific evidence, clinical expertise, and client/patient perspectives) for accurate and effective clinical decision making.” (<https://www.asha.org/Certification/2020-Audiology-Certification-Standards/>)

**Method of Assessing Competency:** Competency in this ASHA standard is assessed on all assignments and exams in this course; thus, there are multiple opportunities for students to demonstrate competency. If a student earns a passing grade on **every assignment and exam**, then the student will meet competency. If a student does not pass an assignment or an exam, then the instructor will review the student’s work to determine which portions did not meet competency and to what extent. If the student does not demonstrate competency of that material via (a) passing grade(s) on (an)other class assignment(s) covering similar material, then the student will need to complete make-up or additional work to demonstrate competency in that material. **A passing grade is a B or better. If a student fails to complete any of the tasks required for competency, they will work with the course instructor to either redo the task or complete an additional task in order to demonstrate competency. If a student is not able to successfully complete this task, then an improvement plan will be initiated to remediate the skill in question. See the AuD handbook section on improvement plans.**

### **Learning Outcomes:**

1. Students will determine the level(s) of evidence of sources used for evidence-based practice (EBP); students will interpret evidence to make EBP clinical decisions.
2. Students will demonstrate an understanding of the ethical issues involved in research with human subjects, by successfully completing the online CITI training program for their home campus.
3. Students will complete an introduction section of a research proposal.
4. Students will write clearly and effectively using the format and style of a scientific research paper, including the proper use and citation of resources.
5. Students will describe, explain, and apply the following concepts: variables, research strategy, research design, and quality of measurements at a level that is appropriate for: critically evaluating research; being an efficient consumer of research; completing their capstone project; and being a clinical member of a research team.
6. Students will demonstrate an understanding of statistics at an introductory level that is appropriate for interpreting the statistics of their capstone projects, and for interpreting statistical and clinical significance of published research.

### **Instructor’s Objectives:**

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

- 1) Provide you with suggestions for study skills and strategies;
- 2) Prepare classes that include a mix of lecture and learning activities that are designed to facilitate your learning;
- 3) Explain difficult concepts to the best of my ability;
- 4) Be available during office hours and by appointment to answer questions or discuss the material;

- 5) Provide a non-threatening environment in which it is acceptable to learn by trying new things and new ideas, and to not always have the “right” answer.

### Class Schedule

The following is a **tentative schedule**, and the topics on each day are subject to change. **There will likely be more class meeting days than what is listed here, and class meeting days are subject to change.** EBP HW due dates may also change. I do **not** plan to change the due dates for any other assignments or exams.

| Day | Date     | Topic   | Textbook Reading<br>(On many days, there will be additional required readings posted in Canvas. You will often need to have the articles available to you in class in either electronic or paper format). |
|-----|----------|---|---|
| W   | Sept. 2  | Course goals; introduction to research & EBP cases  | <b>Class meets</b><br>Orlikoff et al., chapter 1 through p. 21  |
| W   | Sept. 9  | Starting a research project: ideas and finding sources; research questions  | Orlikoff et al., chapter 1 pp. 21-31  |
| M   | Sept. 14 | EBP: creating questions and finding sources; difference between research and EBP in questions & sources   | <b>Class meets</b>  |
| W   | Sept. 16 | <b>Human subjects protection course certificate due</b><br><br>Variables and measurement scales   | <b>EBP HW #1 due</b><br><br>Orlikoff et al., chapter 3 pp. 72-79, also chapter 6 pp. 224-228  |
| M   | Sept. 21 | Finish variables and measurement scales?<br>Introduction: research questions; structure and APA style; scientific writing and avoiding plagiarism | <b>EBP HW #2 due</b><br><b>Class meets</b><br>Orlikoff et al., chapter 2  |

|   |          |  |   |
|---|----------|--|---|
| W | Sept. 23 | <b>Anti-plagiarism assignment or pledge due;</b><br>Methods: research strategies and design                              | <u>Required:</u> Orlikoff et al., chapter 3<br><u>Supplementary:</u> Orlikoff et al., chapter 6, pp. 204-221                  |
| M | Sept. 28 | Methods: research strategies and design  |   |
| W | Sept. 30 | Methods: research strategies and design, including EBP levels of evidence  | <b>Class meets</b><br><b>EBP HW #3 due</b>  |
| M | Oct. 5   | <b>Lit. search, research question, &amp; variables assignment due</b><br>Methods: research strategies and design         | <u>Required:</u> Orlikoff et al., chapter 4<br><u>Supplementary:</u> more info and examples are in Orlikoff et al., chapter 5 |
| W | Oct. 7   | Methods: research strategies and design  |   |
| M | Oct. 12  | Methods: research strategies and design  | <b>Class meets</b><br><b>EBP HW #4 due</b>  |
| W | Oct. 14  | Methods: quality of measures, reliability and validity   | Orlikoff et al., 228-264  |
| M | Oct. 19  | <b>Exam 1</b>  |   |
| W | Oct. 21  | Methods: quality of measures   |   |
| M | Oct. 26  | Methods: quality of measures   |   |
| W | Oct. 28  | <b>Peer review day: must have a complete version of your introduction ready for peer review by 1pm</b>                   | <b>Class meets for a short time to discuss peer reviews</b>   |
| M | Nov. 2   | <b>Peer reviews due to the D2L dropbox</b><br>Methods: data collection and recording procedures; Evaluating EBP evidence | <b>Class meets</b><br><b>EBP HW #5 due</b>  |

|          |                                       |   |  |
|----------|---------------------------------------|---|--|
| <b>W</b> | <b>Nov. 4</b>                         | Evaluating EBP evidence;<br>Results: null hypotheses and statistics                                   | <b>Class meets</b><br><b>EBP HW #6 due</b><br><br>Orlikoff et al., chapter 7 pp. 273-293, 305-309; |
| M        | Nov. 9                                | Results: null hypotheses, statistics, and interpretation  | Orlikoff et al., chapter 7 pp. 301-305, 309-322;   |
| W        | Nov. 11                               | Results: null hypotheses, statistics, and interpretation  |  |
| <b>M</b> | <b>Nov. 16</b>                        | <b>Next version of introduction due;</b><br>Results: statistics and interpretation                    |  |
| <b>W</b> | <b>Nov. 18</b>                        | Results: statistics and interpretation  | <b>Class meets</b><br><b>EBP HW #7 due</b>   |
| M        | Nov. 23                               | Results: statistics and interpretation  | <u>Supplementary examples:</u> Orlikoff et al., pp. 328-360  |
| W        | Nov. 25                               | Results: statistics and interpretation  |  |
| M        | Nov. 30                               | Results: statistics and interpretation  |  |
| W        | Dec. 2                                | Finish statistics and interpretation?<br><br>Discussion, conclusions, and applications, including EBP | <b>Class meets</b><br>Orlikoff et al., chapter 8 pp. 368-376<br>Orlikoff et al., chapter 9         |
| <b>M</b> | <b>Dec. 7</b>                         | Discussion, conclusions, and EBP applications   | <b>Class meets</b><br><b>EBP HW #8 due</b>   |
| <b>W</b> | <b>Dec. 9</b>                         | <b>Final Introduction due by 1 pm</b>   |  |
| <b>M</b> | <b>Dec. 14</b><br><b>1:00-2:30 pm</b> | <b>Exam 2</b>   |  |