

# Research Methods and Critical Thinking in Communication Sciences and Disorders

CSD 710 | FALL 2022 MONDAYS, 2:00-2:50 PM | CPS 024

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**CPS 034** 



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Office Hours TBD

# CONSIDER

- Mr. Jones saw a news segment about an innovative treatment that promises to cure his stuttering and he wants you to begin incorporating it into his speech therapy sessions.
- Your school district has invested in a new tablet-based protocol to treat pragmatic language problems with teenagers. Your special education director wants you to implement this "state-of-the-art" treatment even though you have questions about teens learning social skills without actual human interaction.
- You just completed an evaluation of a nonverbal preschooler with a G-tube who has a rare syndrome. You excitedly begin to research the syndrome before you plan intervention, but you cannot find any research about prognosis or types of intervention with regard to speech, language, cognition, and swallowing.

### COURSE DESCRIPTION

As a practicing speech-language pathologist, you will confront scenarios like those described above on a frequent basis. As a licensed and nationally credentialed speech-language pathologist, you will be required to engage in evidence-based practice. ASHA defines evidence-based practice as "an approach in which current, high-quality research evidence is integrated with practitioner expertise and client preferences and values into the process of making clinical decisions" (American Speech-Language-Hearing Association, 2005).

In this course you will learn about different types of research and how research studies are designed. You will develop skills to critically read research articles and determine the level and strength of the research. Through application activities (current events and discipline-specific), team-based learning, and group discussion, you will develop a systematic approach to critical thinking that will benefit you not only as a speech-language pathologist, but also a responsible citizen.

American Speech-Language-Hearing Association. (2004). Evidence-based practice in communication disorders: an introduction [Technical Report]. Available from www.asha.org/policy.

# **Course Objectives**

- 1. Students will identify, compare, and contrast different levels of evidence (e.g., Level 1-clinical, randomized trials) and different types of research (e.g., qualitative, applied).
- 2. Students will apply a structured critical thinking approach to solve various clinical issues after considering a variety of perspectives and interventions. This will include how to proceed with a client when there is no/limited research on a particular disorder, syndrome, etc.
- 3. Students will consider the evidence-based triad of research, clinician values/perspective/experience, and client and family values/perspective/experience to support intervention decisions.
- 4. Students will demonstrate skill in reading and comprehending a variety of journal articles and types of research to assist them in making evidence-based clinical decisions.
- 5. Students will learn to access and use evidence-based resources using the library, databases, speechBITE, and preset literature notifications of new information.
- 6. Students will identify fallacies and biases that impact critical thinking.

# **Course Assignments**

- <u>Journal Article Critique</u>—You will read and analyze a journal article and explain/critique the research design, bias, limitations, and conclusions (LO 1, 4).
- <u>Appeal Letter</u>—You will write a letter of appeal using a critical thinking approach by identifying and responding to an argument through a well-written and research-based argument of your own (LO 5).
- <u>Critical Thinking Scenario</u>—You will be given a multi-faceted simulation of a real-life professional experience. Using only the materials provided, you and a partner will need to analyze the information with a critical eye and evaluate the situation to come up with a final product based on critical thinking and application of the research given to you (LO 1, 2, 3, 4, 6)
- Myths? Busted!—You will select from a list of CSD, science, medicine, or educational myths and debunk the myth with reliable supporting evidence (LO 2, 6).
- <u>Final Course Reflection</u>—You will respond to prompts to reflect upon your learning and your growth in critical thinking and understanding of research.

# ASHA Competencies Met:

ASHA IV-E, F, G: The applicant must have demonstrated knowledge of standards of ethical conduct, the processes used in research and of the integration of research principles into evidence-based clinical practice, and contemporary professional issues.

Course Outline		
Date	Content	Chapter
September 12	Course Introduction	Canvas
September 19	In-Class Discussion	Canvas
September 26	Asking the Right Questions How to Read Journal Articles	B & KCh 1 Canvas
October 3	PICO, IRB Process, History of Research	Canvas
October 10	Issues and Conclusions Reasons	B & KCh 2 B & KCh 3
October 17	Ambiguous Words and Phrases  Journal article critique	B & KCh 4 Canvas
October 24	Research Design Value and Descriptive Assumptions	Canvas B & KCh 5
October 31	Fallacies	B & KCh 6
November 7	Evaluating Evidence	B & KCh 7, 8
November 14	Rival Causes	B & KCh 9
November 21	Examining Statistics Insurance Appeal	B & KCh 10 Canvas
November 28	Coming to Reasonable Conclusions	B & KCh 11, 12
December 5	Speech Bumps that Interfere	B & KCh 13
December 12	What if there is no evidence?  Myths? Busted! due	Canvas
December 16 10:15 am-12:15 pm	FINAL: Critical Thinking Scenario/Final Reflection	



# Textbook:

Browne, M.N., & Keeley, S. M. (2018). *Asking the right questions: A guide to critical thinking (14th ed.)*. Pearson.

# (Un)grading policy

I'm trying to continually grow in my evidenced-based teaching skills, so we'll be using "ungrading" for this course. I read the book, *Ungrading: Why Rating Students Undermines Learning (and What to Do Instead)* by Susan Blum (2020) and attended a workshop on ungrading in May 2021. Current research suggests that grading is arbitrary, does not truly represent learning, and is fraught with bias. Students also do not learn as much if they are graded versus if they are given written/verbal feedback. Additionally, metacognition is an important practice for improving learning of course content. We will discuss "ungrading" on the first day of class and what it means for this course.

In a nutshell, you will have 4 ungraded assignments (one with a group), that will be used to collaboratively determine your final grade in the course. You and I will together determine your learning progress and your grade in class through written feedback, metacognition activities, and personal learning reflections. It is my hope that this approach will decrease stress, increase academic "risk-taking," and result in deeper, meaningful, and personalized learning.



## **Course Policies**

- Contacting the instructor
  - Office Hours: I will have established weekly office hours once the clinic schedule is set and that
    is the best time to see me. If those hours don't work, then email me for an appointment. You
    don't have to have a specific class-related question to attend office hours. I also enjoy when
    students drop in virtually for a brief visit just to chat.
  - Email: Remember some faculty receive as many as 100 emails per day. Your email should be clear, concise, and professional so that your issues can be responded to effectively. Include the entire thread of an ongoing email conversation so that I can recall the history of your issue without searching for other emails you have sent. I will try to respond within 24 hours. If I haven't responded in that timeframe, please send me a reminder email because sometimes yours may get "buried" in my inbox. To have and model a work/life balance, I don't respond to emails after 5:00 pm or on the weekends.
- <u>Disability Accommodations</u>: Students with documentation through disability services will be accommodated. I have worked hard to make all materials accessible to screen-readers and have added closed-captions where possible. I will use automatic subtitles during class. However, I'm only human and may have missed something. If I am not adequately meeting your accommodations, please let me know so I can adjust accordingly. If modifications are required due to a disability, please inform me and contact the Disability and Assistive Technology Center to complete an Accommodations Request form. Phone: 346-3365 or Room 609 Albertson Hall.
- <u>"Best by" Dates</u>: We're in the Dairy State and know that milk is "best" by a specific date marked on the container. Therefore, all assignments have a "best by" date. This is the established deadline for each exam or assignment and I anticipate most of you will submit assignments at this time. However, if you cannot meet the deadline, fill out the "due date extension request" form in advance and outline a new due date with justification. Like other best-by dates, the longer you go past the due date, the more the milk curdles, and I may not be able to guarantee the same amount of feedback as if you had met the original date.
- Intellectual Property: Lecture materials and any potential recordings for CSD 710 are protected intellectual property at UW-Stevens Point. Students in this course may use the materials and recordings and take notes for their personal use related to participation in this class. If a lecture is not already recorded, you are not authorized to record my lectures without my permission unless you are considered by the university to be a qualified student with a disability requiring accommodation [Regent Policy Document 4-1]. Students may not copy or share lecture materials and recordings outside of class, including posting on internet sites or selling to commercial entities. Students are also prohibited from providing or selling their personal notes to anyone else or being paid for taking notes by any person or commercial firm without the instructor's express written permission. Unauthorized use of these copyrighted lecture materials and recordings constitutes copyright infringement and may be addressed under the university's policies, UWS Chapters 14 and 17, governing student academic and non-academic misconduct.
- <u>Academic Integrity</u>: Academic Integrity is an expectation of each UW-Stevens Point student. Campus community members are responsible for fostering and upholding an environment in which student learning is fair, just, and honest. Academic misconduct is unacceptable. It compromises and disrespects the integrity of our university and those who study here. Failure to understand what constitutes academic misconduct does not exempt responsibility from engaging in it.

#### • Attendance:

- Attending class will likely be the single most important factor in determining your performance and grade in the course, so plan to attend every class. In some class meetings you will have at least one project, exercise, test, and/or discussion that will count toward participation. The relationship between attendance and achievement in education has been extensively documented in peer-reviewed research. I would encourage to connect with a classmate early in the semester who can be a resource for you if you are sick or otherwise miss class. Note that properly worn (covering nose and mouth) face coverings are required to attend class.
- We are still in the midst of a pandemic and it is likely that many of you may become ill.
   Similarly, life events (family illness, births, transportation problems, etc.) happen. Please let me know prior to class that you will not be in attendance and you can make-up the work. I am happy to work with you on extensions and a make-up plan. If it is an emergency and you cannot notify me prior to class, let me know as soon as possible. If you miss class due to illness, I do not need a doctor's excuse.
- Please refer to the "Absences due to Military Service" and "Religious Beliefs Accommodation" here.
- If you decide to drop a class, please do so using myPoint or visit the Enrollment Services
   Center. Changes in class enrollment will impact your tuition and fee balance, financial aid award and veterans' educational benefit.

### **Student Supports**

Any student who faces challenges securing their food, housing, safety, healthcare or other crisis and believes this may affect their performance in the course is urged to contact the Dean of Students for support. Furthermore, please notify the me if you are comfortable in doing so, so that I can direct you to relevant campus resources (e.g., food pantry, counseling center, etc.). I am also posting resources in a module on Canvas. I am happy to assist you with issues beyond the classroom if I can and will maintain confidentiality. I want you to succeed.

If you have experienced a bias incident (an act of conduct, speech, or expression to which a bias motive is evident as a contributing factor regardless of whether the act is criminal) at UWSP, you have the right to report it using this link. You may also contact the Dean of Students office directly at dos@uwsp.edu.

#### **EMERGENCIES**

- In the event of a medical emergency, call 911 or use red emergency phone located in clinic hallways. Offer assistance if trained and willing to do so. Guide emergency responders to victim.
- In the event of a tornado warning, proceed to CSD Clinic hallways. Avoid wide-span rooms and buildings.
- In the event of a fire alarm, evacuate the building in a calm manner. Meet in front of HEC building. 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.