Course Information
Time: Monday, 10:00 a.m. - 12:45 p.m.
Location: Callier Dallas, Room J204
Course Credits: 3

Professor Contact Information
Instructor: Andrea Warner-Czyz, Ph.D.
Telephone: 214.905.3124
Email: warnerczyz@utdallas.edu
Office Hours: Wednesday, 10:00 a.m. – 12:00 p.m., or by appointment

Course Pre-requisites, Co-requisites, and/or Other Restrictions
Honest uncertainty about one or more aspects of clinical practice in communication disorders and a willingness to think critically.

Course Description
This course concerns an expanded version of the framework known as evidence-based practice (EBP), in which credible evidence derived from scientific research, from clinical practice, and from patients themselves is identified and incorporated into clinical decision-making. Students will learn how to ask strong and answerable questions about evidence, how to find potentially valuable evidence, how to appraise evidence critically, and how to design, present and defend a strong and credible study of their own. This course is open to all graduate students; it has been designed to ensure that students in audiology and speech-language pathology demonstrate required knowledge and skills as outlined in the Standards and Implementation Guidelines for the Certificate of Clinical Competence in their respective areas as described below.

Student Learning Objectives/Outcomes
1. Describe the origins, characteristics, strengths and limitations of evidence-based practice (AUD Std IV-B15; SLP Std III-F)
2. Conduct efficient and effective electronic searches for external scientific evidence (AUD Std IV-B15, E12; SLP Std III-F)
3. Define and apply the criteria for appraising the validity of evidence (AUD Std IV-B15, E12; SLP Std III-F)
4. Define and apply the criteria for appraising the importance of evidence (AUD Std IV-B15, E12; SLP Std III-F)
5. Describe a systematic approach to integrating evidence from external scientific research, from clinical practice, and from patients into clinical decision-making (AUD Std IV-B15, E12; SLP Std III-D, F)
6. Plan a research study consistent with EBP principles and criteria (AUD Std IV-B15; SLP Std III-F)

Required Textbook
Additional Required Readings


Assignments & Academic Calendar

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Due at the class (email to instructor or bring to class session)</th>
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<tbody>
<tr>
<td>01/13</td>
<td>Introduction</td>
<td>Notes (important questions/comments) on Chapters 1-2. Be prepared to talk about a research question of your choice, keeping PICO in mind.</td>
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<td>01/20</td>
<td>No class (MLK Holiday)</td>
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<td>Date</td>
<td>Topic</td>
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<tr>
<td>02/03</td>
<td>Validity of evidence</td>
<td>Notes on Horner et al.(2005)</td>
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<td>Find and describe a study with relatively good internal validity and a study with relatively poor internal validity. Contrast their strengths and weaknesses and describe how the weaknesses could have been avoided.</td>
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<tr>
<td>02/10</td>
<td>Importance of evidence</td>
<td>Notes on Dollaghan Chapter 5 (pp. 47-62)</td>
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<td>Notes on Rosnow &amp; Rosenthal (2009)</td>
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<td>Prepare a 5-slide powerpoint presentation leading through the introduction to your PICO question.</td>
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<td>02/17</td>
<td>Importance of evidence</td>
<td>Notes on Wong &amp; Hickson Chapter 10 (237-266)</td>
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<td>Calculate the $d$ value as in Beeson &amp; Robey (pp. 164-165) for the SD target data in Figure 3 and for p. 1516 of Ertmer &amp; Maki (2000).</td>
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<td>02/24</td>
<td>Designing a research study</td>
<td>First draft of introduction (background and rationale) for your paper, including outline of planned methods</td>
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<td>03/03</td>
<td>Individual meetings</td>
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<td>03/10</td>
<td>Spring Break – no class</td>
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<tr>
<td>03/17</td>
<td>Critical appraisal of systematic reviews</td>
<td>Notes on Dollaghan Chapter 6 (pp. 63-80)</td>
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<td>Notes on Coleman (2009)</td>
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<td>03/24</td>
<td>Meta-analysis</td>
<td>Notes on Robey &amp; Dalebout (1998)</td>
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<td>Notes on van Kleeck et al. (2010)</td>
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<td>03/31</td>
<td>Writing a methods section</td>
<td>Outline of planned methods, description of materials and methods.</td>
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<td>04/07</td>
<td>Critical appraisal of treatment, diagnosis/screening evidence</td>
<td>Notes on Dollaghan Chapter 7 (pp. 81-104)</td>
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<td>Complete CATE form for Neufeld et al. (2010) and CADE form for Honeth et al. (2010); explain reasoning for each rating briefly. First draft of methods section</td>
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<td>04/14</td>
<td>Incorporating patient preferences</td>
<td>Notes on Krahn &amp; Naglie (2008)</td>
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<td>Notes on Murad et al. (2008)</td>
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<td>Questions, comments, links from Hardonk et al. (2010)</td>
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<td>04/21</td>
<td>Decision aids</td>
<td>Notes on Wong &amp; Hickson Chapter 3</td>
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<td>Notes on decision aid for hearing aids at <a href="http://decisionaid.ohri.ca/AZinvent.php">http://decisionaid.ohri.ca/AZinvent.php</a></td>
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<td>04/28</td>
<td>EBP and CPG</td>
<td>Wong and Hickson Chapter 13</td>
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<td>Final paper due</td>
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**Recommended sections for papers** (papers should substantially exceed poster presentations)

I. Background and rationale, including at least one PICO question and a summary table listing quality feature ratings from your critical appraisals of at least 5 key studies discussed in your background and rationale

II. Planned methods (Participants, procedures, measures, analyses; include research design, plans for sampling, reliability and validity of measures, alpha level, estimates of statistical power, effect size, and sample size and discuss how you will avoid threats to internal validity)

IV. Table/graph/text summarizing hypothetical results and resulting conclusion

V. References (American Psychological Association format)

Depending on the clarity and quality of the final paper you submit, you may be asked to revise it during finals week before receiving a grade for the course.

**Grading Policy**

Grades will be determined according to the following elements:

50% Active participation in all class sessions, including attendance and timely, thoughtful completion of assignments

25% Poster presentation
ASHA STANDARDS ADDRESSED IN THIS CLASS: How knowledge is conveyed and how knowledge and skill acquisition will be demonstrated

Speech-language pathology Standard III-D
The applicant must possess knowledge of the principles and methods of prevention, assessment and intervention for people with communication and swallowing disorders
- Knowledge will be conveyed via class lectures and readings.
- Acquisition will be demonstrated via class discussions and assignments.

Speech-language pathology Standard III-F
The applicant must possess knowledge of processes used in research and the integration of research principles into evidence-based clinical practice
- Knowledge will be conveyed via class lectures and readings.
- Acquisition will be demonstrated via class discussions and assignments.

Audiology Standard IV-B15
The applicant must demonstrate knowledge of principles and practices of research, including experimental design, statistical methods, and application to clinical applications.
- Knowledge will be conveyed via class lectures and readings.
- Acquisition will be demonstrated via class discussions and assignments

Audiology Standard IV-E12
The applicant must have the knowledge and skills necessary to assess efficacy of interventions for auditory and balance disorders
- Knowledge will be conveyed via class lectures and readings.
- Acquisition will be demonstrated via class discussions and assignments

Students will demonstrate the following skills:
1. Critically appraise external scientific evidence on diagnosis and screening
   Measured by: assignments
2. Critically appraise external scientific evidence on treatment
   Measured by: assignments
3. Critically appraise evidence from meta-analyses and systematic reviews
   Measured by: assignments
4. Synthesize current best evidence on a clinical question
   Measured by: poster presentation and paper
5. Use principles of evidence-based practice to design a study of a clinical question
   Measured by: poster presentation and paper

Course Policies
Extra Credit - Extra credit will not be offered.
Late Work - Late work will not be accepted.
Class Attendance - Required for all sessions.

UT Dallas Syllabus Policies and Procedures
The information contained in the following link constitutes the University’s policies and procedures segment of the course syllabus.
Please go to http://go.utdallas.edu/syllabus-policies for these policies.

The descriptions and timelines contained in this syllabus are subject to change at the discretion of the Professor.