EVIDENCE-BASED PRACTICE IN COMMUNICATION DISORDERS
AUD 7339, SPRING, 2015

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: 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 IV-F)
2. Conduct efficient and effective electronic searches for external scientific evidence (AUD Std IV-B15, E12; SLP Std IV-F)
3. Define and apply the criteria for appraising the validity of evidence (AUD Std IV-B15, E12; SLP Std IV-F)
4. Define and apply the criteria for appraising the importance of evidence (AUD Std IV-B15, E12; SLP Std IV-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 IV-D, F)
6. Plan a research study consistent with EBP principles and criteria (AUD Std IV-B15; SLP Std IV-F)

Required Textbook
**Additional Required Readings**


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<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings and assignments</th>
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<tbody>
<tr>
<td>01/12</td>
<td>Introduction</td>
<td>Be prepared to talk about a research question of your choice, keeping PICO in mind.</td>
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<tr>
<td>01/19</td>
<td>No class (MLK Holiday)</td>
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<tr>
<td>02/02</td>
<td>Validity of evidence</td>
<td>Horner et al. (2005)</td>
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<tr>
<td>02/09</td>
<td>Individual meetings</td>
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<tr>
<td>02/16</td>
<td>Importance of evidence</td>
<td>Prepare a revised 4-slide powerpoint presentation leading through the introduction to your PICO question.</td>
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<tr>
<td>02/23</td>
<td>Importance of evidence</td>
<td>Wong &amp; Hickson Chapter 10 (237-266); Ertmer &amp; Maki (2000) 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.</td>
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<tr>
<td>03/02</td>
<td>Critical appraisal of treatment, diagnosis/screening evidence</td>
<td>Dolaghan Chapter 7 (pp. 81-104); Neufeld et al. (2010); and Honeth et al. (2010) Read articles before class. We will complete CATE and CADE forms in class for the two articles. First draft of methods section</td>
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<tr>
<td>03/09</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>03/16</td>
<td>Spring Break – no class</td>
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<tr>
<td>03/23</td>
<td>Critical appraisal of systematic reviews</td>
<td>Dolaghan Chapter 6 (pp. 62-80); Coleman (2009)</td>
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<td>03/30</td>
<td>Meta-analysis</td>
<td>Robey &amp; Dalebout (1998); van Kleeck et al. (2010); Tsuji et al. (2014)</td>
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<td>04/06</td>
<td>Writing a methods section</td>
<td>Azevedo et al. (2011); Kallett (2004)</td>
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<td>04/13</td>
<td>Incorporating patient preferences</td>
<td>Krahm &amp; Naglie (2008); Murad et al. (2008); Hardonk et al. (2010) Outline of planned methods, description of materials and methods</td>
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<td>04/20</td>
<td>Decision aids</td>
<td>Wong &amp; Hickson Chapter 3 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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<tr>
<td>04/28</td>
<td>Clinical Practice Guidelines</td>
<td>Wong and Hickson Chapter 13 Final paper due</td>
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Students will submit 2 questions from the readings prior to class. The instructor will ask questions during class. Students will answer the questions appropriately to receive credit toward class participation.

Recommended sections for papers (papers should substantially exceed poster presentations)
1. 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.
2. 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).
3. 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
20% Paper preparation (2 powerpoint presentations, draft of introduction, draft of methods section)
30% Final paper

ASHA STANDARDS ADDRESSED IN THIS CLASS: How knowledge is conveyed and how knowledge and skill acquisition will be demonstrated
Speech-language pathology Standard IV-D
For each of the areas specified in Standard VI-C, the applicant must have demonstrated current knowledge of the principles and methods of prevention, assessment, and intervention for people with communication and swallowing disorders, including consideration of anatomical/physiological, psychological, developmental, and linguistic and cultural correlates.
- Knowledge will be conveyed via class lectures and readings.
- Acquisition will be demonstrated via class discussions and assignments.

Speech-language pathology Standard IV-F
The applicant must have demonstrated knowledge of processes used in research and of the integration of research principles in to 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.