**CSD 502: Research Methods in Communication Sciences and Disorders**  
Department of Communication Sciences and Disorders  
Western Washington University  
Fall Quarter 2014

**SCHEDULE:** M, T, W, F 1:00 pm to 1:50 pm  
Room AW 405

**LEVEL:** Graduate, 4 credits

**INSTRUCTOR:** Kelli Evans, Ph.D., CCC/SLP  
AIC 388  
360-650-6299  
Kelli.Evans@wwu.edu

**CLASS WEBSITE:** Canvas  
**OFFICE HOURS:** By appointment

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**Course Description**  
Topics include research strategies and designs, measurement issues, evaluation criteria, treatment efficacy, and organization and analysis of data. Introduces students to group and single-subject research designs and qualitative research. Engages students in completing a research project.

**Required Text**


**Required Readings**

4. Additional readings as assigned

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**ASHA Certification Standards**

**Standard IV-E:** The applicant must have demonstrated knowledge of standards of ethical conduct.  
Implementation: The applicant must have demonstrated knowledge of the principles and rules of the current ASHA Code of Ethics.

**Standard IV-F:** The applicant must have demonstrated knowledge of processes used in research and of the integration of research principles into evidence-based clinical practice.  
Implementation: The applicant must have demonstrated knowledge of the principles of basic and applied research and research design. In addition, the applicant must have demonstrated knowledge of how to access sources of research information and have demonstrated the ability to relate research to clinical practice.

**Standard V-A:** The applicant must have demonstrated skills in oral and written or other forms of communication sufficient for entry into professional practice.  
Implementation: ...the applicant must have demonstrated the ability to write and comprehend technical reports, diagnostic and treatment reports, treatment plans, and professional correspondence in English.
Student Learning Outcomes

1. Students will demonstrate mastery of course content.
   a. Students will explain (1) the basic principles of the scientific method and (2) how values and ethics influence the scientific process.
      i. Measurement: (1) Mid-term exam, (2) in-class group activity
   b. Students will demonstrate an understanding of the history, policies, and laws regarding the protection of human participants in research.
      i. Measurement: certificate of NIH training in human subjects research
   c. Students will (1) identify and (2) use APA style to write about research questions, variables, strategies, designs, and internal/external validity threats.
      i. Measurement: Mid-term exam, Research Proposal
   d. Students will describe and interpret research results, justifying the conclusions, and recognizing the limitations of a study.
      i. Measurement: Final exam, in-class group activities
   e. Students will recognize fundamental principles and processes of descriptive and inferential statistics.
      i. Measurement: Final exam, in-class group activities

2. Students will apply knowledge and skills learned to use evidence-based practice principles to critically evaluate external scientific evidence and relate it to clinical decision making.
   i. Measurement: Final exam, in-class group activities

Remediation Procedure

Students scoring below 83% on any learning outcome (as measured by exam questions and assigned projects) will be rated as not showing evidence of the competency. Remedial work will be required of students earning scores of 83% or below as assigned on an individual basis. Remedial work does not change the course grade.

EVALUATION

Attendance: As graduate level study is the final preparation before entering the profession, students should consider class attendance to be similar to attendance in a professional setting. For example, in a professional setting you would not be absent from a scheduled client session or staffing without prior notice. Thus, attendance is required. After one unexcused absence, ten points will be deducted from a student’s total number of points for the semester. Three tardies (arriving more than 10 minutes after the start of class) is counted as an absence. If you arrive late, it is your responsibility to come to me directly after class and see that I correct the roll. If you know that you are going to be absent from or late for class for any reason, contact me in writing beforehand. Absences may be excused or unexcused at the discretion of the instructor. Be prepared to provide a physician notice of illness or documented occurrence of an emergency if asked to aid the instructor’s decision.

Exams: This course has a mid-term (60 points) and a final exam (80 points). They cover the material as indicated on the course outline. Make-up examinations are given only in the case of illness documented with a physician’s letter, and the instructor must be notified prior to the time of the regularly scheduled exam. No electronic devices (cell phones, laptops, etc.) are allowed during exam time. If an electronic device is on your person or otherwise disrupts an exam (rings, makes noise, etc.) you will receive an automatic grade of “0” for that exam with no opportunity for make-up. You will be responsible for the material covered by that exam during remediation procedures.

Projects/Assignments: This course requires several hands-on activities.

1. NIH Training (http://phrp.nihtraining.com) (5 points)
2. Research Question (5 points)
3. Literature review draft (5 points)
4. Methods Outline (5 points)
5. Final research proposal (30 points)
6. Research Article analysis (in class) (5 points)
7. EBP Analysis (in-class)(5 points)
Note: If you are absent for an in-class activity that is worth points, you will receive a 0. If your absence is excused, you may complete the activity independently, outside of class time for credit.

Other assignments: Both in-class and out-of-class assignments may be required, at the discretion of the instructor.

Course Grade: Your final grade will be determined by the total number of points you earn during the semester divided by the total number of possible points. The letter grade will be based on the percentage of points earned as follows:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Grade</th>
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<th>Grade</th>
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<tbody>
<tr>
<td>94-100</td>
<td>A</td>
<td>74-76.9</td>
<td>C</td>
</tr>
<tr>
<td>90-92.9</td>
<td>A-</td>
<td>70-72.9</td>
<td>C-</td>
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<tr>
<td>87-89.9</td>
<td>B+</td>
<td>67-69.9</td>
<td>D</td>
</tr>
<tr>
<td>84-86.9</td>
<td>B</td>
<td>64-66.9</td>
<td>D</td>
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<tr>
<td>80-82.9</td>
<td>B-</td>
<td>60-62.9</td>
<td>D-</td>
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<tr>
<td>77-79.9</td>
<td>C+</td>
<td>0-59.9</td>
<td>F</td>
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Course Policies

Classroom Etiquette: This is a graduate level course in which you receive training for a professional career. This means students need to behave in a professional manner regarding classroom behavior. The classroom is not a place to catch up on sleep, text/chat with friends, surf the internet, catch up with facebook, or work on clinic materials/reports. These behaviors tend to be distracting, and you would not engage in them in other professional interactions (clinical meeting with a supervisor, during therapy with a client, etc.). Please use your electronic devices for note-taking only, unless a specific classroom activity calls for accessing the internet. If I notice an excess of off-task behavior related to electronic devices, I reserve the right to ban them from the classroom.

Cell phones or other electronic devices are NOT ALLOWED on your person or within your line of sight during exams or quizzes. They must be in your bags or otherwise put away. Anyone caught with a cell phone or other electronic device during exams or quizzes will receive an F (0 points) and may face further disciplinary action related to academic dishonesty. You will not have an opportunity to make-up that exam or quiz.

Course Changes: Because all classes do not progress at the same rate, the instructor may wish to modify the course requirements or timing as circumstances dictate. Students will be given adequate notification via in-class announcements or e-mail. The attached course outline is tentative and subject to change.

Lecture Notes: The instructor may provide lecture notes for some lecture topics; however, they are ONLY notes and do not represent all course content. The student is responsible for all assigned readings, projects, and in-class discussions/activities.

Academic Dishonesty: As described in the University Catalog, academic dishonesty is not tolerated at Western Washington University. A student commits an act of academic dishonesty when he or she participates in representing work of their own when in fact it is the work of another. A Western student charged with academic dishonesty may face significant repercussions such as failure of the assignment and course and possibly dismissal. All acts of academic dishonesty are on record in the Registrar’s Office and the office of the Provost. Students do have the right to due process and may appeal a charge of academic dishonesty. For a full description of the academic honesty policy and procedures at Western, please refer to the University Catalog.

Ethical Computing: Students are also responsible for knowing and adhering to WWU's standards for ethical computing. Refer to these web sites: (1) Policy for Responsible Computing (http://west.wwu.edu/atus/helpdesk/acceptableusepolicy.shtml) (2) Ethical Conduct: User Agreement for WWU Network and Computer Resources (http://west.wwu.edu/atus/helpdesk/useragreement.shtml)

Accommodations: To request disability accommodation, please contact Disability Resources for Students office, 650-3844, or for student assistance related to required course procedures, please contact the Student Life office, 650-3706.
Program Accreditation: The Master's degree program in speech-language pathology is accredited by the Council on Academic Accreditation (CAA) of the American Speech-Language-Hearing Association (ASHA). For further information and public comment opportunities, including questions or concerns related to graduate program accreditation, contact ASHA at the following address and phone numbers:

American Speech-Language-Hearing Association
2200 Research Boulevard
Rockville, MD 20850-3289
Members: 800-498-2071 Non-Members: 800-638-8255
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Readings Due</th>
<th>Assignments Due</th>
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<tbody>
<tr>
<td>9/24</td>
<td>Introductions&lt;br&gt;Syllabus&lt;br&gt;NIH training explained</td>
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<td>Get to know your team</td>
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<tr>
<td>9/26</td>
<td>What is research/Scientific Method</td>
<td>Chapter 1</td>
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<td></td>
<td>Intro to Evidence-based Practice</td>
<td>9/30: EBP ASHA tutorial</td>
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<tr>
<td>10/6-10</td>
<td>Introduction Section&lt;br&gt;Writing a Research Question</td>
<td>Chapter 2</td>
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<tr>
<td>10/13-10/20</td>
<td>Research Strategies (variables, experimental research, descriptive research)</td>
<td>Chapter 3&lt;br&gt;10/20: Due - research question</td>
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<td>10/17</td>
<td>No class: complete nih training and submit certificate by e-mail</td>
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<tr>
<td>10/21-27</td>
<td>Research Design (Between subjects, within subjects, mixed)&lt;br&gt;Validity Threats (Internal and external)</td>
<td>Chapter 4</td>
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<td>10/28</td>
<td>Article analysis</td>
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<td>10/28: Due - In-class group activity</td>
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<td>10/29</td>
<td>review</td>
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<td>10/29: Due- Literature review draft</td>
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<td>10/31</td>
<td>10/31: Mid-term Exam</td>
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<td>11/3</td>
<td>Qualitative Design</td>
<td>Kovarsky, 1994</td>
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<td>11/5-17</td>
<td>Methods Section&lt;br&gt;Measurement Issues&lt;br&gt;EBP critical review of Methods</td>
<td>Chapter 6</td>
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<td>11/11</td>
<td>11/11: Veterans Day Holiday</td>
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<td>11/18-25</td>
<td>Results (analyzing data and interpreting findings</td>
<td>Chapters 7 &amp; 8</td>
<td>11/18: Due – submit outline of methods</td>
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<td>11/26</td>
<td>Discussion Section</td>
<td>Chapter 9</td>
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<tr>
<td>11/28</td>
<td>11/28: Thanksgiving Holiday</td>
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<tr>
<td>12/1-3</td>
<td>Critically Evaluating EBP practice</td>
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<td>12/1: Due – Research Proposal&lt;br&gt;12/3: Due - In-class critical evaluation of articles</td>
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<td>12/5</td>
<td>Course evaluations&lt;br&gt;Review</td>
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<td>Final Exam: Tuesday, December 9, 1:00-3:00 pm</td>
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