

SPHR 6210: Research Methods in Speech and Hearing
Spring semester 2014
1 or 3 credits

Professor: Adrienne Hancock, Ph.D.
Time and Location: Friday, 12:45-3:15
E-mail: Hancock@gwu.edu
Office Hours: TBA- see sign-up sheets on office doors in Hall of Govt

Purpose of Course:

This course has three main purposes. The first is to introduce first-year graduate students to the fundamentals of quantitative research design and procedures in the speech and hearing sciences. The second purpose is to assist students in becoming critical evaluators of research in speech and hearing sciences. The final purpose is to assist students in improving their scientific writing skills.

KASA standards pertinent to this course

- Standard IV-C: Student has demonstrated knowledge of communication and swallowing disorders and differences
- Standard IV-D: Student has demonstrated current knowledge of the principles and methods of prevention, assessment, and intervention
- Standard IV-E: Student has demonstrated knowledge of standards of ethical conduct
- Standard IV-F: Student has knowledge of processes used in research and the integration of research principles into evidence-based clinical practice
- Other standards may pertain, depending on the content of your prospectus

Required Textbooks and Readings:

Patten, M.L. (2009). Understanding research methods: An overview of the essentials. 8th edition. Glendale, CA: Pycszak Publishing.
Additional readings will be available on blackboard.

Expectations:

In order to stimulate critical thinking and discussion, this class is conducted in a traditional seminar format in which students are responsible for participating in discussions on the assigned topics and readings. These discussions will address pertinent research-related topics. These discussions will be followed by discussions of how these research-related topics will be addressed in your individual projects.

It is possible to be a passable speech pathologist and never read an article in the Journal of Speech, Language, and Hearing Research or any other peer-reviewed journal. However, in order to be an up-to-date speech pathologist on the cutting edge of the profession, one must be a critical evaluator and consumer of research. One must develop critical thinking skills in order to evaluate current research, form opinions about it, and draw conclusions from it. From these conclusions you will develop your own theories that you will continually test out in your own research and clinical practice. It is this continual hypothesis testing that keeps clinical practice new and exciting; without it, the potential for burn out is high.

Research Librarian Appointments Available at Gelman Library

Research librarians are fantastic resources and they are here to help if necessary. You are not required to make an appointment but they are available if you need her.

Assignments and Grades:

Learning about research methods involves both processes and products. As you can see, there are many assignments in this class throughout the semester. These assignments will contribute to your learning the *processes* involved in research.

If you are taking this course for 3 credits:

1. Reading quizzes (28 points)
2. Clinical Measurement Assignment (5 points)
3. Linking Research to Clinical Practice (LRCP) (57 points total)
 - a. Guide to use at Gelman (optional)
 - b. 10 Draft of Part 1&2 to Professor
 - c. 5 Peer-review to original author and Professor
 - d. 40 Complete LRCP project to Professor
 - e. 2 Presentation to peers in class
4. Article Review (5 points)
5. Reflection Paper (5 points)
6. Class Attendance (see below)

If you are taking this course for 1 credit:

50% of your final course grade in SPHR6210 is from the paper you write for SPHR6295 “Preparing a thesis proposal”, graded by your thesis advisor (ask them for the syllabus); 50% of your grade is from the assignments listed below, graded by your SPHR6210 course instructor.

1. Clinical Measurement Assignment (5 points)
2. *Modified* Linking Research to Clinical Practice (LRCP) (10 points total)
 - a. 3-visual depictions of two treatment outcomes (graphs)
 - b. 3-written description of results (visual inspection methods)
 - c. 4-comparison of two treatment outcomes
3. Article Review (5 points)
4. Reflection Paper (5 points)
5. Reading pop-quizzes (25 points)
6. Class Attendance (see below)

Linking Research to Clinical Practice. Students will locate, evaluate and apply current research literature to a clinical case by designing a single subject research question. They will identify, measure, and graphically represent data over time and evaluate the data collected in order to make statements regarding behavior change. See blackboard for specific information.

Article Review. Using an empirical research article provided by the professor, students will identify critical components of the research.

Reflection Paper. Students will write a 2 page paper reflecting on their research and writing experiences during the semester. See blackboard for specific questions.

Reading Pop-Quizzes. Periodically throughout the semester the instructor will give unannounced pop-quizzes on the readings at the beginning of class. No make-ups will be permitted.

Class attendance. I expect you to be an active participant in class. Learning the research process relies heavily on formative feedback regarding your ideas, organization of information, and writing. Much of this feedback occurs during class. Undocumented absences #2-14 will result in grades being lowered by one half grade for every class missed.

Final grades for the course will be based on the number of points obtained out of a total of approximately **100** points. Course grades will be computed on the following scale:

A	=	94-100%	C+	=	79-76%
A-	=	93-90%	C	=	75-73%
B+	=	89-86%	C-	=	72-70%
B	=	85-83%	F	=	69 and below
B-	=	82-80%			

Academic Integrity:

I expect that your work will be your own. Students should be familiar with GWU's Code of Academic Integrity (<http://studentconduct.gwu.edu/>). Academic dishonesty (see Code for examples) will not be tolerated in this class.

Learning Outcomes:

Students who successfully complete the course will be able to:

1. Explain the importance of having a research-based profession and how research interacts with clinical practice
2. Perform accurate and comprehensive searches for topics using electronic and non-electronic resources
3. Define and describe the different sections of a research article and the types of information present in each one
4. Explain the steps involved in evaluating evidence in research articles and analyze scholarly articles for level of evidence
5. Explain the differences between independent and dependent variables
6. Define the steps involved in the research process
7. Define the types of reliability and validity and how they relate to measurement
8. Describe threats to reliability and to validity and what can be done to minimize these threats
9. Analyze research scenarios for ethical and unethical conduct
10. Explain the process of informed consent and why it is critical to research involving human subjects
11. Students will:
 - Locate, evaluate and apply current research literature to a clinical case
 - Design single subject research
 - Graphically represent data over time
 - Evaluate data in order to make statements regarding behavior change
 - Include the above in a written paper and oral presentation.
12. Provide appropriate, respectful, and useful feedback to peers on research and writing
13. Work efficiently and effectively with groups of your colleagues

Information for students with disabilities:

Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Disability Support Services office at 202-994-8250 in the Marvin Center, Suite 242, to establish eligibility and to coordinate reasonable accommodations. At a student's request, DSS prepares an individualized letter to professors which verifies the nature of the student's disability and documents the need for auxiliary aids and services and/or academic adjustments. Students are encouraged to meet with each professor early in the semester to discuss the academic implications of the disability as they relate to the specific course and to request accommodation. For additional information please refer to: <http://gwired.gwu.edu/dss/>.

University Counseling Services:

The University Counseling Center (UCC) assists students in addressing personal, social, career, and study problems that can interfere with their academic progress and success.

Services for students include:

- academic support and Peer Tutoring Services:
<http://gwired.gwu.edu/counsel/AcademicSupport/>,
<http://gwired.gwu.edu/counsel/AcademicSupport/PeerTutoringService/>
- crisis consultations at 202-994-5300 (24/7)
- confidential counseling services (individual and small group)
- podcasts and self-help materials on website:
<http://gwired.gwu.edu/counsel/PodCast/>,
<http://gwired.gwu.edu/counsel/OutreachSelfHelp/>

They encourage students to check out their website and to call them with questions!

Emergency Preparedness

In the case of an emergency, if at all possible, the class should shelter in place. If the building that the class is in is affected, follow the evacuation procedures for the building. After evacuation, seek shelter at a predetermined rendezvous location.