

Last name of instructor (Semester Year)

California State University, Sacramento

RESEARCH METHODS IN AUDIOLOGY

CSAD621 - 3 units
Spring 2020 (AUD-1)

COURSE FACULTY

Course Instructor:
Folsom Hall office #:
Office Phone:
Office Hours:
E-mail address:

REQUIRED CLASS MEETINGS TIMES

Days and times:
Building: Folsom Room #:

REQUIRED TEXTS

Brookshire, R.H., & Brundage, S.B. (2015). *Writing scientific research in communication sciences and disorders*. Plural Publishing.

OPTIONAL TEXTS

COURSE WEBSITE

<https://sacct.csus.edu>

SacCT will be used as the learning management site for dissemination of course readings, handouts, slides, assignments, announcements, and tests/quizzes. The course faculty will have materials posted to SacCT at least 48 hours before class.

Instructor Communication and Response Time

Faculty strive to have open communication with students both within and outside of the classroom. Students are encouraged to contact faculty to discuss questions about the course. Responses to telephone or e-mail messages will usually be transmitted within 48 hours during regular working hours. If you do not have a response within this time period, please check your contact methods and resend the message. Faculty will generally respond to student questions received during evenings and weekends once they are back in the office during regular business hours.

***Please be aware that all content for this course is the property of the course faculty who have created it and can only be used for this course. Those wishing to use the materials outside of this course must receive written permission from the author/creator.**

GENERAL COURSE INFORMATION

PRE-REQUISITES

Admission to Doctor of Audiology program; CSAD611, CSAD612, CSAD613, CSAD614

COURSE DESCRIPTION

Overview

Last name of instructor (Semester Year)

This course is designed to provide first-year Doctor of Audiology students with an understanding of the principles of scientific research and research methods in audiology. This course will prepare students to design, perform, and disseminate their Au.D. doctoral project.

Approved Course Description (from CSUS Course Catalog)

Treatment of human subjects and research methods. Overview of the research process, including research designs, development of data collection instruments, and data collection, and introduction to basic statistical concepts for the Au.D. doctoral project. Ethical considerations of research are also discussed.

WHY IS THIS COURSE IMPORTANT?

This course serves as an introduction to research methods, design, and analysis used in audiology. Students will learn how to critically evaluation research for future clinical practice. In addition, the course provides guidance with developing a proposal for the Au.D. doctoral project, which will be completed under the supervision of a supervising faculty member and the student's doctoral project committee.

UNIVERSITY LEARNING GOALS

	1 Disciplinary knowledge	2 Communication	3 Critical thinking/analysis	4 Information literacy	5 Professionalism	6 Intercultural/global perspectives	7 Research
Addressed by this course	X	X	X	X	X	X	X

GRADUATE LEARNER OUTCOMES

Mastery of each student-learning outcome listed below is indicated by a grade of B or better on each component of the corresponding measures listed in the table. Students are required to track their progress towards meeting each learning outcome and must make an appointment with the instructor for any grade equal to or less than a B. The instructor will suggest strategies to help you establish competence and knowledge in these areas.

Students should track their progress towards meeting each learning outcome by listing their grades on the table below over the course of the semester.

Upon completion of this course, students will be able to:

1. State the steps of the scientific method
2. Describe the importance of research and the role of audiologists in evidence-based clinical research
3. Explain the history of scientific research, including human subjects research, ethics, and authorship
4. Describe the importance of the scientific method
5. List the levels of research evidence
6. Differentiate between research designs and methods commonly used in audiology research
7. Perform a literature search on relevant research for a topic of interest
8. Develop a testable research question and hypothesis
9. Critique research articles and their application to evidence-based practice
10. Perform basic statistical tests, including uses, assumptions, limitations, and applications
11. Describe research designs, methodologies, and analyses used in qualitative research
12. Design a research proposal for the Au.D. capstone project with guidance from a supervising audiology faculty member and committee

Graduate	Component Indicating Competency	Grade(s) Received
----------	---------------------------------	-------------------

Last name of instructor (Semester Year)

Learner Outcome		
1-6,8-10	Exam (100%)	
7	Annotated bibliography (100%)	
7	Literature review (100%)	
8	Research question and hypothesis (100%)	
9	Discussion board post (100%)	
12	Proposal (100%)	

COURSE/CLASS POLICIES

Course Format

Lecture

Class Preparation:

Prior to the first day of class, all students must have completed HIPAA training. All required readings are for the date listed in the course schedule, not the following class period. Students are responsible for all assigned readings, whether discussed in class or not.

Class Participation:

Students are expected to actively participate in class discussions and are required to have read the assigned material prior to class meetings.

Class Attendance:

Classroom attendance is necessary for this course. No more than three unexcused absences are allowed. Students are expected to arrive on time as class begins at X:XX am/pm.

Class Assignments

Course grades will be based on discussion board posts, assignments for the final proposal (annotated bibliography, literature review, question and hypothesis), and three exams.

Discussion board posts: There will be five discussion board posts that are aimed at helping students focus on and apply the course objectives to their research proposal.

Research question and hypothesis: Students will develop a testable and feasible research question and include two hypotheses (null and alternative) for their proposed project.

Annotated bibliographies: The annotated bibliographies are intended to provide direction for students gathering sources for the literature review. Although it is expected that students have between 10 and 15 sources for the literature review, students will select five bibliographies to submit for a grade. These bibliographies are due in class on the dates listed on the course schedule. All citations must be provided in APA format.

Literature review: Students will submit a literature review based on the proposed research question, hypotheses, and annotated bibliographies. The review should include the following sections: Introduction, background, purpose, and hypotheses. All sources should be cited in APA format.

Proposal: At the end of the semester, students will submit a research proposal that has been approved by their faculty advisor (and advising committee) in preparation for their Au.D. capstone project. The proposal must include the following sections: Title page, introduction, background, purpose, hypotheses, methods, and planned analyses.

Last name of instructor (Semester Year)

Exams

- **Exam absences:** No make-up examinations will be given unless there is a documented emergency for which you have written proof. Any approved make-up exams will be scheduled at the end of the semester (during finals week) and may be administered in a different format from the original exam.
- **Exam procedures:**

Test arrival/start

Test duration and completion

Commitment to Integrity

As a student in this course (and at this university) you are expected to maintain high degrees of professionalism, commitment to active learning and participation in this class and also integrity in your behavior in and out of the classroom.

Sac State's Academic Honesty Policy & Procedures

"The principles of truth and honesty are recognized as fundamental to a community of scholars and teachers. California State University, Sacramento expects that both faculty and students will honor these principles, and in so doing, will protect the integrity of academic work and student grades." Read more about Sac State's Academic Honesty Policy & Procedures at the following website: <http://www.csus.edu/umannual/AcademicHonestyPolicyandProcedures.htm>

Definitions: At Sac State, "cheating is the act of obtaining or attempting to obtain credit for academic work through the use of any dishonest, deceptive, or fraudulent means."

"Plagiarism is a form of cheating. At Sac State, "plagiarism is the use of distinctive ideas or works belonging to another person without providing adequate acknowledgement of that person's contribution." *Source:* Sacramento State University Library

Note: Any form of academic dishonesty, including cheating and plagiarism, shall be reported to the office of student affairs.

Understand When You May Drop This Course

It is the student's responsibility to understand when he/she need to consider disenrolling from a course. Refer to the Sac State Course Schedule for dates and deadlines for registration. After this period, a serious and compelling reason is required to drop from the course. Serious and compelling reasons include: (a) documented and significant change in work hours, leaving student unable to attend class, or (b) documented and severe physical/mental illness/injury to the student or student's family. Under emergency/special circumstances, students may petition for an incomplete grade. An incomplete will only be assigned if there is a compelling extenuating circumstance. All incomplete course assignments must be completed in accordance with the department's policy.

Accommodations

Inform your instructor of any accommodations needed. If you have a documented disability and verification from the Office of Services to Students with Disabilities (SSWD), and wish to discuss academic accommodations, please contact your instructor as soon as possible. It is the student's responsibility to provide documentation of disability to SSWD and meet with a SSWD counselor to request special accommodation before classes start. SSWD is located in Lassen Hall 1008 and can be contacted by phone at [\(916\) 278-6955](tel:9162786955) (Voice) or [\(916\) 278-7239](tel:9162787239) (TDD only) or via email at sswd@csus.edu

Last name of instructor (Semester Year)

Course Requirement Grading

<u>Activity</u>	<u>Points Available</u>
Discussion board posts (10 points x 5)	50
Research question and hypothesis	100
Annotated bibliography (50 points x 5)	250
Literature review	300
Proposal	500
Exam 1	250
Exam 2	250
Final exam	250
<u>TOTAL COURSE POINTS AVAILABLE</u>	1950

Overall Percentage Needed

Note: A grade of "B" or higher is required to count toward the minimum number of units needed to advance to candidacy.

<u>Grade</u>	<u>Percentage</u>
A	93-100%
A-	90-92%
B+	87-89%
B	83-86%
B-	80-82%
C+	77-79%
C	73-76%
C-	70-72%
D+	67-69%
D	63-66%
D-	60-62%
F	< 60%

COURSE SCHEDULE OF LECTURE TOPICS AND EXAMS

<u>Date</u>	<u>Topic and Activity or Quiz and Exam</u>	<u>Readings/ Assignment</u>
1/20	Overview of course	
1/22	History of research and ethics	
1/27	Ethical treatment of human subjects	Aita, M., & Richer, M.C. (2005). Essentials of research ethics for healthcare professionals. <i>Nursing and Health Sciences</i> , 7(2), 119-125. McKee, M., Schlehofer, D., & Thew, D. (2013). Ethical issues in conducting research with deaf populations. <i>American Journal of Public Health</i> , 103(12), 2174-2178.
1/29	Research article structure	http://blog.efpsa.org/2012/11/15/1397/
2/3	Research questions Hypothesis development	Farrugia, P., Petrisor, B.A., Farrokhyar, F., & Bhandari, M. (2010). Research questions, hypotheses and objectives. <i>Canadian Journal</i>

Last name of instructor (Semester Year)

		<i>of Surgery, 53(4), 278-281.</i>
2/5	Databases and literature search Reference management	Brookshire and Brundage- Ch. 2, 10
2/10	Measurement Probability	
2/12	Reliability	Research question and hypothesis due Bannigan, K., & Watson, R. (2009). Reliability and validity in a nutshell. <i>Journal of Clinical Nursing, 18(23), 3237-3243.</i>
2/17	Validity	
2/26	Review for Exam 1	
3/2	Exam 1	
3/4	Quantitative research designs	Annotated bibliography #1 due
3/9	Research designs Sampling	Brookshire and Brundage- Ch. 3
3/11	Evaluating research Introduction to statistics	Annotated bibliography #2 due Brookshire and Brundage- Ch. 4 Review of basic statistical concepts. https://in.sagepub.com/default/files/upm-binaries/49259_ch_1.pdf
3/16	Statistical procedures and types of data Power	
3/18	Statistical procedures and analysis	Annotated bibliography #3 due
3/23	Non-parametric tests	
3/25	Reporting results	Annotated bibliography #4 due Brookshire and Brundage- Ch. 7-8
3/30	Single-subject studies	
4/1	Surveys	Annotated bibliography #5 due
4/6	Review for Exam 2	
4/8	Exam 2	Literature review due
4/13	Qualitative research	Sofaer, S. (2002). Qualitative research methods. <i>International Journal of Qualitative Health Care, 14(4), 329-336.</i> Knudsen et al. (2012). Conducting qualitative research in audiology: A tutorial. <i>International Journal of Audiology, 51(2), 83-92.</i>
4/15	Sampling and data collection in qualitative research	Sargeant, J. (2012). Qualitative research part II: Participants, analysis, and quality assurance. <i>Journal of Graduate Medical Education, 4(1), 1-3.</i>
4/20	Data collection in qualitative research	Sutton, J., & Austin, Z. (2015). Qualitative research: Data collection, analysis, and management. <i>Canadian Journal of Hospital Pharmacy, 68(3), 226-231.</i>
4/22	Qualitative data analysis Themes and coding	Jacelon, C.S., & O'Dell, K.K. (2005). Analyzing qualitative data. <i>Urology Nursing, 25(3), 217-220.</i>

DRAFT

Last name of instructor (Semester Year)

4/27	Mixed methods research	Proposal due Tariq, S. & Woodman, J. (2013). Using mixed methods in health research. <i>Journal of the Royal Society of Medicine Short Reports</i> , 4(6).
4/29	Critiquing research reports	Stockhausen, L., & Conrick, M. (2002). Making sense of research: A guide for critiquing a paper. <i>Contemporary Nursing</i> , 14(1), 38-48.
5/4	Review for final exam	
5/11	Final exam	

Please note that dates, topics, and assignments are subject to change. In the event of a change, you will be given ample notification of the change.

DRAFT