



California State University, Sacramento

Department of Communication Sciences and Disorders

UNDERGRADUATE SYLLABUS & COURSE OUTLINE

Class Information

Semester/Year: Spring 2026	Course: CSAD 148 Research in Speech - Language Pathology and Audiology.	Section: 01
Meeting Days: Monday & Wednesday	Meeting Times: 9:00 – 10:15 AM	Location: Folsom Hall 1050
Instructors: Hamid Motallebzadeh, Ph.D.	Email: h.motallebzadeh@csus.edu	Phone: 916-278-3589
Office Location: 2404E	Office Hours/Appointments: Monday and Wednesday 10:30-11:30 AM, Thursday 12:30-1:30 PM <u>by appointment only.</u>	

Catalogue Course Description

CSAD 148. Research in Speech - Language Pathology and Audiology. 3 Units

Prerequisite(s): CHDV 30, DEAF 51, PSYC 2, STAT1, CSAD 110, CSAD 111, CSAD 112.

Term Typically Offered: Spring

Survey of research strategies and methods in Speech-Language Pathology and Audiology. Statistical procedures and single-subject designs. Emphasis on interpreting research reports in the literature and on developing research projects. Writing research proposals and reports.

Place of Course in Program

Students enrolled in the undergraduate program in communication sciences and disorder will generally take this course in the spring of senior year. As part of the class, students will engage with classmates to develop and present a group research project. Students will apply knowledge acquired from other coursework to learn how to read research, develop a research question, determine a method of study, and present results in poster format.

Sacramento State Baccalaureate Learning Goals for the 21st Century (BLG)	Addressed by this course (Y/N)
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Competence in the Disciplines: <i>The ability to demonstrate the competencies and values listed below in at least one major field of study and to demonstrate informed understandings of other fields, drawing on the knowledge and skills of disciplines outside the major.</i>	Y
Knowledge of Human Cultures and the Physical and Natural World <i>through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts. Focused by engagement with big questions, contemporary and enduring.</i>	Y
Intellectual and Practical Skills, Including: <i>inquiry and analysis, critical, philosophical, and creative thinking, written and oral communication, quantitative literacy, information literacy, teamwork and problem solving, practiced extensively, across the curriculum, in the context of progressively more challenging problems, projects, and standards for performance.</i>	Y
Personal and Social Responsibility, Including: <i>civic knowledge and engagement—local and global, intercultural knowledge and competence*, ethical reasoning and action, foundations and skills for lifelong learning anchored through active involvement with diverse communities and real-world challenges</i>	Y
Integrative Learning**, Including: <i>synthesis and advanced accomplishment across general and specialized studies</i>	Y

Course Learning Outcomes:

UNDERGRADUATE

Mastery of each student-learning outcome listed below is indicated by a grade of C 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 C. The instructor will suggest strategies to help students 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.

CSAD 148 SPECIFIC STUDENT LEARNING OUTCOMES:

1. The student will demonstrate knowledge of the scientific method, science, research design, and the theory and use of statistics in research.
2. The student will demonstrate knowledge of evidence-based practice, basic vs. applied research, bias, validity and reliability.
3. The student will demonstrate how to develop, conduct, and interpret research.
4. The student will describe a topic conducive to experimental research and employ appropriate methods for conducting a literature search on that topic.
5. The student will demonstrate knowledge of human research protections and the history of their development.
6. The student will demonstrate 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 of the disorders in order to determine the value of different research studies.
7. The student will demonstrate knowledge of evidence-based practice, research design, validity and reliability.
8. The student will demonstrate knowledge of appropriate ethics in speech/language/hearing research.

9. The student will demonstrate the use of library resources to improve the learning process.

Course Learning Outcome	Components Indicating Competence	Grades Received
1	Exam, discussions, outline, poster	
2	Exam, discussions, outline, poster	
3	Exam, discussions, outline, poster	
4	Exam, discussions, outline, poster	
5	Exam, discussions, outline, poster, IRB	
6	Exam, discussions, outline, poster	
7	Exam, discussions, outline, poster	
8	Exam, discussions, outline, poster, IRB	
9	Exam, discussions, outline, poster	

Textbooks and Materials:

1. No textbooks are required for this course. All course material is found in the PowerPoints or through articles posted on Canvas.
 - Optional: American Psychological Association. (2020). Publication manual of the American Psychological Association (7th ed.). <https://doi.org/10.1037/0000165-000>
2. Microsoft Office or equivalent (Word, Excel, PowerPoint)
3. Adobe Acrobat for PDFs
4. This course utilizes Canvas. All course materials will be available on Canvas.
5. There is a \$5 related materials fee associated with this course for poster printing.

Online Resources:

All PowerPoints, labs, study guides, and supplemental materials will be posted on Canvas.

Course Requirements/Components

Structure of Course

This course is structured with three main component parts:

1. Lecture and corresponding exams
2. Discussion articles and assignments
3. Group project

Class Preparation

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

Policy on attendance

Since there is no textbook and the class is heavily discussion-based, attendance is mandatory. Students who anticipate absences longer than one week should contact both the instructor and their

group members in advance to establish a participation contract. For more than 3 absences, points will be deducted from the total grade.

Exams & Makeups

Exams take place in the classroom on the day of the exam or through the testing center on campus. Makeups are allowed only with documentation of need (e.g., doctor's note, police report). All makeups will take place at the Testing Center.

Late Assignments

Late assignments are accepted with a 10% penalty per day late up to 10 days late (at which point the grade would be 0%). This is true for both individual and group assignments.

Peer Review

Due to the nature of the group project, peer review is a significant portion of the grade. Students with scores of "not acceptable" on peer review may lose up to 10% from their final grade. Students who are having difficulty with their groups should contact the instructor early and in writing if they are concerned with the integrity of their peer review grade.

Office Hours

Office hours are by email appointment. Meetings are available in person or on Zoom.

Cell Phone Policy

Please keep your cell phones turned off during class. If you absolutely need it to be on, please keep it on "vibrate" mode and sit near the exit. If you need to take a call, please leave the classroom silently and come back when you are finished. You do not need to ask permission to leave or enter the class.

Special Needs/Accommodations

Please seek assistance from [Disability Access Center \(DAC\)](#).

Audio Recording

Students may audio record lectures only if they have official accommodations.

Student travel policy

<https://www.csus.edu/college/health-human-services/communication-sciences-disorders/internal/documents/policy/csad-student-travel-policy.pdf>

If you are sick, stay home and do not attend class. Notify your instructor. Please self-diagnose if you are experiencing any COVID- like symptoms (fever, cough, sore throat, muscle aches, loss of smell or taste, nausea, diarrhea, or headache) or have had exposure to someone who has tested positive for COVID contact Student Health & Counseling Services (SHCS) at 916-278-6461 to receive guidance and/or medical care. The CDC provides a good source of information regarding COVID-19 and a way to self-check symptoms: <https://www.cdc.gov/coronavirus/2019-ncov/index.html>.

Students must adhere to COVID-19 policies as described on the CSUS website. Please see <https://www.csus.edu/compliance/risk-management/coronavirus.html> and <https://www.csus.edu/return-to-campus/return-to-campus-faq.html> for more information and updates.

Additional Information

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/student/stu-0100.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." The use of artificial intelligence, including ChatGPT, without attribution is considered plagiarism.

Note: Any form of academic dishonesty, including cheating and plagiarism, shall be reported to the Office of Student Conduct.

Department Policy on Use of APA format

The Department of Communication Sciences and Disorders requires the use of the APA format and style. All students are required to reference the APA manual. All assignments are to be composed using APA format and style unless otherwise noted.

Students may utilize the APA Style Guide through the Sac State Library or Purdue Online Writing Lab (OWL) website for APA support.

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 by the department's policy.

Inclusivity:

Students in this class are encouraged to be active participants in all aspects of the course, including but not limited to lectures, synchronous and asynchronous activities, discussion posts, etc. Each of us must show respect for each other, as our class represents a diversity of beliefs, backgrounds, and experiences. This enriches all of our learning experiences together. Our individual differences deepen our understanding of one another and the world around us, rather than divide us. In this class, people of all ethnicities, genders and gender identities, religions, ages, sexual orientations, disabilities, socioeconomic backgrounds, regions, and nationalities are strongly encouraged to share their rich array of perspectives and experiences. If you feel your differences may in some way isolate you from our classroom community, or if you have a specific need, please contact the instructor early in the semester. Your instructor will work with you to ensure that you become an active and engaged member of our class and community.

Equal Access:

California State University-Sacramento, Department of Communication Sciences and Disorders, seeks to provide equal access to its programs, services, and activities for people with disabilities. If

you have a documented disability and verification from the Disability Access Center (DAC), 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 DAC and meet with a DAC counselor to request special accommodation before classes start. Sacramento State Disability Access Center (DAC) offers a wide range of support services and accommodations for students in order to ensure students with disabilities have equal access and opportunity to pursue their educational goals. Working collaboratively with students, faculty, staff and administrators, DAC provides consultation and serves as the information resource on disability related issues to the campus community. DAC is located in Lassen Hall 1008 and can be contacted by phone at (916) 278-6955 (Voice) or (916) 278-7239 (TDD only) or via email at dac@csus.edu.

Title IX

The University requires faculty and staff to report any personal disclosures of sexual misconduct including rape, dating/domestic violence and stalking to the Title IX Coordinator. Students who do not wish to report their experience to me or the Title IX Coordinator may speak to someone confidentially by contacting Student Health and Counseling Services.

Sac State is committed to supporting students and fostering a campus environment free of sexual misconduct and gender-based discrimination. If a student chooses to disclose to a faculty or staff member an experience related to sexual misconduct which includes rape, relationship violence, or stalking, all faculty and staff are obligated to report this disclosure to the university's Title IX Coordinator. Sac State's Title IX Coordinator is Mary Lee Vance. Please email equalopportunity@csus.edu or (916) 278-5770. Upon receipt of the report, the Title IX Coordinator will contact you to inform you of your rights and options as a survivor and connect you with support resources, including resolution options for holding accountable the person who harmed you. Students who elect not to discuss their experience with the Title IX Coordinator can speak confidentially to the following confidential resources:

Student Health & Counseling Services at The WELL On Campus Phone Number: 916-278-6461

Website: www.csus.edu/shcs

Campus Confidential Advocate – Laura Swartzen Email: weave@csus.edu

On Campus Phone Number: 916-278-5850 (during business hours) WEAVE 24/7 Hotline: 916-920-2952

Basic Needs Support

If you are experiencing challenges with food, housing, financial or other unique circumstances that are impacting your education, help is available. The CARES office provides case management support for any enrolled student. Email the CARES office at cares@csus.edu to speak with a case manager about the resources available to you.

Check out the CARES website.

Other Resources

- The Office of Student Affairs maintains a list of campus resources/centers: <https://www.csus.edu/center/>
- Testing Center: <https://www.csus.edu/student-affairs/centers-programs/testing-center/>
- Library: <https://library.csus.edu/> for consultation : Rachel Stark, MS, AHIP, stark@csus.edu

- Services to Students with Disabilities: <https://www.csus.edu/student-affairs/centers-programs/services-students-disabilities/>
- Student Health and Counseling Services at The WELL: <https://www.csus.edu/student-life/health-counseling/>
- Student Academic Success and Education Equity Programs: <https://www.csus.edu/student-affairs/retention-academic-success/>
- Crisis Assistance and Resource Education Support (CARES): <https://www.csus.edu/student-affairs/crisis-assistance-resource-education-support/>
- CHHS Student Success Center: <https://www.csus.edu/college/health-human-services/student-success/>
- Reading & Writing Center: <https://www.csus.edu/undergraduate-studies/writing-program/reading-writing-center.html>
- Peer & Academic Resource Center: <https://www.csus.edu/student-affairs/centers-programs/peer-academic-resource/>
- SMART Thinking (tutoring resource): https://www.csus.edu/student-affairs/centers-programs/degrees-project/_internal/_documents/smarthinking.pdf

TENTATIVE Course Schedule/Outline

Date	Topic/Class Content	Project	Submission
1/26	<p>Introduction to Course and syllabus review</p> <p>How do you spot fake science? I</p> <p>Science, Pseudoscience, and Myth</p> <p>Outline: scientific method, falsifiability, evidence types, pseudoscience red flags, scientific claims</p>	None	
1/28	<p>How do you spot fake science? II</p> <p>Science, Pseudoscience, and Myth</p> <p>Outline: scientific method, falsifiability, evidence types, pseudoscience red flags, scientific claims</p>	Team up	1. Team representative submits Team Roster Template (10 points).
2/2	<p>Are all swans white? I</p> <p>Deduction vs. Induction</p> <p>Outline: induction, deduction, hypothesis testing, model and paradigm, correlation vs causation</p>	Review last year's posters on the wall (out of class).	2. Team representative submits the Poster Review Template (20 points).
2/4	<p>Are all swans white? II</p> <p>Deduction vs. Induction</p> <p>Outline: induction, deduction, hypothesis testing, model and paradigm, correlation vs causation</p>	Discuss topics of interest	3. Team representative submits Topic Ideas Template (3 potential topics) (15 points).
2/9	No class (conference)	Watch presentation of our librarian I	
2/11	No class (conference)	Watch presentation of our librarian II	
2/16	<p>Who is telling the truth?</p> <p>Lecture Title: Pyramid of Evidence</p> <p>Outline: information pyramid, peer review, study types, credibility checklist</p>	Discuss the feasibility of the research topics.	4. Team representative submits Topic Selection Template (20 points).
2/18	<p>Do annual general health checks reduce illness and mortality?</p> <p>Lecture Title: Systematic Reviews and Meta-Analysis</p> <p>Outline: single study vs synthesis, inclusion and exclusion criteria, risk of bias, effect size</p>	Literature review: search and discuss.	

2/23	IMDb or PubMed? I Lecture Title: Finding and Reading Literature Outline: research question to keywords, databases, search strategy, paper anatomy, quality appraisal	Literature review: search and discuss a relevant review paper.	
2/25	IMDb or PubMed? II Lecture Title: Finding and Reading Literature Outline: research question to keywords, databases, search strategy, paper anatomy, quality appraisal	Literature review: search and discuss.	
3/2	Can we measure “happiness” like we measure blood pressure? Lecture Title: Quantitative Research: Design and Measurement Outline: variables, reliability, validity, systematic vs random error, sampling and generalization	Finalize literature review; discuss research questions.	5. Team representative submits Literature Review and Research Questions Template (40 points).
3/4	What is it like to be you? Lecture Title: Qualitative Research Outline: observation, interview, focus groups	Work on project outline	
3/9	How can one billionaire raise the “average” salary of a whole room? I Lecture Title: Descriptive Statistics I: Mean, Median, and Outliers Outline: mean, median, mode, outliers, skewness, percentiles and IQR	Work on project outline	6. Team representative submits Project Outline Template (30 points). 1. Each student submits Article Review Template (quantitative and qualitative).
3/11	How can one billionaire raise the “average” salary of a whole room? II Lecture Title: Descriptive Statistics I: Mean, Median, and Outliers Outline: mean, median, mode, outliers, skewness, percentiles and IQR	Develop survey	
3/16	Are you “tall”? Lecture Title: Statistics III: The Normal Distribution Outline: normal distribution, standard deviation, p-value, percentiles, outliers	Develop survey	
3/18	Would you take Russian roulette for \$1M?	Develop survey	7. Team representative submits Survey Draft Template (35).

	Lecture Title: Statistics II: Probability and Risk Outline: probability basics, conditional probability, Bayes' rule, randomized response model		
3/23	Spring break		
3/25	Spring break		
3/30	My niece failed a hearing screening. Is she deaf? Lecture Title: Statistics IV: False Positives Outline: true positive, false positive, false negative, sensitivity, specificity, accuracy	Work on IRB	
4/1	Exam		
4/6	Is it unethical to test a new vaccine on volunteers? Lecture Title: Ethics in Human Subjects Research Outline: lessons from history, informed consent, risk vs benefit, vulnerable populations, IRB and review process, conflicts of interest	Work on IRB	8. Team representative submits IRB Draft Template (25 points).
4/8	Who Gets the Credit? Lecture Title: Plagiarism, Copyright, and Citation Ethics Outline: plagiarism vs paraphrasing, citation rules, copyright basics, reference management	Collect data	
4/13	Does your poster "pop" or is it just "text"? Lecture Title: Poster Design Outline: layout and hierarchy, typography, color basics, figures and captions, poster pitch	Collect data	
4/15	Can you win the room in 10 minutes? Lecture Title: Effective Presentation Outline: talk structure, slide design, data storytelling, delivery skills, Q and A	Collect data	
4/20	Why does Microsoft Word break your formatting right before submission? Lecture Title: APA Template in MS Word	Collect data	

	Outline: styles and headings, page layout, tables and figures, citations and references, table of contents		
4/22	How does Netflix know you better than your best friend? Lecture Title: Introduction to Artificial Intelligence Outline: predictive algorithms, machine learning basics, and how "Big Data" is replacing traditional hypothesis testing.	Collect data	9. Team representative submits Data File Template (25 points).
4/27	Is using ChatGPT cheating, or is it a learning tool? Lecture Title: Effective and Responsible Use of AI Outline: ethical AI usage, using AI for brainstorming vs. data fabrication.	Outline required statistical analysis.	10. Team representative submits Statistical Analysis Plan Template (30 points).
4/29	Visualization of data	Discuss figures and charts	
5/4	Work on poster	Discuss results and conclusions.	
5/6	Work on poster	Assemble poster	11. Team representative submits Poster File (50 points). Print posters.
5/11	Work on poster	Prepare poster presentation.	
5/13	Research presentation		2. Each student submits Reflection and Peer Review Template.

Grading Policy

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

The Final Grade will be based on a percentage of total points (500) and will be assigned as follows:

Course Requirements and Grade Distribution

Source	Point	% of grade
Exam	100	20
Group Assignments	300 points total (11 submissions; point values vary by submission. See the Canvas Assignments page for details and due dates).	60
Individual Assignments	2x50	20
Total	500	100
ATTENDANCE	You may miss up to 3 classes with no penalty. Starting with the 4th absence, your course total is reduced by 10 points per missed class meeting.	-

Table 1: Course Grade Scheme

%	Letter
95– 100	A
90 – 94.99	A-
87 – 89.99	B+
83 – 86.99	B
80 – 82.99	B-
77 – 79.99	C+
73 – 76.99	C
70 – 72.99	C-
67 – 69.99	D+
63 – 66.99	D
60 – 62.99	D-
< 60	F