California State University, Sacramento

Department of Communication Sciences and Disorders

UNDERGRADUATE SYLLABUS & COURSE OUTLINE

Semester/Year: Spring 2021	Course: CSAD 148 Research in Speech - Language Pathology and Audiology.	Section: 01 02
Meeting Days: MW	Meeting Times: 01 11am-12:15pm 02 1pm-2:15pm	Location: Virtual
Instructor: Tonia Davis, PhD, CCC-SLP	Email: tonia.davis@csus.edu	Phone: 916-278-6654
Office Location: Folsom Hall 2404D	Office Hours/Appointments: Tuesdays & Thursdays 11am-12:30pm and by appointment	

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, CSAD 125, CSAD 126, CSAD 130, and CSAD 145.
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)
Competence in the Disciplines: *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.*	Y
Knowledge of Human Cultures and the Physical and Natural World *through study in the sciences and mathematics, social sciences, humanities, histories, languages, and the arts. Focused by engagement with big questions, contemporary and enduring.*	Y
Intellectual and Practical Skills, Including: *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.*	Y
Personal and Social Responsibility, Including: *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*	Y
Integrative Learning**, Including: *synthesis and advanced accomplishment across general and specialized studies*	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, article reviews, prospectus paper and presentation, poster	
2	Exam, article reviews, prospectus paper and presentation, poster	
3	Exam, article reviews, prospectus paper and presentation, poster	
4	Exam, article reviews, prospectus paper and presentation, poster	
5	Exam, article reviews, prospectus paper and presentation, IRB application, poster	
6	Exam, article reviews, prospectus paper and presentation	
7	Exam, article reviews, prospectus paper and presentation, poster	
8	Exam, article reviews, prospectus paper and presentation, poster, IRB application	
9	Exam, article reviews, prospectus paper and presentation, poster	

Textbooks and Materials:

1. Orlikoff, R.E., Schiavetti, N. & Metz, D. (2015). *Evaluating Research in Communicative Disorders, 7ᵗʰ Ed.* Boston, MA: Pearson. (**optional; powerpoints are derived from this textbook**)
2. **2.** American Psychological Association (2020). Publication Manual of the American Psychological Association, 7ᵗʰ edition, *American Psychological Association,* Washington, DC. (**optional; APA citation manuals are available on the CSUS Library Website)**
3. Articles as posted on Canvas.

Online Resources:

Internet connection; computer with camera and microphone; Canvas, Microsoft Teams.

Grading Policy:

Source	Points
ARTICLE DISCUSSIONS	10 points each x 8 = 80 points total
EXAMINATIONS Exam #1 Exam #2	100 points 100 points
RESEARCH PROJECT Research project outline IRB application Data file Poster Presentation	100 points 50 points 25 points 100 points
Total	555 points

Letter grades are assigned according to the following scores:

%	Letter
95-100	A
90-94%	A-
87-89%	B+
83-86%	B
80-82%	B-
77-79%	C+
73-76%	C
70-72%	C-
67-69%	D+
60-66%	D
≤59%	F

Course Policies/Procedures:

Attendance

Lectures (Mondays) are asynchronous and can be completed on your own time. Students are expected to attend all class discussions and project workdays (Wednesdays). Students are asked to turn on their cameras during class. I understand that there may be times when you cannot keep your camera on the entire class, and there is no penalty attached to turning off your camera.

Please make every attempt to avoid multi-tasking on your electronic devices during class (e.g., checking email). I realize that this is very difficult, but it is also very noticeable to the instructor and the other students when you are checking email or working on other assignments during class. Multi-tasking is not an effective strategy for adult learning.

Exams & Makeups

Exams will be open for approximately 72 hours (see schedule). Once you begin the exam, you will have 75 minutes to complete the exam. Please make every effort to complete the exam during the scheduled window. Students who need to make up the exam will be required to provide documentation of need. Students who are eligible for extended time on exams should contact the instructor directly to provide documentation.

Late Assignments

Late assignments are accepted with a 10% penalty per day late. Late assignments will not be graded if submitted more than one week after the due date.

Electronic Devices

Electronic devices may be used to access course materials during each class session. Cell phones should be on silent. If you need to be reached during the class for an emergency, please inform the instructor prior to the start of class. You may not record during discussions or group work.

Office Hours Policies

Office hours will take place virtually this semester and are "drop in" utilizing the waiting room to protect student confidentiality. If you would like to have a private appointment, please schedule one with the instructor by email.

Letters of Recommendation

It is not unusual for students to need letters of recommendation during the spring semester for SLPA applications, job references, or scholarships. Please reach out. Try to provide two weeks' notice for letters of recommendation for SLPA or scholarships. If you plan to apply to graduate school next year, please reach out to me this semester so that I have you on my radar. You do not need to submit anything to me until next fall, but I want to have you "on my list."

ASHA Code of Ethics Statement

As a future clinician, I expect you to follow the Sacramento State Commitment to Integrity (see Additional Information) as well as the American Speech Language Hearing Association (ASHA) Code of Ethics.
The four Principles of Ethics form the underlying philosophical basis for the Code of Ethics and are reflected in the following areas:

- *(I)   responsibility to persons served professionally and to research participants, both human and animal;*
- *(II)   responsibility for one's professional competence;*
- *(III)   responsibility to the public; and*
- *(IV)   responsibility for professional relationships.*[1]

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[1] https://www.asha.org/code-of-ethics/

Commitment to a Safe Learning Environment

I am committed to each student's success in learning within a caring, responsive, and safe environment that is free of discrimination, violence, and bullying. Our program works to ensure that all students have the opportunity and support to develop to their fullest potential and share a personal and meaningful bond with peers and faculty within the program. Please don't be a bystander to acts of harassment, discrimination, or hatred.

Inclusion and Access

As we transition to virtual teaching, you may find ways in which this course does not meet your accessibility needs or you may identify ways in which course access can be improved for others. I encourage you to speak up when you see room for improvement. For formal accommodations, students should seek support through Services for Students with Disabilities (see Additional Information below).

Online Learning

For additional information, please review the [CSAD Handbooks](#) website
https://www.csus.edu/college/health-human-services/communication-sciences-disorders/student-resources.html

Zoom/ Online Instruction privacy and relevant rights and responsibilities:

Any time that a class session is recorded during the COVID-19-related Remote Instruction Period, students will be notified. If students do not want their likeness during class participation included in the recorded class session, they may elect to not participate via video recordings. Recordings will be available for viewing during the Remote Instruction Period subject to the following:

- Only students enrolled in the subject class during the Remote Instruction Period may view the recording.
- Students may not post or use the recordings in any other setting (e.g., social media, shared Google drive) for any purpose. Students who violate this will be subject to student discipline, up to and including expulsion.
- Federal and California law as well as University policies protecting intellectual property rights and use of instructional materials (including any recordings of class sessions) remain in effect during the Remote Instruction Period.
- If faculty have any plan to use the recording for a different class in the future, the faculty member will need written FERPA consent from those students in the current class who are identifiable in any of the recordings. A FERPA consent form signed by all students in the course will also be needed if the recordings are made available to others beyond the classroom on a nonsecure digital platform.

Technical Assistance

Seek help when you can't access Canvas or class materials.

- For technical assistance, contact the IRT Help Desk. Visit AIRC 2005 during [open hours](#) to speak with the IRT Service Desk Team, or call (916)278-7337. [IRT website.](#)
- For assistance with course materials, contact your instructor

Spam and Phishing Scams

- Learn how to stay safe and protect yourself from hackers who may try to access your personal information: [Don't Fall for a Phishing Scam](#)
- Use anti-virus, anti-spyware, and anti-malware software. [Sac State's Software and Tools](#) available for download.
- Use pins and passwords to secure your computer and devices- don't share your password with anyone. Use strong passwords that include a combination of letters and numbers that no one can guess.

Canvas Student App

Canvas is fully functional on many types of smartphones and tablets. Compatible devices include platforms such as iPhone/iPad/iPod Touch, and Android. However, it is recommended that you do not solely rely on one of these devices to complete your online course work. Access to a computer is still needed for many online activities. Visit the [Mobile section](#) of the [Canvas Guides](#) website for more information.

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/umanual/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." Source: Sacramento State University Library 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.

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. Prefer 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 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**. Sacramento State Services to Students with Disabilities (SSWD)** 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, SSWD provides consultation and serves as the information resource on disability related issues to the campus community. SSWD 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 sswd@csus.edu.

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

Knowledge And Skills Acquisition (KASA) For Certification in Speech-Language Pathology

CSAD 148 Research in Speech-Language Pathology and Audiology

Standard IV-A

- The student will demonstrate prerequisite knowledge of statistics.

Standard IV-E, IV-G, IV-H: Contemporary Professional Issues

- The student will demonstrate the ability to analyze, synthesize and evaluate knowledge re: standards of ethical conduct.
- The student will demonstrate the ability to analyze, synthesize and evaluate knowledge re: contemporary professional issues and advocacy.

Standard IV-F: Research

- The student will demonstrate the ability to analyze, synthesize and evaluate knowledge re: processes used in research and integration of research principles into evidence-based clinical practice.

Standard V-A: Oral and Written Communication

- The student will demonstrate skill in oral and written or other forms of communication sufficient for entry into professional practice.

Date	Topic	Read	Synchronous/ Asynchronous	Deliverables Due
WEEK 1 Monday 1/25	Course Overview	None	**Synchronous** *this week only*	None
Wednesday	Discussion 1 Group Project Q&A	Watch: "Prisoners of Silence" PBS	Synchronous	**Discussion 1 due midnight Friday**
WEEK 2 Monday 2/1	Levels of Evidence Research Questions	Watch lecture; review any linked reading assignments within the ppt	Asynchronous	None
Wednesday	Guest lecturer: **Rachel Stark, MS, AHIP** Discussion 2	Review: Gemiini website	Synchronous	**Discussion 2 due midnight Friday**
WEEK 3 Monday 2/8	Variables and Testing Hypotheses	Watch lecture; review any linked reading assignments within the ppt	Asynchronous	
Wednesday	Discussion 3 Group Project Q&A	Watch: Belmont Report video Review: Human Research Protections website	Synchronous	**Discussion 3 due midnight Friday**
WEEK 4 Monday 2/15	Research Design: Randomized Controlled Trials	Watch lecture; review any linked reading assignments within the ppt	Asynchronous	**Outline of project/paper due (100 points)**
Wednesday	Discussion 4 Group Project Check In	Read: Ramig et al., 2018	Synchronous	**Discussion 4 due midnight Friday**

WEEK 5 Monday 2/22	Research Design: Case Controlled Group Designs	Watch lecture; review any linked reading assignments within the ppt	Asynchronous	
Wednesday	Discussion 5 Group Project Check In	Read: McCauley et al., 2009	Synchronous	**Discussion 5 due midnight**
WEEK 6 Monday 3/1	Methods	Watch lecture; review any linked reading assignments within the ppt	Asynchronous	**IRB due (50 points) OR List of Articles due (25 points)**
Wednesday	**Exam 1 open Wednesday through Friday**			
WEEK 7 Monday 3/8	Reliability & Validity	Watch lecture; review any linked reading assignments within the ppt	Asynchronous	
Wednesday	Discussion 6 Group Project Check In	Read: Kendall et al., 2019	Synchronous	**Discussion 6 due Friday midnight**
WEEK 8 Monday 3/15	Research Design: Single Subject Designs	Watch lecture; review any linked reading assignments within the ppt	Asynchronous	
Wednesday	Discussion 7 Group Project Check In	Read: Howard et al., 2011	Synchronous	**Discussion 7 due Friday midnight**
SPRING BREAK – 3/22-3/26				
WEEK 9 Monday 3/29	Testing Hypotheses & Variables, Revisited	Watch lecture; review any linked reading assignments within the ppt	Asynchronous	
Wednesday – No class – Cesar Chavez Day				
WEEK 10 Monday 4/5	Data Organization & Results Section	Watch lecture; review any linked reading assignments within the ppt	Asynchronous	
Wednesday	Discussion 8 Group Project Check In	Read: Olson, 2004	Synchronous	**Discussion 8 due Friday midnight**
WEEK 11 Monday 4/12	Conclusions, Limitations, and Future Directions	Watch lecture; review any linked reading assignments within the ppt	Asynchronous	**Data File due (25 points) OR Flowchart due (50 points)**

Wednesday – No class – group projects schedule statistics appointments				
WEEK 12 Monday 4/19	Evidence Based Practice, Pseudoscience, and the Internet	Watch lecture; review any linked reading assignments within the ppt	Asynchronous	
Wednesday – No class – group projects schedule statistics appointments				
WEEK 13 Monday 4/26	**Exam 2 open Saturday through Monday**			
Wednesday	Discussion 9 Group Project Check In		Synchronous	**Discussion 9 due Friday midnight**
WEEK 14 Monday 5/1	No class - workspace for projects and/or papers			
Wednesday	Discussion 10 Group Project Check In		Synchronous	**Discussion 10 due Friday midnight**
WEEK 15 Monday 5/10	**Poster Presentations**	None	**Synchronous** – *I will work with groups to schedule Monday vs. Wednesday*	**Posters due (100 points) in class**
Wednesday	**Poster Presentations**		**Synchronous**	**Posters due (100 points) in class**
WEEK 16 – Finals **Papers due (100 points) Wednesday 5/19 for those students who did not participate in the group project**				

Organization of the Course

Asynchronous lectures (usually Mondays) will be posted prior to the assignment date. They will include a recorded video and a powerpoint with a list of learner outcomes and a list of vocabulary. Suggested reading will be included and linked within the powerpoint or posted to Canvas with instructions inside the powerpoint. No textbook is required to be successful in the course, but the powerpoints roughly follow the order of the Orlikoff textbook from your suggested readings.

Synchronous classes (usually Wednesdays) *will not be recorded*. The discussion assignments can be completed on your own, but by coming to class and doing them together, you will engage in the material on a deeper level. The remainder of the class will be used for breakout rooms for group projects. If you are completing a group project, attendance is required. If you are completing an individual paper, attendance is not required, or you may attend for discussion and then leave early.

Research Project Option 1

The most common option in this course is to complete a group research project. In this project, you will identify a research question and hypothesis, develop methodology to test your question, write an IRB (ethics approval document), collect data, analyze your data (with your instructor – you don't have to do this on your own), and create and present a poster on your findings. You will find many previous examples in the course files. I encourage you to do a group project on a topic of interest to you, and as such, I am allowing you to pick your own groups. If you plan on completing the group project, you must attend class on Wednesdays synchronously. Most students tell me that they enjoy completing original research and that the group project is their favorite part of the course.

Assignment	Due Date (Points)	Description
Project Outline	2/15 (100)	Complete a 2-3 page outline of your rationale, research questions, variables, hypotheses, proposed methodology, and a list of possible references
IRB	3/1 (50)	Complete CITI training, the internal review board document (protection of human subjects/ethics committee), and provide the instructor with a copy of your proposed survey
Data File	4/12 (25)	Submit an excel data file of your survey data, recoded as necessary (all data must be numeric), and schedule an appointment with the instructor to run your analyses
Poster/Presentation	5/10 or 5/12 (100)	Present a research poster (examples on Canvas) to the class. Explain your rationale, hypothesis, methodology, and results. The poster should follow APA formatting. There is no final paper if you complete this option.

Systematic Literature Review Option 2

If you plan to attend the course completely asynchronously, you should not do a group project as it is impossible to complete a project of this magnitude without direct face-to-face contact on a weekly basis. Therefore, this option has been created for you. For this project, you will identify an _intervention_ that you are interested in learning more about. You will conduct a systematic search for articles about this intervention, read 20+ articles on this topic, create a flowchart selecting the highest quality evidence for further review, create a table of all of your articles, and review the evidence on your intervention for quality. The culminating paper will be 8-10 pages in length (not including tables/figures) and completed independently. This is a lot of work, and it will be easy to fall behind. However, it provides you a completely independent and/or asynchronous option if you desire.

Assignment	Due Date (Points)	Description
Paper Plan	2/15 (100)	Complete a 2-3 page outline of your intervention choice, research question, inclusionary & exclusionary criteria, proposed search strategy, and date of appointment with Rachel Stark
List of Articles	3/1 (25)	Provide a list of 20-40 references, in APA format, that you plan to review as part of your systematic review. Annotate any articles that must be requested through Interlibrary Loan
Flowchart/Table	4/12 (50)	Submit a flowchart of your systematic review (examples on Canvas), in which you narrow down from 20-40 articles to only the 5-15 articles that meet your inclusionary and exclusionary criteria. Also submit a table of your final articles that includes population, measurement, and outcomes
Paper	5/19 (100)	Complete a full research paper, including at least one figure (flowchart) and one table (above) in APA format. The full research paper will likely be 8-10 pages without figures, tables, or references. This paper will be competed independently.