



# California State University, Sacramento

## Department of Communication Sciences and Disorders

### GRADUATE SYLLABUS & COURSE OUTLINE

Semester/Year: Spring 2021	Course: CSAD621: Research Methods in Audiology	Section: 01
Meeting Days: TR	Meeting Times: 10:00-11:15am	Location: Zoom
Instructor: Laura Gaeta, Ph.D.	Email: <a href="mailto:lgaeta@csus.edu">lgaeta@csus.edu</a>	Phone: 916-278-4701 (voicemail only)
Office Location: Zoom	Office Hours/Appointments: Monday 1:00-2:00pm; Tuesday 1:00-2:00pm; Thursday 12:30-1:30pm	

#### Catalog Course Description:

**CSAD 621 Research Methods in Audiology.**

**3 Units**

**Prerequisite(s):** Admission to Doctor of Audiology program; CSAD 611; CSAD 612; CSAD 613; CSAD 614

**Term Typically Offered:** Spring

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.

#### Place of Course in Program

This course serves as an introduction to research methods, design, and analysis used in audiology. Students will learn how to critically evaluate research for future clinical practice. The major writing assignment in this course is a full research paper, including data analysis. 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. As a GWI course, the content will help students to understand and gain experience with major writing conventions and practices within audiology, and provide opportunities for students to further develop their writing skills through reflection, feedback, and revisions.

Sacramento State Graduate Learning Goals (GLG)	Addressed by this course (Y/N)
<b>Disciplinary knowledge:</b> <i>Master, integrate, and apply disciplinary knowledge and skills to current, practical, and important contexts and situations.</i>	Y
<b>Communication:</b> <i>Communicate key knowledge with clarity and purpose both within the discipline and in broader contexts.</i>	Y
<b>Critical thinking/analysis:</b> <i>Demonstrate the ability to be creative, analytical, and critical thinkers.</i>	Y
<b>Information literacy:</b> <i>Demonstrate the ability to obtain, assess, and analyze information from a myriad of sources.</i>	Y
<b>Professionalism:</b> <i>Demonstrate an understanding of professional integrity.</i>	Y
<b>Intercultural/Global Perspectives:</b> <i>Demonstrate relevant knowledge and application of intercultural and/or global perspectives.</i>	Y
<b>Research:</b> <i>Conduct independent research resulting in an original contribution to knowledge in the focused areas of their graduate program</i>	Y

## Course Learning Outcomes:

### GRADUATE

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. See the program's Academic Performance Improvement Plan (APIP) policy at <https://www.csus.edu/college/health-human-services/communication-sciences-disorders/internal/documents/audiology/csad-apip-policy-spring-2020.pdf>

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

### GRADUATE EXPECTED LEARNER OUTCOMES (ELO)

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.

### GWJ GENERAL LEARNING GOALS

By the end of the semester, students will:

1. Understand the major research and/or professional conventions, practices, and methods of inquiry of the discipline;
2. Understand the major formats, genres, and styles of writing used in the discipline;
3. Practice reading and writing within the discipline;
4. Practice reading and writing as a learning process that involves peer and instructor feedback, revision, critical reflection, and self-editing.

ELO	Component Indicating Competency	Grade(s) Received
1-5, GWI 1, 3	Exam I	
1, 6, 8-10, GWI 3	Exam II	
1-6, 8-11, GWI 3	Exam III	
7, GWI 2, 3, 4	Annotated bibliography	
7, GWI 3, 4	Literature review	
8, GWI 3, 4	Research question and hypothesis	
7-10, GWI 3, 4	Final paper	
9, GWI 1, 3, 4	Discussion board posts	
9, GWI 1, 3, 4	Participation in peer reviews	
12	Proposal and presentation	
GW1 1-4	APA modules and quizzes	
1-6, 9-11, GWI 1-3	Quizzes	
1-6, 7, 9, 1, 11, GWI 1-4	Participation	

**Textbooks and Materials:**

See Canvas

American Psychological Association. (2020). *Publication manual of the American Psychological Association* (7<sup>th</sup> ed.). <https://doi.org/10.1037/0000165-000>

**Online Resources:**

jamovi available from jamovi.org

This course utilizes Canvas. All course materials will be available on Canvas.

**Course Requirements/Components:**

**Course Format**

Lecture

**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.

**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:**

Students are expected to join on time as class begins at 10:00am. All lectures will be delivered synchronously, which means that a Zoom call will be scheduled for 75 minutes on Tuesdays and Thursdays. If a student is unable to attend a scheduled Zoom session, it is the student's responsibility to notify the instructor before class. 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. You are asked to report any possible COVID related illnesses/exposures to SHCS via this link COVID-19 Illness/Exposure Report Form: <https://sacstateshcs.wufoo.com/forms/covid19-illnessexposure-report/> Expect a call from SHCS within 24 hours. 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>

### **Class Assignments:**

Course grades will be based on discussion board posts, assignments for the final paper (annotated bibliography; literature review; question and hypothesis) and associated peer and/or instructor reviews, two APA writing and style quizzes, an APA tutorial, participation, a proposal and presentation, eight quizzes, and three exams. Assignments must be submitted on time. Assignments that are submitted after the due date/time will be deducted points for each day the assignment is late (see rubric for points). If more than three days have elapsed from the original due date, students will receive 0 points for the assignment. Any instances of academic misconduct will result in a 0 on that assignment or exam and will be reported according to department- and campus-level policies.

Rubrics for all assignments will be available on Canvas. Turnitin.com will be used for written assignments submitted online.

For students who become ill or who are placed under quarantine during the COVID-19 pandemic, contact the instructor so that due dates for the below assignments can be adjusted (student will not be penalized in these cases). Follow the Sacramento County Public Health Department's advice: frequently wash hands with warm, soapy water for at least 20 seconds; avoid touching eyes, nose, and mouth; cover coughs and sneezes with a tissue then throw the tissue in the trash; and stay home when you are sick. For information about COVID-19 assessment and remote learning, students are directed to the Sac State mobile app.

**Discussion board posts:** There will be three discussion board posts that are aimed at helping students focus on and apply the course content to the field of audiology and their research project design.

**Quizzes:** There will be eight quizzes in Canvas for this course. Quizzes will cover a range of topics. The quiz period is 30 minutes.

**Research question and hypothesis assignment:** Students will develop a research question and hypothesis to use throughout the semester. See assignment for details and rubric.

**Annotated bibliography:** The annotated bibliography is intended to provide direction for students gathering sources for the literature review. It is expected that students have between 10 and 15 sources for the literature review. This assignment is due on Canvas on the date 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 bibliography. The review should include the following sections: introduction, background, purpose,

and hypothesis. All sources must be cited in APA format. Additional information about the literature review assignment will be available on Canvas.

**Final paper:** At the end of the semester, students will submit a paper that has been reviewed by peers and the instructor throughout the course. The paper must include the following sections: abstract, title page, introduction, background, purpose, hypotheses, methods, results, discussion, conclusion, and references. Any supporting tables and figures must also be included.

**Proposal and presentation:** Students will submit a proposal for the doctoral research project by the end of the semester. Peers and the instructor will give feedback regarding the feasibility, methodological rigor, and logic. Students will present their projects to the class at the end of the semester.

**Peer reviews participation:** Students will be involved in the review of other students' written assignments throughout the semester. See course schedule for due dates and turnaround times. A rubric for the peer reviews will be available on Canvas.

**APA modules and quizzes:** There are two APA writing and style quizzes in the course and one citation tutorial. See Canvas for upload instructions and quiz due dates.

**Participation:** Students can receive 15 points for participation in class activities.

## **Exams**

**Exam absences:** An unexcused absence will result in zero points for the exam. An excused absence can only be granted by the course instructor. It is the student's responsibility to contact the instructor within the first two weeks of the semester if he/she is unable to sit for the exam. Family members/significant others may contact the course coordinator on behalf of students who are hospitalized or are otherwise unable to speak directly with the course instructor. It is the student's responsibility to contact the instructor about rescheduling the exam. Scheduling conflicts due to work or family travel are not eligible for make-up exams; these absences will result in a zero on the exam. Students with accommodations should notify the instructor early in the semester to allow for accommodations for the full semester (i.e., a student who notifies the instructor of accommodations halfway through the semester may have those accommodations for the remaining assignments of the semester; past assignments and exams cannot be retaken). If a student is given permission to miss an exam, a make-up exam will be administered during the week prior to the final exam. The make-up exam may be formatted differently from the original exam at the discretion of the course instructor.

**Exam procedures:** All exams are closed-book and closed-note; no outside resources are permitted unless otherwise noted. Students will be required to sign an honor code before starting and upon submitting the exam. The exam period is 60 minutes.

## **Grading:**

<b>Activity</b>	<b>Points Available</b>	<b>Points Earned</b>	<b>Percentage of Grade</b>
Discussion board posts (5 points x 3)	15		3.75%
Participation in peer reviews (5 points x 5)	25		6.25%
Research question and hypothesis assignment	20		5%
Annotated bibliography	25		6.25%
Literature review	50		12.5%

Proposal	50		12.5%
Final paper	100		25%
Exam 1	15		3.75%
Exam 2	15		3.75%
Exam 3	15		3.75%
Quizzes (5 points x 8)	40		10%
APA style and writing module quizzes (2.5 points each x 2)	5		1.25%
APA citation tutorial completion	5		1.25%
Proposal presentation	5		1.25%
Participation	15		3.75%
<b>TOTAL COURSE POINTS AVAILABLE</b>	<b>400</b>		

**Overall percentage needed:**

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

<b>Letter</b>	<b>%</b>
A	93-100%
A-	90-92.99%
B+	87-89.99%
B	83-86.99%
B-	80-82.99%
C+	77-79.99%
C	73-76.99%
C-	70-72.99%
D+	67-69.99%
D	63-66.99%
D-	60-62.99%
F	< 60%

Note: Scores that are on the border between two grades will be rounded (e.g. 94.5% will be 95%, 89.5 will be 90%, etc.) Scores that will round to another letter grade by the second digit after the decimal place (e.g., 89.45) will round to the tens decimal place and follow the first note (e.g., 89.5 will round to 90%).

**Au.D. Program Policies**

## Academic conduct

Students enrolled in the Au.D. program must adhere to the Department and University policies on academic misconduct. Please see the department's policy on academic misconduct ("Policy on Student Academic and Clinical Conduct"). The following are expectations for professional behavior in the classroom:

- **Ethics:** Students must uphold the ethical standards set forth by professional bodies in the field (see Appendices C and D).
- **Respect:** Students should demonstrate respect to their peers, instructors, and staff.
- **Feedback:** Students are expected to self-reflect and modify their work in response to feedback, while displaying non-defensive behavior to suggestions.
- **Health:** Students should maintain their personal wellness and health, attending to any needs in a timely fashion in order to support their academic and professional growth.
- **Attire:** Students should dress appropriately for class. Classes may be held in clinic space, so students are expected to observe the clinic dress code.
- **Accountability:** Students are expected to be accountable, honest, and professional for their activities and communications. The general principles of ethical behavior should be applied to their coursework, evaluations, and examinations.
- **Language:** Students should demonstrate professional oral and written communication, including emails. Discretion and professional language should be used in all modalities, emphasizing constructive rather than reactive use.
- **Scholarship:** Students should take an active role in their learning, recognizing their deficiencies and seeking to correct them, as part of their commitment to lifelong learning.
- **Effort:** Students should collaborate and work to complete tasks and assignments on time or by the set deadline. Students are expected to follow through on all activities while maintaining professionalism and intellectual curiosity.

## Attendance

Students are expected to arrive in class on time, prepared to participate and engage in classroom activities for both in-person and synchronous/virtual interactions. Students are responsible for class content, lecture materials, assignments, announcements, and must be aware of changes in the class schedule. Students are advised that instructional faculty may include an attendance policy in courses, which may require attendance as part of the student's course grade. These policies will be set in the syllabus.

Given the full-time, intensive nature this doctoral program, it is important that students contact instructors if they are absent or are anticipating absence, especially over an extended period of time. In the case of the latter, the Au.D. Program Director must also be notified. Attendance for clinical practica is outlined in the clinic handbook.

## Email

Students in the Au.D. program are required to maintain an active CSUS email address, which is linked to the student ID number. Official emails will be sent through CSUS email. Students are expected to regularly check their CSUS emails.

## TENTATIVE Course Schedule/Outline:

Date	Topic and Activity or Exam	
1/26	Overview of course	Syllabus
	Scientific method	Scientific method: Introduction; importance of collaboration
1/28	Ethics	Ethical treatment of human subjects

		Ethics in writing
2/2	Research types	Types of research  How to read a research article  Independent and dependent variables
2/4	Research question and hypothesis development	Identifying important questions  Formulating research questions with PICO  Null and alternative hypotheses
2/9	Databases and literature search  Reference management	Guest lecture from Rachel Stark, M.S., and Mary-Kate Finnegan  Annotated bibliography assigned  Homework: Identify five articles on a topic of interest
2/11	APA conventions	Science reports  Citing research (paraphrasing, in-text citations, and reference lists)  Selection and structure of annotated bibliographies  Feedback rubrics
2/16	Annotated bibliographies	Paragraph structure and general organization  Writing an annotated bibliography  Peer review of research question and hypothesis assignment
2/18	Measurement Reliability Validity	Operational definitions  Types of reliability and validity
2/23	Sampling	Quantitative designs (group versus single)  Research participant characteristics  Sampling methods  Random assignment methods
2/25	Peer review	
3/2	Methods	Participants, designs, materials
3/4	Exam I	
3/9	Introduction to statistics	N, mean, standard deviation  Median, mode, outliers  Basics of data visualization
3/11	Statistical procedures and types of data  Power	Parametric/non-parametric statistics  Types of data  Correlation
3/16	Statistical procedures and analysis	Type I and Type II errors  Sample size, power

		t-test, ANOVA, Chi-square
3/18	Data analysis	Analysis of study data
3/23	Spring break	Spring break
3/25	Spring break	Spring break
3/30	Systematic reviews, grey literature	Guest lecture: Rachel Stark, M.S., AHIP  Evaluation of research articles
4/1	Discussion section	General structure
4/6	Peer review	
4/8	Exam II	
4/13	Qualitative research	Questions
4/15	Sampling and data collection in qualitative research	Sampling  Data collection procedures
4/20	Qualitative data analysis	Themes and coding
4/22	Mixed methods research  Surveys  Case studies	Uses, methods  Measurement, survey design
4/27	Exam III	
4/29	Peer review	
5/4	Critiquing research  Authorship	Research quality  Journals (predatory; peer-reviewed)
5/6	Presentations and posters	
5/11	Barriers	Barriers to research
5/13	Doctoral project proposal presentations	Presentation of projects
5/16	Finals week	

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

# 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) 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.

## Important Tips for Success as an Online Learner

There are some basic technical skills and requirements that you will need to have to be successful in this online course. If you have difficulties using Canvas, please go through the [Canvas Student Tour](#).

- ***Begin planning now for private, uninterrupted time in your schedule*** to complete the assignments – preferably in at least one-hour blocks and at least three times a week. It can be easy to fall behind!
- *Check your email account regularly* for updated information. We will be using your Saclink email account for communication. Use Saclink e-mail for private messages to the instructor and other students.
- Read directions carefully.
- For online communication, conventions of on-line etiquette ("netiquette"), which include a courtesy to all users, will be observed. Please see [Guidelines for Online Discussions](#).

## Attitudes & Technical Skills Required

You will find that the following attitude will significantly contribute to your success in this online class:

- A positive attitude towards technology
- An open mind towards online education
- Willingness to share your experiences with others
- Strong analytical and critical thinking skills for when you "get stuck"
- Resourcefulness - don't be afraid to click on links and explore and ask questions
- Time management

Online learning requires only basic technical skills:

- Be competent with file management (for example, creating a folder on your desktop, moving files from one location to another, finding a saved file)
- Possess internet navigation skills
- Update your Internet browser

- Send and receive email
- Create and save documents (Word, PowerPoint, Excel or HTML)
- Toggle between two open software applications on your computer
- Copy text from a word processing program and paste them into another program

### 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/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.” 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. 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 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](mailto: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 just a phone call or email away! The CARES office provides case management support for any enrolled student. Email the CARES office at [cares@csus.edu](mailto: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](mailto: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 Audiology

CSAD 621    **Research Methods in Audiology**

## **Scientific and Research Foundations**

- Basic science skills (e.g., scientific methods, critical thinking)

## **Standard II-A: Foundations of Practice**

- A13. Principles of research and the application of evidence-based practice (i.e., scientific evidence, clinical expertise, and client/patient perspectives) for accurate and effective clinical decision making