



# California State University, Sacramento

## Department of Communication Sciences and Disorders

### UNDERGRADUATE SYLLABUS & COURSE OUTLINE

Semester/Year: Spring 2020	Course: CSAD 148: Research in Speech - Language Pathology and Audiology.	Section: 03
Meeting Days: Mondays and Wednesdays	Meeting Times: 3:00 PM-4:15 PM	Location: Folsom Hall 2604
Instructor: Dr. Heather Thompson	Email: <a href="mailto:heather.thompson@csus.edu">heather.thompson@csus.edu</a>	Phone: 916-278-6654
Office Location: Folsom Hall 2404G	Office Hours/Appointments: Mondays and Wednesdays 10:00-11:20am	

#### Catalogue Course Description:

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

**Prerequisite(s):** CHDV 30, DEAF 51, PSYC 2, SAT

1, [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)
<b>Competence in the Disciplines:</b> <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
<b>Knowledge of Human Cultures and the Physical and Natural World</b> <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
<b>Intellectual and Practical Skills, Including:</b> <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
<b>Personal and Social Responsibility, Including:</b> <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
<b>Integrative Learning**, Including:</b> <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 computer resources to improve the learning process.

Course Learning Outcome	Components Indicating Competence	Grades Received
1	Exam, article reviews 1-8, prospectus paper and presentation, poster	
2	Exam, article reviews 1-8, prospectus paper and presentation, poster	
3	Exam, article reviews 1-8, prospectus paper and presentation, poster	
4	Exam, article reviews 1-8, prospectus paper and presentation, poster	
5	Exam, article reviews 1-8, prospectus paper and presentation, IRB application, poster	
6	Exam, article reviews 1-8, prospectus paper and presentation	
7	Exam, article reviews 1-8, prospectus paper and presentation, poster	
8	Exam, article reviews 1-8, prospectus paper and presentation, poster, IRB application	
9	Exam, article reviews 1-8, prospectus paper and presentation, poster	

## Textbooks and Materials:

1. Orlikoff, R.E., Schiavetti, N. & Metz, D. (2015). *Evaluating Research in Communicative Disorders*, 7<sup>th</sup> Ed. Boston, MA: Pearson.
2. American Psychological Association (2020). Publication Manual of the American Psychological Association, 7<sup>th</sup> edition, *American Psychological Association*, Washington, DC.
3. Articles as posted on canvas
4. Articles for research project as chosen by student

## Other Resources

1. Green, SB. & Salkind, NJ. (2005). *Using SPSS for Windows and Macintosh: Analyzing and Understanding Data*, 4<sup>th</sup> Edition. Upper Saddle River, NJ: Pearson.
2. Schwartz, B., Wilson, J., & Goff, D. (2015). *An Easy Guide to Research Design & SPSS*. Los Angeles: SAGE. \* on reserve with the library.

## Online Resources:

1. Canvas for course materials.

## Course Requirements/Components:

**Electronic devices:** Internet connection, access to Canvas/Web site, access to a computer and printer.

### COURSE STRUCTURE:

This course will incorporate a variety of in-class learning experiences including direct instruction/lecture, active learning activities, small/whole group discussions, and multimedia viewing. Due to the breadth and depth of the course content, students will be assigned weekly readings to be completed before the class meeting. Therefore, in some aspects, this course will be a “flipped classroom.” Classes may cover related but different information than that which is presented in the assigned readings. Therefore, students must attend classes as well as complete all assigned readings. Classes will also provide students with opportunities to apply information presented in the readings by working through a group research project. All assignments and activities are carefully administered for the purpose of enhancing student learning.

### EXPECTATIONS:

1. **Attendance:** Students are expected to attend class and to be prepared to participate in weekly class discussions and activities. Attendance may be taken at the start of class. Assignments **must** be turned in or taken on the scheduled dates and times. If you are absent from class, you are responsible for all material covered and to notify the instructor of an expected absence.
2. **Electronic device usage:** Electronic devices will be used to access posted Canvas resources or documents and posted materials. Accessing email and other non-course online activities is not permitted. Information will be posted on Canvas throughout the semester. Ensure that you access the material in a timely manner.
3. **Commitment to Integrity:** As a student in this course (and at this University) you are expected to maintain high degrees of professionalism, exhibit a commitment to active learning and participation in this class, and demonstrate integrity in your behavior in and out of the classroom. Students are expected to conduct themselves in a manner that demonstrates respect for others and respect for diversity. Academic dishonesty of any kind will not be tolerated and will be dealt with under established University policy. If you are caught cheating on an exam, you will receive a failing grade for the class. Students who experience concerns with the assignments or course material should communicate these challenges to the instructor as soon as possible. Building rapport and effective relationships is key to becoming an effective professional. Be proactive and inform the instructor when any difficulties arise during the semester so possible solutions can be identified.

### COURSE EVALUATIONS:

At the completion of the course, each student is expected to comment on the nature of this course. This procedure allows the instructor to modify segments of the course in order to make it more applicable to future students’ educational and professional growth.

**GRADED COURSE ACTIVITIES:**

A minimum GPA of 2.5 is necessary for major classes in order to graduate with a Bachelor’s Degree in Communication Sciences and Disorders. All assignments must be completed and turned in during class, on time, and in the correct form. Emailed assignments will not be accepted. Late assignments will be reduced by 20% per day and the late penalty will be applied at the time the assignment is received by the instructor.

**GRADING:**

Points you receive for graded activities will be posted to the Canvas Grade Center. Grades are typically posted within seven (7) days following the completion of an activity. Final grades will be based on the number of points received out of the total number of points available for exams, article reviews, project components and participation. Exam scores are determined by the scantron machine. The grade that you obtain on the scantron and on exams and assignments is the grade that you earn. The instructor will not reply to emailed requests to “bump up” a grade. *Note:* For more information about grading at Sac State, visit the academic policies and grading section of the university catalog.

Grading Policy:

Source	Points	% of Grade	Due Date
<b>ARTICLE DISCUSSIONS</b>	10 points each x 8 = 80 points total	10%	Per date on the syllabus [Approximately 1 due each week]
<b>EXAMINATIONS</b>			
Exam #1	100 points	12.5%	03/04/2020
Exam #2	100 points	12.5%	TBD - final exam week
<b>RESEARCH PROJECT</b>			
Research Project Outline	25 points	3.1%	02/24/2020
Prospectus paper & presentation	200 points	25%	03/11/2020 & 03/16/2020
IRB application	50 points	10%	03/23/2020
Data file	25 points	10%	04/06/2020
Poster Presentation	100 points	3.1%	05/04/2020
<b>PARTICIPATION AND TEAMWORK</b>			
Class attendance and participation	100 points	12.5%	All classes
Peer evaluation	20 points	2.5%	05/04/2020
<b>Total</b>	800	100%	

Letter grades are assigned according to the following scores:

Points	%	Letter
744-800	93-100	A
729-743	90-92%	A-
696-728	87-89%	B+
664-695	83-86%	B
640-663	80-82%	B-
616-639	77-79%	C+
584-615	73-76%	C
560-583	70-72%	C-
536-559	67-69%	D+
480-535	60-66%	D
<480	≤59%	F

**Total individual score: \_\_\_\_\_/400 = 50% of final grade**  
**Total group project score: \_\_\_\_\_/400 = 50% of final grade**

## Course Policies/Procedures:

1. **Attendance:** Professional attendance is required. Report absences to Dr. Thompson in person or by email prior to class meeting. Practice attending now as attendance (and promptness) at scheduled meetings is a professional behavior that you will need to develop and maintain.
2. **You are responsible for all materials covered in your absence.** This means that you are responsible for obtaining any materials from a missed class from a classmate or from Canvas, when available online.
3. **Class meetings and participation:** It is expected that students will complete all readings prior to class. Teaching strategies will include lecture, discussion, observation, and functional assignments. Active listening and critical thinking are expected in this course.
4. **Cellphones/Recording/Electronic Devices:** Please silence all cellphones and other communication devices prior to class. To facilitate your own learning (practice in note-taking) and out of respect for your fellow classmates (to allow all students to feel comfortable actively participating in class discussion), please do not audio or video record lectures. If you require an accommodation and require additional support, please see Dr. Thompson.
5. **Exams:** Examinations must be completed on the scheduled day. There will be one midterm held in class and one final exam held during the final exam period. Examinations will be based on class lectures, assigned readings, class activities/homework, and class discussion. Exams may be composed of multiple choice, true/false, matching and/or short answer questions. Exams may require the use of a scantron. Be sure to erase thoroughly on the scantron. There is no “leeway” for accidental pencil marks. Bring a scantron form. If you do not have a scantron form and a classmate doesn’t have an extra one, you cannot take that examination and you will have earned a “zero” on that exam. You may not leave class to retrieve a scantron.

During exams, all bags/materials and supplies must be placed at the front of the classroom with cellphones turned off. To ensure a fair testing environment, you may not wear smartwatches during the exam. Please secure these in your bag or leave at home. Students are not permitted to take biological breaks during the exam as students are unable to be proctored once they leave the room.

Examinations must be completed on the scheduled day. In the case of a documented medical emergency during a midterm, the student will be required to provide documentation of the illness, and a make-up exam will be available, possibly in essay format, scheduled the week prior to dead week. **It is the responsibility of the student to contact Dr. Thompson prior to the exam, demonstrate documentation of the medical emergency through a paper copy of a doctor’s note, and schedule the make-up to be taken at the testing center or in a location deemed appropriate by the professor.** Scheduling conflicts such as work or volunteering or family holidays/travel are ineligible for exam make-ups. The final exam will be scheduled according to the registrar’s office. Please take this into consideration when booking travel plans at the end of the semester.

6. **Study Guides:** This course material requires the application of concepts learned throughout other aspects of the undergraduate program in communication sciences and disorders. Students are encouraged to develop their own personal study guide for this class to best support their learning. Students may wish to develop charts to compare/contrast key terms and definitions. Students are also encouraged to think about and develop an understanding of how a given term applies to the research project. To help, a list of important terms is presented at the end of each chapter.

TENTATIVE Course Schedule/Outline:

Date	Topic/Class Content	Readings	Assignment/Activities
Week 1 01/22	<b>Review syllabus/assignments/class</b> Structure/expectations Random Assignment <b>Introduction: Pursuing Research in Higher Education</b> <b>Research and practice in Communicative Disorders</b> Knowledge Acquisition Scientific Method The conduct of scientific research	Orlikoff et al. (2015) Ch 1 pgs. 1-34	<i>Assign groups; exchange contact information; discuss interests</i> <ol style="list-style-type: none"> <li>1. Obtain randomly-assigned group assignments from instructor.</li> <li>2. Change seats and sit with group members.</li> <li>3. Decide on a research topic, research question, and divide up the work.</li> </ol>
Week 2 01/27	<b>Evidence-based practice</b> Framing a clinical question Reflective practice Research-practice relationships <b>Research and practice in Communicative Disorders</b> The Nature of Research in CSD The Editorial Process in Publishing The challenge of cyberspace	APA 7 <sup>th</sup> edition (2020), Ch 1 pgs. 1-26. Orlikoff et al. (2015) Ch 2 pgs 35-71.	<i>Review literature and narrow down topics that are of interest to you</i>
01/29	<b>How to conduct a literature search</b> Keyword terms Review of databases and resources PsycINFO, CINAHL, web of science Google Scholar Article Review #1		Review library website at: <a href="http://library.csus.edu/services-for-students">http://library.csus.edu/services-for-students</a> <i>Understand how to find articles, organize a literature search</i>
Week 3 02/03	<b>The Introduction Section of the Research Article</b> Nature of Technical Writing Time to work on project	APA 7 <sup>th</sup> edition (2020), Ch 2 pgs. 29-67.	<i>Hand in ideas for project</i>
02/05	<b>Components of Introduction</b> General Statement of the Problem Rationale for the study Review of the Literature Research questions and hypotheses Limitations of the Study		<i>Understand how to find articles, organize a literature search for your project</i>
Week 4 02/10	<b>Review of statistics</b>	Orlikoff et al. (2015) Ch 3 pgs 72-89.	<b>Due: AR #1, submit beginning of class (hard copy, stapled)</b> <i>Refine project idea in light of feedback from instructor.</i>
02/12	<b>Research Strategies in Communicative Disorders</b> Quantitative Research Variables in Empirical Research Experimental Research		<i>Develop research questions and hypotheses.</i>
Week 5 02/17	<b>Research Design in Communicative Disorders</b> Descriptive Research, Qualitative Research Mixed Methods, Quantitative Design, Group Designs, Single Subject Design	Orlikoff et al. (2015) Chs 3, 4, pgs. 72-147.	<b>Due: AR #2, submit at beginning of class (hard copy, stapled)</b> <b>Due: Research Question, submit at the beginning of class (stapled, hard copy)</b>
02/19	<b>Validity Issues in Research</b> Design	Orlikoff et al., (2015). Ch 4, pgs. 148-165	<i>Decide on methodology and learn how you will answer your research question</i>

	Pilot Research		
Week 6 02/24	<b>In-class work on research project</b> Goal: to write a proposal for your project using APA format that you will turn in during weeks 8-9.	APA 7 <sup>th</sup> edition (2020), Ch 3 pgs. 71-108.	<i>Start writing prospectus paper</i> <b>Due: AR#3, submit at beginning of class (hard copy, stapled)</b> <b>Due: Research Project outline</b>
02/26	<b>Experimental Designs for Studying Treatment Efficacy</b> Treatment Efficacy Pre, quasi and true experiments Levels of Experimental Evidence	Orlikoff et al. (2015) Ch 5 APA 7 <sup>th</sup> edition (2020), Chs 4-6	<i>Narrow down your methodology and work on troubleshooting</i>
Week 7 03/02	<b>The Methods Section of the Research Article</b> Components of Method Section Participants, Materials, Procedures APA 7 <sup>th</sup> edition formatting Time for group research project	Orlikoff et al. (2015) Ch 6 APA 7 <sup>th</sup> edition (2020), Ch 9	<b>Due: AR#4 submit at beginning of class (hard copy, stapled)</b>
03/04	<b>Exam #1</b>	Students are responsible for all readings, lectures and class discussion up to 03/02/19	
Week 8 03/09	Class time for research project		
03/11	<b>Prospectus Presentations</b>		<b>Due: Prospectus Papers, Presentation and Questionnaire</b>
Week 9 03/16	<b>Prospectus Presentations</b>		<b>Due: Prospectus Papers, Presentation and Questionnaire</b>
03/18	<b>In class time to work on project</b>		<i>IRB application; Refine research project in light of feedback from presentation and paper</i> <b>Due: AR#5 submit at beginning of class (hard copy, stapled)</b>
Week 10 03/23	<b>The Results Section of the Research Article</b> Organization of Quantitative Results Organization of Qualitative Results Quantitative Data Analysis	Orlikoff et al. (2015) Ch 7 pgs 273-323. In-class small group activities. <a href="https://www.csus.edu/information-resources-technology/software-catalog/#data-research">https://www.csus.edu/information-resources-technology/software-catalog/#data-research</a>	<b>Due: IRB application – Obtain ethics clearance. Note: Data collection cannot begin until ethics clearance has been obtained.</b>
03/25	<b>Statistical Inference</b> Analyzing Differences Data Display	Orlikoff et al. (2015) Ch 8 pgs 327-379.	<i>Bring copies of questionnaire for distribution in class</i>
Week 11 03/30 & 04/01	SPRING RECESS – NO CLASS		
Week 12 04/06	<b>Data collection and analysis</b> Mandatory in-class project time		<b>Due: AR#6 submit at beginning of class (hard copy, stapled)</b> <b>Due: Data file</b> In-class small group activities Collect copies of questionnaire in class
04/08	<b>The Discussion and Conclusions Section of the Research Article</b> Organization The Abstract of the Research Article	Orlikoff et al. (2015) Ch 9 pgs 381-418.	
Week 13 04/13	<b>Best Evidence and Clinical Decision Making</b> Application of Best Current Research Evidence	Orlikoff et al. (2015) Ch 10 pgs 419-440.	<b>Due: AR#7 submit at beginning of class (hard copy, stapled)</b>

	Barriers to EBP Systematic Reviews		
04/15	<b>Mandatory in-class project time</b>		
Week 14 04/20	<b>SPSS data analysis</b>		<b>Due: AR#8 submit at beginning of class (hard copy, stapled)</b>
04/22	<b>Poster Formatting</b> Assemble sections into word document References	APA 7 <sup>th</sup> edition (2020), Chs 9 & 10.	Be prepared to spend class time assembling the sections you will put into your poster. <i>Spend class time working on your poster</i>
Week 15 04/27	<b>Current Research in SLP</b>		In-class small group activities <b>Due: Final Poster submitted to IRT for printing</b> <a href="https://www.csus.edu/information-resources-technology/data-research/academic-poster-printing.html">https://www.csus.edu/information-resources-technology/data-research/academic-poster-printing.html</a>
04/29	<b>Publication Process</b>	APA 7 <sup>th</sup> edition (2020), Ch 12.	
05/04	<b>Undergraduate Research Symposium</b>		<b>Due: Poster presented during class time</b>
05/06	<b>Symposium Debrief; Course Evaluations</b>		<b>Due: Peer Evaluation form due in class</b>

## 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, Division 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. 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.

### 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 in the area of food and/or stable housing, help is just a click, email or phone call away! Sacramento State offers basic needs support for students who are experiencing challenges in these areas. Please visit our Basic Needs website to learn more about your options and resources available.

<https://www.csus.edu/basicneeds/>

### Other Resources

Testing Center: <https://www.csus.edu/testing/>

Library: <https://library.csus.edu/>

Services to Students with Disabilities: <https://www.csus.edu/sswd/>

Student Health and Counseling Services at The WELL: <https://www.csus.edu/shcs/>

Peer & Academic Resource Center: <https://www.csus.edu/parc/>

Student Academic Success and Education Equity Programs: <https://www.csus.edu/saseep/>

Case Manager, Office of Student Affairs: <https://www.csus.edu/student-affairs/crisis-assistance-resource-education-support/>

# 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.