California State University, Sacramento

Department of Communication Sciences and Disorders

CSAD 148 Research Methods

Spring Semester, 2019

Folsom 1050

Instructor

Tonia Davis, PhD, CCC-SLP Email: tonia.davis@csus.edu Office: Folsom 2404D Office Hours: Tuesday, Wednesday, and Thursday, 12-1pm Phone: 916-278-6679 Section 02: T/R 4:30pm-5:45pm Section 03: T/R 6:00pm-7:15pm

Catalog Course Description

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. 3.0 units.

Prerequisite(s): CHDV 30, DEAF 51, PSYC 2, STAT 1 (or equivalents), CSAD 110, CSAD 111, CSAD 112, CSAD 125, CSAD 126, CSAD 130, and CSAD 145.

Required Texts

1. Orlikoff, R.E., Schiavetti, N. & Metz, D. (2015). *Evaluating research in communicative disorders*, 7th Ed. Boston, MA: Pearson.

This text is currently available online at: <u>https://www.scribd.com/document/363218582/Evaluating-Research-in-Communication-Disorders-7th-ed</u>

- 2. American Psychological Association (2009). *Publication Manual of the American Psychological* Association, 6th Edition. Washington, D.C.: American Psychological Association.
- 3. Other required readings will be posted on **Canvas Learning Management System**.

Required Technology

https://tophat.com

This course will make use of TopHat technology to facilitate classroom discussions, promote student engagement during lectures, monitor material acquisition, and attendance. Students will be permitted to utilize their phone, laptop or tablet to produce real-time responses to questions proposed during various lectures. Difficulties signing in for attendance must be addressed with the instructor before, during, or immediately after lecture to receive attendance points. Students are responsible for monitoring their own attendance and participations points in TopHat. TopHat application subscription is per semester (\$26) or per year (\$38).

Learning Outcome Competencies (CSAD 148)

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. <u>Students are required to track their</u> 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 you establish competence and knowledge in these areas.

Specific Student Learning Outcomes

Upon completion of the course, the student will be able to:

- 1. Demonstrate knowledge of the scientific method and research design.
- 2. Interpret research findings accurately and concisely.
- 3. Apply scientific research to speech/language/hearing clinical practice (i.e., case studies).
- 4. Conduct a comprehensive literature search on a topic of choice.
- 5. Develop, conduct and interpret a structured research project.
- 6. Explain human research protections and the history of their development.
- 7. Discuss ethical research design within the context of speech/language/hearing research.

Learning Outcomes	Components Indicating Competence	Grades Received
1, 6, 7	Exam 1	
	Exam 2	
2, 3, 6, 7	Discussions 1-10	
4, 5, 6, 7	Research Project:	
	Prospectus	
	IRB	
	Poster	

Assessment

Assessment	Туре	Points	Percent	Due Date
			Total	
			Grade	
Exams	Individual	100 x 2 exams = 200	27%	2/28 and 4/23
Discussion Papers	Individual	$10 \ge 10$ discussions = 100	13%	See schedule
Attendance	Individual	$5 \ge 22 \text{ days} = 110$	15%	Daily
Project: Research	Group	20		2/14
Questions				
Project: Presentation	Group	50		3/7
Project: Prospectus	Group	100		3/12
Paper			45%	
Project: IRB	Group	25		3/14
Project: Data File	Group	20		4/4
Project: Poster	Group	100		4/30 (print)
				5/7 (present)
Project: Peer Review	Individual	25		4/30
		Sum: 750 points		

Assessment Specifics

- <u>Two exams</u> will take place during the course sequence. Each exam will consist of 50 multiple choice questions. Students should bring scantron 883 or 883E to class on exam days. Exams will cover the lectures and assigned chapter readings. Makeup exams are available only with student documentation and instructor approval. Any makeup exams will take place through the Testing Center and according to their policies.
- <u>Discussions</u> should be uploaded onto **Canvas**. Each discussion has a worksheet with 5-10 questions on the topic of interest. Late discussions will be accepted at a 50% grade penalty (i.e., 5 points instead of 10 points).
- <u>Attendance</u> is mandatory due to the nature of the group project. You have (3) absences in this course for which there is no grade penalty. After (3) absences, you will lose -5 points/absence unless you provide acceptable documentation. There is no extra credit for not using your allocated absences; if you are ill, stay home.
- The <u>Research Project</u> has its own description and rubric. Please see that document for details.
- Extra credit opportunities may be available across the course. Please check Canvas for extra credit opportunities.

	A 95-100%	A- 90-94%
B+ 87-89%	B 83-86%	B- 80-82%
C+ 77-79%	С 73-76%	C- 70-72%
D+ 67-69%	D 63-66%	D- 60-62%
	F Below 60%	

Letter grades will be based upon the following:

Equal Access

California State University – Sacramento's 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 <u>sswd@csus.edu</u>.

If you need course accommodations due to a disability, if you have emergency medical information to share with the instructor, or if you need special arrangements in case the building must be evacuated, please make an appointment with the instructor.

Academic Integrity

The principles of truth and honesty are recognized as fundamental to a community of scholars and teachers. California State University, Sacramento (hereafter referred to as Sacramento State) expects that both faculty and students will honor these principles, and in so doing, will protect the integrity of academic work and student grades. Academic dishonesty defrauds all those who depend upon the integrity of the University, its courses and its degrees. This fraud is accomplished to the extent that faculty, students or campus employees knowingly or unwittingly allow academic dishonesty to work its deception.¹

All honor code violations will be reported to the university per policy. It is the obligation of faculty *and other students* to report potential honor code violations.

"Cheating" includes all of the above:

- Cheating on exams using interpersonal resources, banned materials, or electronic materials (including smart watches)
- Discussing the exam with people in other sections (after one section has taken the exam / before the next section)
- Falsification of records for absences
- **Plagiarism**, including: overt plagiarism of passages from other texts, "minor" changes to text (adding a word here and there), failure to provide citations, and providing overtly inaccurate citations. <u>The whole group</u> is responsible for plagiarism within written documents and will be penalized equally.

¹ <u>https://www.csus.edu/umanual/student/stu-0100.htm</u>

Basic Needs Support

Sacramento State has a number of programs to support students in temporary housing assistance, nutrition supplementation, and for student emergencies. <u>https://www.csus.edu/basicneeds/</u>

Mental Health and Counseling

If you or a loved one are in crisis, please reach out. For immediate assistance, consider <u>https://www.crisistextline.org/</u>. For additional counseling support, Sacramento State offers counseling services through the WELL. Or just reach out to any of your instructors, and we can help you to find the resources you need.

Electronic Devices

Electronic devices may be used to access course materials and TopHat 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. In CSAD 148, you may audio-record during **lectures only.**

Research consistently demonstrates that students retain information more accurately when notes are taken by hand. Even when students do *not* multi-task, handwritten notes promote retention over typed notes (Mueller & Oppenheimer, 2014). While students are welcome to use devices in class to access powerpoints, research articles, or group project materials, as well as to access TopHat for attendance, students should be aware of this research.²

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.

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."

Finally, congratulations! At the end of this semester, you will have completed your major coursework. This is a huge accomplishment! I am so excited to see you walk across the stage at graduation.

² Mueller, P. A., & Oppenheimer, D. M. (2014). The pen is mightier than the keyboard: Advantages of longhand over laptop note taking. *Psychological science*, *25*(6), 1159-1168. https://www.scientificamerican.com/article/a-learning-secret-don-t-take-notes-with-a-laptop/

Week by Week Schedule

Date	Class Plan	To Do – Didactic	To Do – Project
1/22	Syllabus/Introduction		
	Discussion 1		
	(science/pseudoscience)		
1/24	Lecture 1 – Evidence Based	Read chapter 1 pg. 1-	
	Practice (EBP)	16; chapter 5 pg. 196-	
	Group Brainstorming	200 (20 pages)	
	1 0	Discussion 1 due	
1/29	Library Resources – Rachel	Read chapter 1 pg. 21-	
	Stark, MA, AHIP	24; chapter 2 pg. 40-51	
	Discussion 2	(15 pages)	
	(science/advertising)	(12 108.0)	
1/31	Lecture 2 - EBP	Discussion 2 due	Meet with instructor
1/51	Group Brainstorming	Discussion 2 due	re: topic
2/5	Lecture 3 – statistics	Read chapter 3 pg. 72-	ie. topie
2/5	review/research strategies	78; chapter 3 pg. 89-99	
	0	1 10	
2/7	Group Work	(18 pages)	
2/7	Lecture 4 – research questions Group Work	Review chapter 3	
2/12	Lecture 5 – research design	Read chapter 4 pg. 123-	
	Group Work	144 (11 pages)	
2/14	Lecture 6 – research design	Read chapter 5 pg. 168-	Research
	Group Work	178; pg. 187-8 (13	questions due
	1	pages)	-
2/19	Lecture 7 – methods	Read chapter 6 pg. 204-	
	Group Work	219; pg. 250-258 (24	
	1	pages)	
2/21	Lecture 8 – threats to validity	Read chapter 4 pg. 148-	Group presentation
,	Group Work	161; chapter 6 pg. 224-	order posted
	· · I · · · ·	250 (40 pages)	I
2/26	Lecture 9 – research ethics	Read chapter 5 pg. 195-	
2/20	Discussion 3 (ethics)	196; chapter 6 pg. 219-	
	Discussion 5 (curies)	221 (5 pages)	
2/28	EXAM 1 (through lecture 8)	Discussion 3 due	
3/5	No class – use time to prepare		Prepare for group
	for group presentations		presentations
3/7	Group presentations		Presentations due
	* *		– all groups
3/12	Group presentations		Papers due – all
	1 1		groups
3/14	No class		IRB due
S/ 11	CSHA		
	Spring Break -	have fuel	
	- Spring break	- nave run:	

Date	Class Plan	To Do – Didactic	To Do – Project
3/26	Collect data in class (survey		Bring hard copy
	projects)		surveys to class
3/28	No class – collect data (out of		Collect data
	class projects)		(electronic surveys
			will be distributed)
4/2	Lecture 10 – results section	Read chapter 7 pg. 273-	
		286; pg. 301-307;	
		chapter 8 pg. 327; pg.	
		338 (21 pages)	
4/4	Lecture 11 – data organization	Review chapters 7 & 8	Data file due
,	& display	Read Gillam (2008)	
	Discussion 4 (RCT)		
4/9*	Lecture 12 – discussion section	Read chapter 9 pg. 308-	Statistics
- / -	Discussion 5 (reliability)	309; pg. 395-410 (18	appointments
		pages)	"PP """"
		Read McCullough	
		(2000)	
		Discussion 4 due	
4/11*	Discussion 6 (SSRD)	Read Bryan (2000)	Statistics
.,		Discussion 5 due	appointments
4/16*	Discussion 7 (intensity)	Read Bakheit (2007)	Statistics
1/ 10		Discussion 6 due	appointments
4/18*	Lecture 13 – tying it all together	Read chapter 10 pg.	Statistics
1/10	Exam review	326-437 (11 pages)	appointments
		Discussion 7 due	appointments
4/23*	EXAM 2 (cumulative)		Statistics
., _0			appointments
4/25*	Discussion 8 (validity)	Read Olson (2004)	Statistics
17 23	Poster preparation	11cad 013011 (2001)	appointments
	r öster preparation		appointments
4/30	Discussion 9 (interpretation)	Read chapter 8 pg. 372-	Submit posters
1, 50	Poster preparation	376 (graphics; 5 pages)	printing & on
	r öster preparation	Read Megha (2013)	Canvas
		Discussion 8 due	Callvas
5/2	Discussion 10 (quality)	Read ONE of the	
5/2	Group practice time	four articles posted	
	Stoup practice unit	in Canvas	
		Discussion 9 due	
5/7	Postor procentations	Discussion 9 due Discussion 10 due	CUECV
5/ /	Poster presentations	Discussion to due	<u>CHECK</u> <u>LOCATION</u>
5/9	Final reflections		
	Course reviews		

*Call the CSAD Front Desk (Annette) at 916-278-4867 to schedule 30 minutes in office hours to run data together if needed for your projects.

CSAD 148: Research in Speech -- Language Pathology and Audiology

This course has been designed to be in direct support of the following American Speech-Language Hearing Association (ASHA) Knowledge and Skills Acquisition for certification in Speech-Language Pathology:

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.