



California State University, Sacramento

Department of Communication Sciences and Disorders

UNDERGRADUATE SYLLABUS & COURSE OUTLINE

Semester/Year: Spring 2020	Course: CSAD 130 Audiology and Hearing Testing.	Section: 03
Meeting Days: T, TH	Meeting Times: 7:30 PM – 8:45 PM	Location: Folsom Hall 1049
Instructor: Dr. Charles Sanders	Email: csanders@csus.edu	Phone: 916-278-6631
Office Location: Folsom Hall 2000 Cubicle C	Office Hours/Appointments: Monday and Wednesday 5-6p and 7:30-9p by appointment.	

Catalogue Course Description:

CSAD 130. Audiology and Hearing Testing.

3 Units

Prerequisite(s): [CHDV 30](#), [DEAF 51](#), [PSYC 2](#), [STAT 1](#), [CSAD 110](#) and [CSAD 111](#)

Term Typically Offered: Spring only

Introduction to audiology; anatomy and physiology of the hearing mechanism; pathologies of the ear; basic acoustics of sound and its relation to hearing and speech; school hearing screening; hearing conversation; audiometric interpretation and its relationship to speech language and learning disorders.

Place of Course in Program

This course is ideally placed in the second semester of the junior year. Following CSAD 110 Phonetic Science and CSAD 111 Anatomy and Physiology, the Audiology and Hearing Testing course will use that knowledge and expand on it. This will then ready them for CSAD 133 Aural Rehabilitation. This is important to ensure that the students have an intimate knowledge of the auditory mechanism, its normal and abnormal function, and how to evaluate it. This is essential when assessing the receptive language systems.

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

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 you 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 130 SPECIFIC STUDENT LEARNING OUTCOMES:

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:

Mastery of each student learning outcome listed below is indicated by a grade of C (73-76%) 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 you establish competence and knowledge in these areas.

1. Outline the history and contemporary practices related to the profession of audiology.
2. Explain the nature of sound, including concepts related to acoustics (e.g., pressure, intensity, frequency) and psychoacoustics (e.g., loudness, pitch, and binaural hearing).
3. Describe the basic principles of and the behavioral and physiological procedures used to assess the auditory and vestibular systems in infants, children, and adults.
4. Perform pure-tone audiometric testing in a sound-treated booth.
5. Interpret behavioral and physiological test results.
6. Describe disorders of the auditory and vestibular system that impact communication.
7. Discuss appropriate assessment and rehabilitation procedures for children and adults with hearing impairment.

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

Course Learning Outcome	Components Indicating Competence	Grades Received
1	Quiz 1	
1	Quiz 2	
2	Assignment 1	
2	Assignment 2	
2	Midterm 1	
2	Quiz 4	

2	Quiz 5	
3	Midterm 2	
3	Assignment 3	
3	Quiz 6	
3	Midterm 3	
4	Quiz 7	
5	Project	
6	Assignment 4	
6	Midterm 3	
6	Assignment 5	
6	Assignment 6	
7	Midterm 4	

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

CSAD 130 Audiology and Hearing Testing

Standard IV-C: Speech, Language, Hearing, Communication, and Swallowing Disorders and Differences

- The student will demonstrate the ability to analyze, synthesize and evaluate knowledge re: hearing disorders (including the impact on speech and language including the etiologies, characteristics, and anatomical physiological, acoustic, psychological, developmental, linguistic, and cultural correlates.)

Standard IV-D: Prevention, Assessment, and Intervention

- The student will demonstrate the ability to analyze, synthesize, and evaluate knowledge re: the principles and methods of prevention, screening, and intervention regarding hearing, including the impact on speech and language.

Standard IV-B: Basic Human Communication Processes

- The student will demonstrate the ability to analyze, synthesize and evaluate knowledge re: biological bases of human communication.

Textbooks and Materials:

Introduction to Audiology, 13th Edition, Frederick Martin and John Clark (Paperback or ebook)

ISBN: **0134695046**

ISBN-13: **9780134695044**

Authors: Frederick N Martin John Greer Clark

Online Resources:

Access to CANVAS is a requirement of this course. Campus computers are available for student use in many locations. This course is posted on CANVAS. All lecture material and required readings not in the text book will

be available only on CANVAS. I do not recommend printing the lectures until the day before class as the content could possibly change. Grades and statistics for the tests will be posted on CANVAS. Please forward interesting links to me as I will post them for the benefit of the entire class. Required readings will be posted in WORD or PDF format on CANVAS. All submissions must be in WORD or PDF format. **Mac PAGES submissions will not be accepted.**

Course Requirements/Components:

Microsoft Office Suite

- WORD
- EXCEL
- POWER POINT
- Adobe Reader

Grading Policy:

Midterms: There will be 4 midterms given throughout the semester. The midterms will include a combination of multiple choice questions, short answer and essay type questions. Each midterm will be worth 100 points. Each midterm will cover the topics of each section. This class is cumulative. You will need to have a good understanding of the material to continue to the next section. All previous subject matter may be tested during these exams. All midterms are required. (400) **There are NO MAKE-UPS.**

Quizzes: There will be 9 short quizzes. The quizzes will be given each class period. **There are NO MAKE-UPS.** The quizzes will include areas covered in the previous class period and the current readings. Each quiz will be worth 10 points. (90)

Discussions: Student Meet Up! In the discussion section of canvas, please introduce yourself. You will receive 10 points. After the initial post please continue to post, ask questions of each other, and form study groups. This is present for you to be able to communicate with each other outside of class. Your participation throughout the class will be logged and graded. Make sure to post at least one for each unit. (50)

Assignments: There are 7 additional assignments, which are worth 50 points each. Use the Assignments section of CANVAS to access and submit the assignments. (350)

Project: The project consists of performing a hearing evaluation on another student. You will be provided a schedule when the audio suite will be available. This will be work completed outside of class. You will need to complete an audiogram and a written report each worth 50 points for a total of 100 points for the project. This is due the night of the final exam. (100)

Readings: The assigned readings are not optional you will be tested on the material. The material will only be covered briefly in class. All readings will be from our text or posted on web CT. This course requires extensive reading. Be prepared and read all reading assignments prior to class.

The Final Grade will be based on a percentage of total points (950) and will be assigned as follows:

EXAMPLE

Source	Points	% of Grade
1-Midterm	100	10%
All Midterms	400	42%
1-Assignment	50	5%

All Assignments	350	37%
1-Quiz	10	1%
All Quizzes	90	10.5%
Project	100	10.5%

Letter grades are assigned according to the following scores:

Points	%	Letter
950-903	100-95.0	A
902-855	94.9-90.0	A-
854-826	89.9-87.0	B+
825-788	86.9-83.0	B
787-760	82.9-80.0	B-
759-732	79.9-77.0	C+
731-693	76.9-73.0	C
692-665	72.9-70.0	C-
664-636	69.9-67.0	D+
635-598	66.9-63.0	D
597-570	62.9-60.0	D-
569 or below	59.9 or Below	F

Course Policies/Procedures:

Remediation: *If you receive a midterm grade lower than a C-, you are required to sign up for an office hour to discuss your exam. If you cannot come during office hours, I will set up a special appointment time with you. I will analyze your exam with you and identify areas where you have had difficulty with specific course learning outcomes/competencies. I will give you specific strategies and suggestions that will help you establish competence and knowledge in these areas. You will need to follow through with these suggestions in order to receive a complete grade in the class.*

Make-up Policy

There are no make-up quizzes or exams. Your attendance is required at every class period to take these quizzes and exams. The syllabus clearly states necessary dates. Your lowest quiz will be dropped. This is provided to you to allow unforeseeable events preventing you from taking a quiz.

Policy on making up exams and quizzes: No make-up exams are given unless there is a documented medical emergency with written proof. Being late for an exam or quiz will not entitle you to extra time. Please make sure you arrange your schedules to be here on time for the exams. If you miss a short quiz because you are late for class, or absent you will not be given another to make up.

Policy on attendance: Attendance to each class period is not mandatory. But there are no make up quizzes or exams. The information reviewed in class may not be found anywhere else. So it is strongly advised that you attend every class period.

Group Discussions: If you need to speak to your classmate on an issue not pertaining to the lecture please leave the room. If it pertains to the class please ask me or address the entire class. Please keep your behavior in class professional.

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

Drop/Add: Students may drop and add classes only according to University Policy. Neither the department nor I are able to add or drop students from the course. You must go through the online system to add or drop. Students must fill out appropriate forms and meet University deadlines to drop or add classes.

Special Needs/Accommodations: Any student who does not understand or accept the contents or terms of this syllabus or has a disability or condition that compromises his or her ability to complete course requirements must notify the instructor in writing within one week of receiving this syllabus. They must then seek assistance from Disabled Students Services and/or the Learning.

TENTATIVE Course Schedule/Outline:

<i>Unit</i>	<i>Lectures</i>	<i>Readings</i>	<i>Activities</i>
Unit 1 Week of Jan 20	What is an Audiologist?, Quiz 1 Movie Discussion Assignment 1	Audiometric Threshold; Measure of Intensity; Salaries; Sound has a huge impact; Intro Text chapter 1; AAA Brochure; HH_FALL_2014 pgs 17-18 & 20-21 Decibel Fill in the Blank (Assignment 2)	Professional Resources - Ethics and Scope of Practice, Abbreviations/ Prefixes/ Suffixes
Unit 2 Week of Jan 27	Sound Waves and Their Properties; Case History; Principles of Hearing Testing; Quiz 2 Assignment 2 Due	Infection Control Why Me?; Reading 1 & 2; Intro Text Chapter 2 & 7 pgs 150-165; Acoustic Reflex; Acoustic Impedance; Evaluation of the Child Patient; Nozza	Professional Resources – Infection Control Guide Clinical Demonstrations – Sound Waveforms
Unit 3 Week of Feb 3	Anatomy of the External Ear; Disorders of the External Ear; Assignment 3 Due	Courtois 1, 2, 3; Ear Wax Gene; External Auditory Canal; Keratosis Obturans; Otoscopic Conditions; Intro Text Chapter 3 & 9	Learning Supplements – Ear Pathology & Anatomical Diagrams – External Ear; Clinical Demonstrations – Sound Waveforms
Unit 4 Week of Feb 10	The Box; The Ossicular Chain; Muscles and Functions; Transformer Action; Quiz 3	Intro Text Chapter 10	Learning Supplements – Anatomical Diagrams – Middle Ear; Clinical Demonstrations - Myringotomy
Unit 5 Week of 17	Disorders of the Middle Ear ; The Inner Ear; Quiz 4	Tympanometry Practice	Learning Supplements – Anatomical Diagrams – Inner Ear
Unit 6 Week of Feb 24	Midterm 1 The Cochlea; Cochlear Hearing Loss	Intro Text Chapter 11	
Unit 7 Week of March 2	Otoscopy, Immittance, Tympanometry &	Intro Chapter 4 & 5; Audiogram; Hall; Thornton and Raffin; word	Professional Resources – Clinical Forms – Case Histories; Clinical

	Acoustic Reflex; Pure Tone Audiometry; Quiz 5	lists Audiometric Interpretation Chapter 1, 2 & 3; Assignment 3	Demonstration – Otoscope Examinations, Video Oscope, Tuning Fork Tests Learning Supplements – Audiograms & Simulated Hearing Loss; Professional Resources – Hearing Test Instructions; Clinical Demonstrations – Air Conduction Receiver Placement, Air Conduction Testing
Unit 8 Week of March 9	Bone Conduction; Speech Audiometry; Sign up for Hearing Test Observations; Assignment 3 Due Quiz 6	Intro to Audiology pg 93-99 & Chapter 5; Audiometric Interpretation Chapter 4 & 5 Assignment 4	Clinical Demonstrations – Bone Conduction Receiver Placement, Speech Recognition Threshold Testing; Word Recognition Testing
Week of March 16	No Lecture	Air Conduction Practice. Assignment 5	
Unit 9 Week of March 23	Midterm 2 Hearing Test Observation Assignment 5 Due	Hearing Test Observation	Hearing Test Observation
Week of March 30	Spring Break		
Week of April 6	Hearing Test Observation	Hearing Test Observation	Hearing Test Observation
Unit 10 Week of April 13	Nerves; Auditory Pathway; Neural Hearing Loss; Quiz 7 Assignment 4 Due	Intro Text Chapter 12, Assignment 6	
Unit 11 Week of April 20	Hearing; The Vestibular System; Vestibular Disorders Quiz 8	Theories of Hearing 1 & 2;	
Unit 12 Week of April 27	Midterm 3 Audiometric Interpretation; Assignment 6 Due	Intro to Audiology pg 165-185; Hearing Evaluation; Audiometric Interpretation; Otosclerosis; Why does the Carhardt notch?; Sample Reports; Lecture 1,2,3 Audiometric Interpretation Chapter 6 Assignment 7	Learning Supplements – Audiograms; Clinical Demonstrations – Auditory Brainstem Response, Otoacoustic Emissions
Unit 13 Week of May 4	Non-Behavioral Testing; Report Writing;	Retrocochlear Testing; Intro Text Chapter 13, 14, & 15; Criteria for a Recommended	Professional Resources – Patient Handouts – All; Manual Alphabet; Clinical

	Hearing Conservation; School Hearing Screenings Assignment 7 Due Quiz 9	Standard; Noise 01; HPD; Unit 3 Lecture; Audmanschool; CFR; NIOSH 2&3	Demonstrations – Hearing Protection
Week of May 11	Midterm 4 Audiogram and Report Due		

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, may be reported to the office 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.

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/casemanager/>

