



California State University, Sacramento

Department of Communication Sciences and Disorders

UNDERGRADUATE SYLLABUS & COURSE OUTLINE

Semester/Year: Summer 2021	Course: CSAD 130 Introduction to Audiology	Section: 50
Meeting Days: Tuesday/Wednesday/Thursday	Meeting Times: 10:00-11:30am	Location: Zoom
Instructor: Laura Gaeta, Ph.D.	Email: l.gaeta@csus.edu	Phone: 916-278-4701 (voicemail only)
Office Location: Folsom Hall 2316	Office Hours/Appointments: Monday 11:00-12:30; Tuesday 12:00-1:30pm; or by appointment	

Catalogue Course Description:

CSAD 130. Introduction to Audiology.

3 Units

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

Term Typically Offered: Summer

Introduction to the field of audiology. Covers the principles of sound, the anatomy and physiology of the auditory system, audiometry, physiological measures of auditory function, disorders of the auditory system, sound, and various assessment approaches.

Place of Course in Program:

This course is an introduction to the field of audiology. The course reviews the principles of sound, the anatomy and physiology of the auditory system, audiometry and interpretation, and other scope of practice areas for audiologists.

The primary objective of this course is to provide students with an understanding of the field of audiology and give them opportunities to understand the principles and methods of auditory anatomy and physiology, and hearing assessment. Students should understand the basic principles of the hearing and balance mechanisms, testing procedures, interpretation of audiometric test results, disorders and related management, and the scope of practice of audiologists.

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>	Y
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>	Y
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>	Y
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>	Y
Integrative Learning**, Including: <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 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:

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.
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.

Course Learning Outcome	Components Indicating Competence	Grades Received
1	Exams Quizzes	
2	Exams Quizzes	
3	Exams Worksheets Labs	
4	Labs	
5	Worksheets Exams Labs Quizzes	
6	Exams Quizzes	
7	Exams Quizzes	

Textbooks and Materials:

Title: *Introduction to Audiology*

Authors: F. Martin & J. Clark

Edition: 13th

Note: Other selected articles, videos, and papers will be available on Canvas. Students are responsible for assigned readings, whether discussed in class or not. All reading assignments are for the date listed on the course schedule, not the following class period.

Online Resources:

<https://canvas.csus.edu/>

Course Requirements/Components:

Course Format

Lecture

In-class activities

Points for in-class activities can be earned up to 15 points. The course instructor will determine the allocation of these points. Students are expected to actively participate in class discussions and are required to have read the assigned material prior to class meetings. Some course components (e.g., in-class activities, discussions, etc.) require work in pairs or small groups. Students should be respectful and demonstrate professional behavior during class and in breakout rooms.

Class assignments

Course grades will be based on six quizzes, three exams, in-class activities, three case study worksheets, a virtual audiometry assignment, five lab assignments, and a presentation. Students are expected to work independently on assignments. Group/pair assignments will be clearly identified, but the work submitted must be the student's independent work unless otherwise noted. 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 number of points). If more than three days have elapsed from the original due date, students will receive 0 points for the assignment. Note that some in-class activities will be submitted for Dr. Gaeta to review, but not all submitted activities will be graded. Rubrics for all graded class assignments will be available on Canvas. 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.

Examinations

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 Dr. Gaeta 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 Dr. Gaeta about rescheduling the exam, providing documentation for missing the exam, and scheduling a make-up exam as deemed appropriate by the instructor. If a student is given permission to miss an exam, a make-up exam may be administered during the week prior to the final exam or at another time arranged between the instructor and the student. The make-up exam may be formatted differently from the original exam at the discretion of the course instructor. 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).

Test arrival/start

The exam period is 75 minutes. All exams are administered through Canvas. Format of questions on the exams includes, but is not limited to: multiple choice, fill-in-the-blank, short answer, labeling, drawing, and matching. Non-graphing calculators (e.g., TI-83/TI-84) may be used, if required, for test items. Cell phone calculators cannot be used for any graded class assignments or exams unless otherwise noted. Textbooks, study materials, and notes are not permitted for use during the exam. Students may take the exam at any time during the testing period, but the exam must be completed by the deadline. Exams that are in progress by the deadline will be submitted as is, so students must ensure that they have sufficient time to complete the exam.

Quizzes

Quizzes will be available on Canvas one week prior to the due date. Quizzes are based on the assigned reading and not on the information presented in lecture. There are six quizzes to complete. Students will have 30 minutes to take the quiz; late submissions will receive a 0. Make-up quizzes will not be given.

Labs

There are five lab assignments in this class. The labs are designed to give practical experience for the concepts covered in class. Rubrics for scoring each assignment are provided on Canvas. Students should review their work using the available rubrics before submitting their assignments.

Virtual audiometry assignment

The virtual audiometry assignment provides students with experience using a simulated audiometer and patient. Students will use a virtual audiometer to complete this assignment. The assignment and its rubric are available on Canvas.

Case study worksheets

There are three case study worksheets for this class. The worksheets are intended to provide opportunities to connect multiple topic areas to clinical cases and will consist of a case and/or audiogram with a set of questions. The worksheets should be completed individually. See Canvas for due dates and rubrics.

Grading Policy:

All rubrics for associated assignments will be available on Canvas.

Source	Points	% of Grade
Exam I	25	14%
Exam II	25	14%
Exam III	25	14%
Labs	25 (5 points each x 5)	14%
Virtual audiometry assignment	10	6%
Case studies	15 (5 points each x 3)	8%
Quizzes	30 (5 points each x 6)	17%
In-class activities	15	8%
Presentation	15	8%
Total	180	

Letter grades are assigned according to the following scores:

Points	%	Letter
	94-100	A
	90-93	A-
	87-89	B+
	83-86	B
	80-82	B-
	77-79	C+
	73-76	C
	70-72	C-
	67-69	D+
	63-66	D
	60-62	D-
	< 60	F

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%). Values beyond the second digit will not be considered.

Course Policies/Procedures:

Class Participation and Attendance

Attendance in this class is not required, but it is necessary that students attend for lectures, in-class activities, and other graded assignments. Report absences to Dr. Gaeta by email prior to the scheduled class meeting. Points for in-class activities that are graded may be excused with documentation (instructor approval). An unexcused absence will result in 0 points for that day's activity.

Students should join class on time and remain for the duration of the class. Students who are late are responsible for checking with the instructor about missed material during class and obtaining the missed notes from a classmate. When late to class, students are expected to join on mute so as not to disrupt the class.

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. Students who miss class must obtain the assignments and missed work from the course website or from a classmate. Course materials will be available on Canvas and/or in class. Recording of lecture is not permitted unless the student has received prior approval (with appropriate documentation) from the instructor or through accommodations.

Tentative Course Schedule/Outline:

Date	Topic/Class Content	Readings	Assignment/Activities due
06/01	First day of class Course introduction		
06/02	Profession of audiology	Pages 4-16	
06/03	Nature of sound: Intensity and loudness Lab 1: Sound intensity	Pages 17-40	
06/08	Nature of sound: Frequency and pitch	Pages 17-40	Quiz 1 due
06/09	Anatomy and physiology of the outer ear Lab 2: Otoscopy lab	Pages 224-230	Sound lab due (Lab #1)
06/10	Anatomy and physiology of the middle ear	Pages 245-251	

06/15	Anatomy and physiology of the inner ear and central auditory nervous system Lab 3: Anatomy lab	Pages 279-290; 322-326	Quiz 2 due Otoscopy lab due (Lab #2)
06/16	Review for Exam I		
06/17	Exam I – no class Exam due 10:00am PT on 06/18		Anatomy lab due (Lab #3)
06/22	How we hear: Thresholds and the audiogram	Pages 75-92	
06/23	Types of hearing impairment and impact of hearing loss Lab 4: Audiogram lab #1	Pages 58-63	
06/24	Sound measurement-audiometers and hearing screening	Pages 40-52	Audiogram lab 1 due (Lab #4)
06/29	Hearing assessment- Pure-tone air conduction testing Hearing assessment- Pure-tone bone conduction testing Lab 5: Audiogram lab #2	Pages 63-100	
06/30	Masking Hearing assessment- Speech audiometry, speech threshold testing, speech recognition	Pages 133-159 Pages 101-132	Audiogram lab 2 due (Lab #5)
07/01	Audiometry lab day (online audiometry simulator)		Quiz 3 due
07/06	<i>Guest lecture: Rachael Krager, Au.D.</i> Hearing assessment- other behavioral and objective measures, immittance	Pages 160-177	Quiz 4 due
07/07	<i>Guest lecture: Kimberly Smith, Au.D.</i> Physiological tests- auditory evoked response and otoacoustic emissions Review for Exam II	Pages 177-193	Virtual audiometry assignment due
07/08	Exam II – no class Exam due 10:00am PT on 07/09		
07/13	Case study worksheet #1		
07/14	Disorders/Treatment of the outer ear	Pages 230-244	Quiz 5 due
07/15	Disorders/Treatment of the middle ear	Pages 252-278	Case study worksheet #1 due (adult HL)
07/20	Disorders/Treatment of the inner ear and auditory central nervous system; auditory processing disorders	Pages 290-321 Pages 325-350	
07/21	<i>Guest lecture: Suzanne May, Au.D.</i> Anatomy and physiology of the vestibular system; disorders of the vestibular system; vestibular assessment Tinnitus	Pages 280-282 Pages 372-378	Quiz 6 due Case study worksheet #2 due (aging)
07/22	<i>Guest lecture: Elizabeth Barragan, Au.D.</i> Newborn/infant screening and evaluation Toddlers; school-aged children evaluation Malingers and functional hearing loss	Pages 195-221	
07/27	Toddlers; school-aged children evaluation Malingers and functional hearing loss (continued) Review for Exam III		

07/28	Presentations		Case study worksheet #3 due (infant NHS)
07/29	Exam III – no class Exam III due 11:59pm PT on 07/29		

Note: All dates and topics listed are subject to change at the discretion of the course instructor. In the event of a change, you will be notified prior to class.

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. 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.

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/>

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.