



California State University, Sacramento
Department of Communication Sciences and Disorders
Doctor of Audiology (Au.D.)
SYLLABUS & COURSE OUTLINE

Semester/Year: Spring 2026	Course: CSAD 624	Section: 01
Meeting Days: Wednesdays	Meeting Times: 6:00 – 6:50 PM	Location: Folsom 2204
Instructor: Leigh Ann Higa, PhD, MS, CGC (she/her)		Email: leighann.higa@csus.edu / Ph: 808-382-0147
Office Hours: Wed 7:00 PM – 7:30 PM and by appt		Location: Folsom 2000 and/or Zoom

Catalogue Course Description:

CSAD 624 Genetics for Audiology.

1 Unit

Prerequisite(s): Admission to Doctor of Audiology program; [CSAD 611](#), [CSAD 612](#), [CSAD 613](#), [CSAD 614](#).

Introduction to genetics, inheritance, and causes of hearing loss and balance disorders.

Sacramento State Graduate Learning Goals (GLG)

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

Expected Learning Outcomes (ELO)

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.

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. Describe the basic concepts of genetics	Worksheets, assignments, projects	
2. Construct a pedigree chart	Worksheets, assignments, projects	
3. Describe the Mendelian inheritance	Worksheets, assignments, projects	
4. Describe the chromosomal basis of inheritance	Worksheets, assignments, projects	
5. Distinguish between different mechanisms of transmission	Worksheets, assignments, projects	
6. Differentiate between mitosis and meiosis	Worksheets, assignments, projects	
7. Differentiate between DNA and RNA and their respective transcriptions	Worksheets, assignments, projects	
8. Explain structural mutations and their relation to inheritance	Worksheets, assignments, projects	
9. Discuss ethical issues and controversies with genetic testing	Worksheets, assignments, projects	
10. List syndromic and non-syndromic causes of hearing loss and deafness	Worksheets, assignments, projects	

Textbooks, Materials, and Online Resources:

Required:

Jones, S.M. and Jones, T.A. (2011). Genetics, Embryology, and Development of Auditory and Vestibular Systems. Plural Publishing. ISBN-13: 978-1-59756-201-0. ISBN-10: 1-59756-201-7

The textbook is available online through the university library and can be read online, or downloaded (as either an entire book or PDF chapter with maximum of 125 pages per day).

Online Resources:

Canvas

Additional links to required readings and videos can be found in Canvas.

Course Requirements/Components:

Course Format: Hybrid, in person and Zoom lecture and class activities.

Class Participation: 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. Readings are required and it is expected that they will be read prior to the class in which they will be discussed. The class participation grade will be calculated by students' ability to explain reading material when asked as well as by students' meaningful, thoughtful contributions to further class discussion with comments and/or questions.

Class Attendance: Classroom attendance is necessary for this course. No more than three unexcused absences are allowed. Students are expected to arrive on time as class begins at 6:00 PM. If a student becomes ill, with written proof, adjustments will be made so as not to penalize the student.

Class Assignments: Course grades will be based on class participation, in-class and take-home assignments, worksheets, assignments and projects (pedigree project, patient resource project). All written assignments will be submitted in APA format, points will be removed for formatting errors. All assignments should be submitted in Word or Powerpoint.

Assignments must be submitted via Canvas, and are due at 6:00 pm on the due date. 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.

Class Participation: Students will be called upon to keep everyone attentive and to see who has completed the reading. Group work and short presentations on reading materials will also periodically be assigned during class. Being able to express ideas and speak in a group are important skills that will serve you well throughout your career. Behaviors that count toward participation: asking questions, answering questions, making comments, and constructively disagreeing with something in the text or said in class by me or another student. Value-added behaviors that will earn you extra points: comments that relate to material in the text, sharing relevant experiences, and responding to something another student says (including answering a question they ask).

Worksheets: The goal of these worksheets is to test your knowledge. Worksheets will be equally weighted and based on lectures, in class activities and reading material (including reading material that is not discussed during lecture). Worksheets will be published on Canvas, and you will have one week to complete them. Worksheets may consist of true/false, multiple choice, matching, and short answer questions. Please note that you remain individually responsible for being aware of your worksheet due dates and times posted in the course syllabus.

Pedigree Project: See rubric in Canvas for further details. This project will be submitted as a hard copy to the instructor by 6:00 pm on the due date.

Patient Resource: Each student team will be responsible for creating a patient resource on a genetic condition causing hearing loss. See the assignment in Canvas for a full description.

Recording: To facilitate students' learning (practice in note-taking) and out of respect for fellow classmates (to allow all students to feel comfortable actively participating in class discussion), students are not permitted to audio or video record lectures. If students require an accommodation and additional support in note-taking, please see the instructor.

Grading Policy:

CSUS Grading Policy

The CSUS Grading Policy (Policy# 11476953) can be found at:

<https://sacramentostate.policystat.com/policy/11476953/latest>

Source	Points	% of Grade
Class Participation (15)	75	24.6%
Assignments	30	9.8%
Worksheets (3)	45	14.8%
Practice pedigree	15	4.9%
Pedigree project	70	23%
Patient Resource Group Project	70	23%
Total Points Available	305	

Grading – Letter grades are assigned according to the following scores:

Letter	%
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%

Attendance Policy

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.

More than two unexcused absences will lead to initiation of an APIP. Beginning with the 4th unexcused absence, 5% will be deducted from your final grade.

Please see the following document regarding travel guidelines: <https://www.csus.edu/college/health-human-services/communication-sciences-disorders/internal/documents/policy/csad-student-travel-policy.pdf>

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.

I will respond to an email within 6 hours on a weekday (not between the hours of 5:00 PM and 6:00 AM) and 48 hours on a weekend (I will not respond during University or Federally-recognized holidays). Please note that I will be working remotely from Hawaii between Mon, Feb 9th – Fri, Mar 27 and will be 2 or 3 hours behind Pacific Time. In some cases, I may respond to your email with an invitation to continue the conversation in person during office hours or via a phone/Zoom call.

Course Policies/Procedures:

Late Work

Late work will be accepted after the due date, but each day late will result in a 20% deduction in your total grade on that assignment unless there is a documented emergency for which you have written proof, that occurred the day the work was due. Any missed assignments due to the documented emergency will be due the day the student is able to return to class. It is incumbent upon the student to be certain that technological difficulties do not cause deadlines to be missed.

Course Evaluations

This class was developed and reworked over several months and is continually modified with the aim to promote student learning. At the completion of the course, each student is expected to provide constructive feedback 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. A Qualtrics Survey link has also been posted in Canvas so that students have the ability to give anonymous feedback regarding the course. Students are encouraged to use this modality as a direct and appropriate means of voicing concerns.

Tentative Course Schedule/Outline:

Wk	Date	Topic/Class Content	Readings	Print	Online
1	1/28/26	Welcome & History of Genetics			
2	2/4/26	Intro to Biology	Text Ch1 Read one of two NYT articles on Canvas Text Ch2	Ch 1 (p.1-5 (incl Sens Processing) Ch2 (p.26-39. Skip Hedgehog-Wnt. P.42 - end)	Ch1 (p.1-5 (incl Sens Processing)) Ch2 (p.1-14, skip Hedgehog-Wnt. P. 18-end)
3	2/11/26	Basic Genetics DNA, RNA, Protein <u>*Zoom only*</u>	Text Ch3	Ch3 (p.53-60, up to Cell Cycle. P.65-67 (DNA to RNA to Protein). P.71-77 (Genetic Disorders, up to Mendelian Inheritance Patterns)	Ch3 (p1-8, up to Cell Cycle. P.14-16 (DNA to RNA to Protein). P.21-27 (Genetic Disorders, up to Mendelian Inheritance Patterns)
4	2/18/26	Basic Genetics DNA, RNA, Protein cont'd <u>*Zoom only*</u>	Text Ch3	--	--
5	2/25/26	Mitosis and Meiosis Inheritance & Pedigrees Worksheet 1 Due *Zoom only*	Text Ch3	Ch3 (p.60-65, Cell Cycle – up to and incl Gene Nomenclature). P.77-end.	Ch3 (p.8-14 Cell Cycle – up to and incl Gene Nomenclature). P.27-end.
6	3/4/26	Inheritance & Pedigrees *Zoom only*	Text Ch3	Ch3 and Bennett 2019 article on Canvas	Ch3 and Bennett 2019 article on Canvas
7	3/11/26	Basics of Embryology *Zoom only*	Text Ch4	Exact pages TBA	P. 103-120 up to and including Somites. P. 123-124, Table 4.2. P. 137, beginning with "Cranial Placodes" - end
8	3/18/26	Outer and Middle Ear Practice Pedigree Due *Zoom only*	Text Ch5	Entire chapter	Entire chapter
9	3/25/26	SPRING RECESS			
10	4/1/26	Embryology: Inner Ear Worksheet 2 Due	Text Ch6	P.153 -160 (Formation of the Otic Placode), up to and incl. "The dorsal-ventral..." (don't focus on Shh, Wnt, FGF) P.162-165: Formation of Prosensory Patches	Pg 2 - 5 Formation of the Otic Placode and Otic Vesicle, up to and including "The dorsal-ventral boundary ..." (don't focus on Shh, Wnt, FGF). Pg 8 - 11: Formation of Prosensory Patches

				up to last paragraph "Exiting cell cycle..." P.165-167, Elongation and Reorganization of the Cochlear ZNP. P.175- 182 Cochlear Stereociliary Bundles up to Vestibular Afferent Innervation.	up to last paragraph "Exiting cell cycle..." Pg 11 - 13.: Elongation and Reorganization of the Cochlear ZNP. Pg 22 - 29 Cochlear Stereociliary Bundles - up to Vestibular Afferent Innervation.
11	4/8/26	Embryology: Inner Ear PEDIGREE PROJECT DUE	Ch. 6	--	--
12	4/15/26	Disorders I	TBD		
13	4/22/26	Disorders II	TBD		
14	4/29/26	Disorders III Worksheet 3 Due	TBD		
15	5/6/26	Genetics Evaluation and Testing			
16	5/13/25	PATIENT RESOURCE DUE Patient resource – peer review and discussion Class evaluations			
17	5/20/26	No class – FINALS WEEK			

Hornet Honor Code

<https://www.csus.edu/student-affairs/internal/documents/hornet-honor-code.pdf>

As proud members and representatives of the Sacramento State Hornet community, we commit ourselves to actively promoting honesty, integrity, respect, and care for every person, ensuring a welcoming campus environment, and striving to help every member of our Hornet family feel a strong sense of belonging.

As Hornets, we will:

- Promote an inclusive campus and community
- Listen and respect each other's thoughts, interests, and views Value diversity and learn from one another
- Engage daily with mutual trust, care, and integrity
- Support a culture of honor and adhere to campus policies for honesty, ethics, and conduct
- Be proud to be Sac State Hornets.

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.

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:

<https://sacramentostate.policystat.com/policy/11300038/latest>

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.

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 (7th edition.) 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. 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 Disability Access Center (DAC), 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 DAC and meet with a DAC counselor to request special accommodation before classes start. **Sacramento State Disability Access Center (DAC)** 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, DAC provides consultation and serves as the information resource on disability related issues to the campus community. DAC 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 dac@csus.edu Additional information can be found on the DAC website: <https://www.csus.edu/student-affairs/centers-programs/disability-access-center/>

Crisis Assistance & Resource Education Support (CARES) 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 Crisis Assistance & Resource Education Support (CARES) website to learn more about your options and resources available. <https://www.csus.edu/student-affairs/crisis-assistance-resource-education-support/>

Title IX

The University requires faculty and staff to report any personal disclosures of sexual misconduct including rape, dating/domestic violence and stalking to the Title IX Coordinator. Students who do not wish to report their experience to me or the Title IX Coordinator may speak to someone confidentially by contacting Student Health and Counseling Services.

Sac State is committed to supporting students and fostering a campus environment free of sexual misconduct and gender-based discrimination. If a student chooses to disclose to a faculty or staff member an experience related to sexual misconduct which includes rape, relationship violence, or stalking, all faculty and staff are obligated to report this disclosure to the university's Title IX Coordinator. Sac State's Title IX Coordinator is Mary Lee Vance. Please email equalopportunity@csus.edu or (916) 278-5770. Upon receipt of the report, the Title IX Coordinator will

contact you to inform you of your rights and options as a survivor and connect you with support resources, including resolution options for holding accountable the person who harmed you. Students who elect not to discuss their experience with the Title IX Coordinator can speak confidentially to the following confidential resources:

Student Health & Counseling Services at The WELL On Campus

Phone Number: 916-278-6461

Website: <https://www.csus.edu/student-life/health-counseling/counseling/>

Campus Confidential Advocate Email: weave@csus.edu

On Campus Phone Number: 916-278-5850 (during business hours)

WEAVE 24/7 Hotline: 916-920-2952

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/testing/>

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

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

Sacramento State Disability Access Center (DAC): <https://www.csus.edu/student-affairs/centers-programs/disability-access-center/>

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

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

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>

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

ASHA Knowledge And Skills Acquisition (KASA) tracking for courses and clinics in the AuD program can be found online in the student's CALIPSO account.
