

SAN JOSE STATE UNIVERSITY
EDAUD 170
AUDIOLOGY 1
Spring 2021
Dr. June McCullough

Course and Contact Information

Instructor:	Dr. June McCullough
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Contact phone:	(408) 569-2251 (cell)
Class meeting times:	W, 1:00 – 2:15 PM (approximate end time)
Office Hours:	Wednesday after class or by appointment (zoom or cell)

The mission of San Jose State University:

In collaboration with nearby industries and communities, SJSU faculty and staff are dedicated to achieving the university's mission as a responsive institution of the state of California: To enrich the lives of its students, to transmit knowledge to its students along with the necessary skills for applying it in the service of our society, and to expand the base of knowledge through research and scholarship.

SJSU Student Learning Outcomes:

San Jose State University graduates will have developed:

- Specialized Knowledge
 - Depth of knowledge required for a degree, as identified by its program learning outcomes.
- Broad Integrative Knowledge
 - Mastery in each step of an investigative, creative or practical project (e.g. brainstorming, planning, formulating hypotheses or complex questions, designing, creating, completing, and communicating).
 - An understanding of the implications of results or findings from a particular work in a societal context (e.g. social or economic implications of a scientific finding).

- Students graduating with a baccalaureate degree will have demonstrated an understanding of critical components of broad academic areas, the arts, humanities, social sciences, and sciences and their integration.
- Intellectual Skills
 - Fluency in the use of specific theories, tools, technology and graphical representation.
 - Skills and abilities necessary for life-long learning: critical and creative thinking, effective communication, conscientious information gathering and processing, mastery of quantitative methodologies, and the ability to engage effectively in collaborative activities.
- Applied Knowledge
 - The ability to integrate theory, practice, and problem solving to address practical issues.
 - The ability to apply their knowledge and skills to new settings or in addressing complex problems.
 - The ability to work productively as individuals and in groups
- Social and Global Responsibilities
 - The ability to act intentionally and ethically to address a global or local problem in an informed manner with a multicultural and historical perspective and a clear understanding of societal and civic responsibilities.
 - Diverse and global perspectives through engagement with the multidimensional SJSU community.

Character and Commitment

San José State University is a major, comprehensive public university located in the center of San José and in the heart of Silicon Valley. SJSU is the oldest state university in California. Its distinctive character has been forged by its long history, by its location, and by its vision -- a blend of the old and the new, of the traditional and the innovative. Among its most prized traditions is an uncompromising commitment to offer access to higher education to all persons who meet the criteria for admission, yielding a stimulating mix of age groups, cultures, and economic backgrounds for teaching, learning and research. SJSU takes pride in and is firmly committed to teaching and learning, with a faculty that is active in scholarship, research, technological innovation, community service and the arts.

Mission of the Lurie College of Education, SJSU:

The mission... is to prepare educators who have the knowledge, skills, dispositions and ethics that ensure equity and excellence for all students in a culturally diverse, technologically complex, global community.

Mission of the Department of Communicative Disorders and Sciences, SJSU:

The mission of CD&S is to provide a high quality program for speech-language pathologists to meet the communicative needs of our increasingly diverse multilingual/multicultural population. The program follows an academic and clinical

curriculum, based on a sound theoretical framework and research findings that promote competent practitioners who participate in lifelong learning experiences. The program is enhanced through faculty, academic, and clinical expertise, trans-disciplinary and family collaboration and technological advancements in assessment and intervention.

CCTC Standards for Speech-Language Pathologist Credential:

Standard 22 Speech and Language Disorders.

Each candidate demonstrates understanding of speech, language and hearing disorders.

The candidate demonstrates understanding of speech, language, and hearing disorders, including but not limited to disorders of language, articulation, fluency, voice, and hearing.

Standard 23 Evaluation of Speech and Language Disorders

Each candidate demonstrates proficiency in screening for and evaluation of speech and language disorders and in screening for hearing disorders.

The candidate exhibits knowledge of hearing screening procedures.

Standard 24 Management of Speech and Language Disorders

Each candidate demonstrates proficiency in the management of speech, language, and hearing disorders.

The candidate demonstrates knowledge of management procedures, including remediation principles used in habilitation and rehabilitation for children and adults with various disorders of communication in their primary languages.

EDAU 170: Audiology 1

- 1. Course Description:** This course focuses on principles and procedures for diagnosis of hearing loss. Topics include screening versus diagnosis; calibration of audiometric equipment; case history; pure tone air conduction and bone conduction audiometrics; overview of masking; speech audiometry; acoustic immittance; and otoacoustic emissions. The course will culminate in audiometric interpretation and differential diagnosis of common conductive, sensorineural, and retrocochlear pathologies. Prerequisites: EDAU 115 or consent of instructor.
- 2. Course Format:** This course will be taught in an online "hybrid" format, meaning, some portion of the class will take place synchronously (i.e., we will meet together as a group at the same time online), and some portion asynchronously (where you will work at your own pace). The synchronous

portion of the course will take place on Wednesdays from 1:00 PM until about 2:15 PM (we may run over a few minutes). I will make every effort to record each class in case someone has a technology malfunction, but students are expected to be present for the synchronous portion of the class. Student presence/participation will improve the learning environment for everyone.

3. Course Success

Success in this course is based on the expectation that students will spend, for each unit of credit, a minimum of 45 hours over the length of the course (normally 3 hours per unit per week with 1 of the hours used for lecture) for instruction or preparation/studying or course related activities including but not limited to internships, labs, clinical practica. Other course structures will have equivalent workload expectations as described in the syllabus.

4. Student Learning Objectives:

Students who complete this course will:

1. Describe the evidence-based screening and diagnostic test protocols used by audiologists for the purpose of evaluating hearing loss, including case history, otoscopy, pure tone thresholds, speech recognition thresholds, word recognition performance, tympanometry, acoustic reflexes, and otoacoustic emissions;
2. Describe common pathologies that may arise in the auditory system and differentiate the pathologies based on audiometric results;
3. Compare and contrast the recommendations for medical or audiological follow up based upon audiometric test results; and
4. Describe the scope of practice for speech-language pathologists and audiologists as regards to screening for, and diagnosing, hearing loss.

5. Textbook:

Required: Introduction to Audiology Today (2014); James W. Hall III. Pearson Education, Inc. Available to rent as an e-Text for \$34.99 through Pearson publishing with this link:

<https://www.pearson.com/store/p/introduction-to-audiology-today/P100000494388/9780133347890>

Students may also rent this book through Amazon for \$29.99. Note: Pearson told me that they actually show the book as \$34.99 on their product page, but it reverts

to \$29.99 in the cart. Note that Pearson will help you with any issues if you buy through them; if you buy through Amazon, you'll have to work with Amazon if there are any issues.

5. Requirements

This class is laid out as a series of modules. Each module builds on the previous one(s). In other words, students will continuously add new information about a variety of audiological tests (and disorders) so as to culminate in the ability to synthesize all of the tests to correctly diagnose hearing loss. In order to obtain the knowledge and skills required to diagnose hearing loss, students will participate in a variety of activities, including:

1. Synchronous course lectures:
This portion of the class is the “traditional” lecture time where the instructor will discuss the “Big Ideas” related to the weekly module topic. Students should attend and are encouraged to ask questions, either during the class time or after class. During each synchronous class period, at some point, a short, 2-question poll will be taken. Each of the poll questions will count as 2 points towards the final grade.

Total poll points available: 20.

2. Readings: Each week, students will be assigned readings from the textbook (see course schedule). Following the completion of the reading assignments, students will take a “reading mastery quiz” that will consist of 5 multiple choice-type questions. Quizzes may be taken twice. One quiz may be dropped over the course of the semester, such that the maximum number of points available for the quizzes is 60.

**Total Quiz points available: 60
(13 quizzes for 5 points each – one can be dropped)**

3. Supplemental videos: Each week, the instructor will post a “supplemental video(s)” on Canvas that demonstrates or expands on some of the big ideas related to the topic of the week. Most of the videos are geared towards the practical (clinical) aspects of audiology. Student knowledge of the supplemental videos will be evaluated as part of the course exams (see #4 below).

Individual Project: Each student will pick ONE supplemental video during the course of the semester to comment on. When you watch a supplemental video that you really liked, spend some time thinking about it and then, record a video of yourself using Canvas Studio where you describe 1) what you

learned from the video, 2) how it ties together with other information you've learned about in class or read about in the text, and 3) how you think you might use this information in your career as a speech-language pathologist or audiologist. Your video should be about 2-5 minutes in length. When you are done, please caption the video and post it to the discussion board called, Individual Projects. This way, other students can see what you've learned so as to deepen their own understanding of the concepts, AND, we can all get to know you!

The individual project is worth **10 points**.

4. Complete three multiple choice exams as announced, during the course of the semester (approximately weeks 5, 10, and 15). The exams will cover material from the lectures and supplemental videos.

Exams: 20 points each; 60 points total

5. Group Project: Complete one group project regarding a specific hearing disorder (more details to be announced in class and posted in Canvas). In this assignment, each group of approximately 4 students will be assigned a specific hearing disorder and will write a description of the etiology/underlying pathology, symptoms, test results, diagnosis and recommendations for follow up. Students will present their group projects in the form of a 20-minute slide presentation during weeks 10 and 11 of the course. Each student in the group is required to participate in the presentation.

Group project: 15 points total

Total Points: 165

GRADING POLICY: The total points for each student will be calculated and the grades assigned according to the following percentages:

90-100% = A
80 – 89% = B
70 – 79% = C
60 – 69% = D
Less than 60% = F

Please keep up with the schedule. No make ups will be given unless there are compelling, extenuating circumstances.

7. Grievance Procedures:

Students dissatisfied with course policies should refer to grievance procedure policy on file in the CDS office (SH 115).

8. Academic Integrity:

“Your own commitment to learning, as evidenced by your enrollment at SJSU, and the University’s Academic Integrity Policy requires you to be honest in your academic course work. Faculty are required to report all infractions to the Office of Judicial Affairs. The policy on [academic integrity](http://sa.sjsu.edu/student_conduct) can be found at http://sa.sjsu.edu/student_conduct.

9. Americans with Disabilities Act:

“If you need course adaptations or accommodations because of a disability, or if you need special arrangements in case the building must be evacuated, please make an appointment with me as soon as possible, or see me during office hours. Presidential Directive 97-03 requires that students with disabilities register with DRC to establish a record of their disability.”

10. Other University Policies

Per University Policy S16-9, university-wide policy information relevant to all courses, will be available on Office of Graduate and Undergraduate Programs’ [Syllabus Information web page](http://www.sjsu.edu/gup/syllabusinfo/) at <http://www.sjsu.edu/gup/syllabusinfo/>”

11. Classroom Protocol

Students in this class are college juniors, and as such, are expected to take responsibility for attending class on time, completing work on time, and contributing to the learning environment during the synchronous and asynchronous portions of this class. That being said, there is a worldwide pandemic going on, and students' health and safety takes priority. Please let me know if you have any concerns related to your ability to access technology, attend class, keep on track as far as readings and assignments, etc., either now or at any point in the class. The university has many resources and I will point you to them as best as I can. I am flexible and here to help.

12. Course Schedule

Week	Date	Topics, Readings, Assignments, Deadlines
1	01/27/21	<p>Topics for Module 1:</p> <ul style="list-style-type: none"> • Review of Syllabus • Why test hearing? • Test battery approach for differential diagnosis; • Diagnosis vs. screening for hearing loss. <p>Assignments:</p> <ul style="list-style-type: none"> • Go to Module 1 – watch video and review key concepts • Read Chapter 4 pages 87- 102 • Take reading mastery Quiz #1 before next week’s class
	02/03/21	<p>Topic: Module 2:</p> <ul style="list-style-type: none"> • Calibration and listening checks • Case History • Otoscopy <p><u>Assignments:</u></p> <ul style="list-style-type: none"> • Go to Module 2 – watch video and review key concepts • Read Chapter 4 pages 102 – end • Take reading mastery quiz #2 before next week’s class
3	02/10/21	<p>Topic: Module 3: Pure tone air conduction thresholds: evidence-based procedures.</p> <p><u>Assignments:</u></p> <ul style="list-style-type: none"> • Go to Module 3 and watch video/review key concepts • Read Chapter 5 pages 112- 127 • Take reading mastery quiz #3 before the next week’s class
4	02/17/21	<p>Topic: Module 4: Pure tone bone conduction thresholds and intro to masking</p> <p><u>Assignments:</u></p> <ul style="list-style-type: none"> • Go to Module 4 and watch video/review key concepts • Read Chapter 5, pages 127 – 130 and Chapter 7, pages 180 – 183 • Take reading mastery quiz #4 before next week’s class

5	02/24/21	<p>Topic: Module 5: Audiometric interpretation</p> <p><u>Assignments:</u></p> <ul style="list-style-type: none"> • Go to Module 5 and watch video/review key concepts • Read Chapter 5, pages 130 – 146 • Take reading mastery quiz #5 before next week’s class
6	03/03/21	<p>Topic: Module 6: Speech tests</p> <p><u>Assignments:</u></p> <ul style="list-style-type: none"> • Go to Module 6 and watch video/review key concepts • Read Chapter 6 – all of it! • Take reading mastery quiz #6 before next week’s class
7	03/10/21	<p>Topic: Module 7: Tympanometry</p> <p><u>Assignments:</u></p> <ul style="list-style-type: none"> • Go to Module 7 and watch video/review key concepts • Read Chapter 8, pages 214-228 • Take reading mastery quiz #7 before next week’s class
8	03/17/21	<p>Topic: Module 8: Acoustic reflexes</p> <p><u>Assignment:</u></p> <ul style="list-style-type: none"> • Go to Module 8 and watch video/review key concepts • Read Chapter 8, pages 228-235 • Take reading mastery quiz #8 before next week’s class
9	03/24/21	<p>Topic: Module 9: Otoacoustic Emissions</p> <p><u>Assignment:</u></p> <ul style="list-style-type: none"> • Go to Module 9 and watch video/review key concepts • Read Chapter 8 pages 235-248 • Take reading mastery quiz #9 before next week’s class
10	04/07/21	<p>Topic: Module 10: Ear pathologies: Outer Ear and Middle Ear</p> <p><u>Assignment:</u></p> <ul style="list-style-type: none"> • Go to Module 10 and watch video/review key concepts • Read Chapter 11, pages 315 – 333. • Take reading mastery quiz #10 before next week’s class

11	04/14/21	<p>Topic: Module 11: Sensorineural Pathologies</p> <p><u>Assignment:</u></p> <ul style="list-style-type: none"> • Go to Module 11 and watch video/review key concepts • Read Chapter 11, pages 333-353 • Take reading mastery quiz #11 before next week's class
12	04/21/21	<p>Topic: Module 12: Acoustic Neuroma and Auditory Neuropathy Spectrum Disorders</p> <p><u>Assignment:</u></p> <ul style="list-style-type: none"> • Go to Module 12 and watch video/review key concepts • Read Chapter 12, all of it! • Take reading mastery quiz #12 before next week's class
13	04/28/21	<p>Topic: Module 13: Pseudohypacusis and Tinnitus</p> <p><u>Assignments:</u></p> <ul style="list-style-type: none"> • Go to Module 13 and watch video/review key concepts • Read Chapter 15, pages 448 – 455 and pages 456 - 465 • Take reading mastery quiz #13 before next week's class
14	05/05/21	<p>Topic: Putting it all together – Audiological Evaluation</p> <p><u>Assignments:</u></p> <ul style="list-style-type: none"> • Go to Module 14 and watch supplemental video/review key concepts • Individual project due (if not done before today's date) • No additional readings or quizzes!
15	05/12/21	<p>Topic: Putting it all together continued!</p> <p><u>Assignments:</u></p> <ul style="list-style-type: none"> • Go to Module 15 and watch supplemental video/review key concepts • No additional readings or quizzes!
	05/24/21	<p>FINAL EXAM DAY: Monday, May 24, 12:15</p> <p>Glass debrief-review scheduled</p>

