



California State University, Sacramento

Department of Communication Sciences and Disorders

UNDERGRADUATE SYLLABUS & COURSE OUTLINE

Semester/Year: Spring 2021	Course: CSAD 111 Anatomy and Physiology of the Speech Mechanism	Section: 50
Meeting Days: Tuesday/Thursday	Meeting Times: 8am-9:15am	Location: Web Online
Instructor: Tonia Davis, PhD, CCC-SLP	Email: tonia.davis@csus.edu	Phone: 916-278- 6679
Office Location: Folsom Hall 2316 Suite 2404D	Office Hours/Appointments: Tuesdays and Thursdays, 11am-12:30pm and by appointment	

Catalogue Course Description:

CSAD 111. Anatomy and Physiology of the Speech Mechanism.

3 Units

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

Corequisite(s): [CSAD 110](#)

Term Typically Offered: Fall only

Anatomical, physiological and neurological bases of speech. Covers development, normal structure and function. A general course in human anatomy is recommended as background.

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>	N
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>	N
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 111 SPECIFIC STUDENT LEARNING OUTCOMES:

In preparation for courses on disordered systems, students will be able to identify and describe the typical anatomy and physiology of the following systems:

1. Respiration
2. Phonation
3. Articulation
4. Mastication & Deglutition
5. Neuroanatomy
6. Audition

Course Learning Outcome	Components Indicating Competence	Grades Received
1	Exam 1 Labs 1, 2, 3	
2	Exam 2 Labs 4, 5	
3	Exam 3 Labs 6, 7	
4	Exam 3 Labs 6, 7	
5	Exam 4 Labs 8, 9	
6	Exam 5 Lab 10	

Textbooks and Materials:

Required Text

Seikel, J.A., Drumright, D.G., & King, D.W. (2016, 2019). *Anatomy and Physiology for Speech, Language, and Hearing*, 5th OR 6th edition, Plural Publishing.

Page numbers are provided for both the 5th and 6th edition. You do not need supplementary materials for the textbook through the Plural Publishing website. The 5th edition is available on course reserves in the library.

Canvas

All powerpoints, labs, study guides, and supplemental materials will be posted on Canvas.

<http://csus.instructure.com>

Human Biodigital Anatomical Modeling

We will also be using the following website in class and for some lab assignments:

<https://human.biodigital.com/index.html>

Some Mac users have said that the dissection tools do not work in the Safari browser – please check your browsers. This program is **free** – you do not need any of the purchasable add-ons.

Other Materials

For various lab activities, you will need to have: construction paper, scissors, glue/tape, pipe cleaners, and markers/crayons/coloring pencils, playdough or modeling clay. You may wish to use additional materials. Please feel free to be creative and use whatever you have at home. I have seen dried macaroni and beans used very effectively!

Grading Policy:

The *Anatomy and Physiology of the Speech and Hearing Mechanism* course includes two major components of assessment: examinations and laboratory activities. Please see the schedule for due dates for all assessment.

1. Five Examinations (100 points each)
2. Ten Labs (20 points each)

Letter grades are assigned according to the following scores:

	A 95-100%	A- 90-94%
B+ 88-89%	B 82-87%	B- 80-81%
C+ 78-79%	C 72-77%	C- 70-71%
D+ 68-69%	D 62-67%	D- 60-61%
	F Below 60%	

Course Policies/Procedures:

Attendance, Electronic Devices, Virtual Experience, Participation and Discussion

This course is a synchronous lecture course with asynchronous lab activities. Attendance in all lectures is required. The expectation for the course is that you attend each synchronous class session ready to participate, just as you would for an in-person course. It is expected that students keep their cameras on during each class session. There are no points attached to either attendance or webcam expectations.

Please make every attempt to avoid multi-tasking on your electronic devices during class (e.g., checking email). I realize that this is very difficult, but it is also very noticeable to the instructor and the other students when you are checking email or working on other assignments during class. Multi-tasking is not an effective strategy for adult learning.

All lectures will be audio-recorded with transcript provided (however, the transcript for anatomy is pretty terrible. Speech-to-text software does not understand anatomical terms!).

Exams & Makeups

Exams will be open for approximately 72 hours (see schedule). Once you begin the exam, you will have 75 minutes to complete the exam. Please make every effort to complete the exam during the scheduled window. Students who need to make up the exam will be required to provide documentation of need. Students who are eligible for extended time on exams should contact the instructor directly to provide documentation.

Late Assignments

All labs will be turned in via **Canvas**. Labs will be accepted late within 72 hours of the due date. Students will lose a letter grade for each day late (2 points/day). Labs will not be accepted more than 72 hours after the due date.

Office Hours Policies

Office hours will take place virtually this semester and are “drop in” utilizing the waiting room to protect student confidentiality. I prioritize undergraduate students for drop-in office hours. If you would like to have a private appointment, please schedule one with the instructor by email.

Technology Lending Library

Sacramento State has a technology lending library for students who do not have the necessary equipment to participate in class. This includes laptops, webcams, and hotspots. Technology can be picked up on campus or mailed to your home address (this takes a few weeks) and kept for the entire semester. If you have a technology need for class participation, please contact your instructor directly, as the instructor must submit a request on your behalf.

Extra Credit Opportunities

There will be opportunities for extra credit throughout the semester. Extra credit opportunities will be posted on Canvas. It is the responsibility of the student to follow through on extra credit opportunities. No late extra credit will be accepted.

Letters of Reference

I accept requests for letters of reference for graduate school in the fall of your senior year (for students applying as seniors; by November 15), or spring of your senior year (for students applying after graduating). Should you need a letter of reference for a scholarship opportunity, I would be happy to provide one. I typically need approximately two weeks to write a letter of reference; however, during “grad apps season” (November-February), I will often need four weeks’ notice.

ASHA Code of Ethics Statement

As a future clinician, I expect you to follow the Sacramento State Commitment to Integrity (see Additional Information) as well as the American Speech Language Hearing Association (ASHA) Code of Ethics.

The four Principles of Ethics form the underlying philosophical basis for the Code of Ethics and are reflected in the following areas:

- (I) responsibility to persons served professionally and to research participants, both human and animal;*
- (II) responsibility for one's professional competence;*
- (III) responsibility to the public; and*
- (IV) responsibility for professional relationships.¹*

Commitment to a Safe Learning Environment

I am committed to each student’s success in learning within a caring, responsive, and safe environment that is free of discrimination, violence, and bullying. Our program works to ensure that all students have the opportunity and support to develop to their fullest potential and share a personal and meaningful bond with peers and faculty within the program. Please don’t be a bystander to acts of harassment, discrimination, or hatred.

Inclusion and Access

As we transition to virtual teaching, you may find ways in which this course does not meet your accessibility needs or you may identify ways in which course access can be improved for others. I encourage you to speak up when you see room for improvement. For formal accommodations, students should seek support through Services for Students with Disabilities (see Additional Information below).

¹ <https://www.asha.org/code-of-ethics/>

Online Learning

For additional information, please review the [CSAD Handbooks](#) website

<https://www.csus.edu/college/health-human-services/communication-sciences-disorders/student-resources.html>

Zoom/ Online Instruction privacy and relevant rights and responsibilities:

Any time that a class session is recorded during the COVID-19-related Remote Instruction Period, students will be notified. If students do not want their likeness during class participation included in the recorded class session, they may elect to not participate via video recordings. Recordings will be available for viewing during the Remote Instruction Period subject to the following:

- Only students enrolled in the subject class during the Remote Instruction Period may view the recording.
- Students may not post or use the recordings in any other setting (e.g., social media, shared Google drive) for any purpose. Students who violate this will be subject to student discipline, up to and including expulsion.
- Federal and California law as well as University policies protecting intellectual property rights and use of instructional materials (including any recordings of class sessions) remain in effect during the Remote Instruction Period.
- If faculty have any plan to use the recording for a different class in the future, the faculty member will need written FERPA consent from those students in the current class who are identifiable in any of the recordings. A FERPA consent form signed by all students in the course will also be needed if the recordings are made available to others beyond the classroom on a nonsecure digital platform.

Technical Assistance

Seek help when you can't access Canvas or class materials.

- For technical assistance, contact the IRT Help Desk. Visit AIRC 2005 during [open hours](#) to speak with the IRT Service Desk Team, or call (916)278-7337. [IRT website.](#)
- For assistance with course materials, contact your instructor

Spam and Phishing Scams

- Learn how to stay safe and protect yourself from hackers who may try to access your personal information: [Don't Fall for a Phishing Scam](#)
- Use anti-virus, anti-spyware, and anti-malware software. [Sac State's Software and Tools](#) available for download.
- Use pins and passwords to secure your computer and devices- don't share your password with anyone. Use strong passwords that include a combination of letters and numbers that no one can guess.

Canvas Student App

Canvas is fully functional on many types of smartphones and tablets. Compatible devices include platforms such as iPhone/iPad/iPod Touch, and Android. However, it is recommended that you do not solely rely on one of these devices to complete your online course work. Access to a computer is still needed for many online activities.

Visit the [Mobile section](#) of the [Canvas Guides](#) website for more information.

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, shall be reported to the [Office of Student Conduct](#).

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. 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. 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.

Inclusivity:

Students in this class are encouraged to be active participants in all aspects of the course, including but not limited to lectures, synchronous and asynchronous activities, discussion posts, etc. Each of us must show respect for each other, as our class represents a diversity of beliefs, backgrounds, and experiences. This enriches all of our learning experiences together. Our individual differences deepen our understanding of one another and the world around us, rather than divide us. In this class, people of all ethnicities, genders and gender identities, religions, ages, sexual orientations, disabilities, socioeconomic backgrounds, regions, and nationalities are strongly encouraged to share their rich array of perspectives and experiences. If you feel your differences may in some way isolate you from our classroom community, or if you have a specific need, please contact the instructor early in the semester. Your instructor will work with you to ensure that you become an active and engaged member of our class and community.

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 with food, housing, financial or other unique circumstances that are impacting your education, help is available. The CARES office provides case management support for any enrolled student. Email the CARES office at cares@csus.edu to speak with a case manager about the resources available to you. Check out the [CARES website](#).

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/student-affairs/centers-programs/testing-center/>
- Library: <https://library.csus.edu/> for consultation : Rachel Stark, MS, AHIP, stark@csus.edu
- Services to Students with Disabilities: <https://www.csus.edu/student-affairs/centers-programs/services-students-disabilities/>
- Student Health and Counseling Services at The WELL: <https://www.csus.edu/student-life/health-counseling/>
- Student Academic Success and Education Equity Programs: <https://www.csus.edu/student-affairs/retention-academic-success/>
- Crisis Assistance and Resource Education Support (CARES): <https://www.csus.edu/student-affairs/crisis-assistance-resource-education-support/>
- 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>
- Peer & Academic Resource Center: <https://www.csus.edu/student-affairs/centers-programs/peer-academic-resource/>
- 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 Speech-Language Pathology

CSAD 111 Anatomy and Physiology of the Speech Mechanism.

This course has been designed to be in direct support of the following American Speech-Language Hearing Association (ASHA) 2017 Knowledge and Skills Acquisition for certification in Speech-Language Pathology:

Standard IV-A

- The student will demonstrate prerequisite knowledge of the biological sciences.

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

Standard IV-B: Swallowing Processes

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

Tentative Course Schedule:

Date	Topic	Read
1/26	Introduction Syllabus Overview	
1/28	Nomenclature Tissues	V5 Ch 1 pg. 1-20 (to joints) V6 Ch 1 pg. 1-19 (to joints)
Lab 1 Nomenclature Practice due Friday		
2/2	Respiratory Structures	V5 Ch 2 pg. 49-93 V6 Ch 2 pg. 47-93
2/4	Respiratory Mechanics	V5 Ch 3 pg. 143-165 V6 Ch 3 pg. 145-166
Lab 2 Boyle's Law due Friday		
2/9	Respiratory Muscles	V5 OR 6 Ch 2 pg. 93-132
2/11	Respiratory Disorders Review Day	
Lab 3 Respiratory Muscles due Friday		
2/16	No class – Exam 1 open	
2/18	Laryngeal Structures	V5 Ch 4 pg. 183-209 V6 Ch 4 pg. 185-211
Lab 4 Build a Larynx due Friday		
2/23	Intrinsic Muscles	V5 Ch 4 pg. 209-222 V6 Ch 4 pg. 212-225
2/25	Laryngeal Mechanics	V5 Ch 4 pg. 222-236 V6 Ch 4 pg. 225-239
Lab 5 Bernoulli Principle due Friday		
3/2	Extrinsic Muscles	V5 Ch 5 pg. 245-275 V6 Ch 5 pg. 247-275; 291-295
3/4	Laryngeal Development & Disorder Review Day	
3/9	No class – Exam 2 open	
3/11	Visible Structures/Pathways	V5 Ch 6 pg. 299-304 & 355-361; V6 Ch 6 pg. 305-309 & 359-366
Lab 6 Oral Motor Exams due Friday		
3/16	Craniofacial Structures	V5 Ch 6 pg. 305-341 V6 Ch 6 pg. 309-348
3/18	Craniofacial Muscles	V5 Ch 6 pg. 361-397 V6 Ch 6 pg. 366-403
Lab 7 Draw a Face due Friday		
Spring Break – No classes 3/23 or 3/25		
3/30	Articulatory Physiology	V5 Ch 7 pg. 413-421 & 430-439; V6 Ch 7 pg. 417-427 & 436-444
4/1	Mastication (Chewing) & Deglutition (Swallowing) Bring food to class!	V5 Ch 6 pg. 341-355 & Ch 8 pg. 447-480; V6 Ch 6 pg. 346-359 & Ch 8 pg. 455-491

4/6	Craniofacial Development & Disorder Review Day	V5 Ch 7 pg. 421-430 & Ch 8 481-486; V6 Ch 7 pg. 427-436; 444-449; & Ch 8 491-497
4/8	No class – Exam 3 open	
4/13	Neural Structures (“Neuroanatomy”)	V5 Ch 11 pg. 597-630 & 634- 652; V6 Ch 11 pg. 632-663 & 667-686
4/15	Neural Pathways (“Neurophysiology”)	V5 Ch 11 pg. 583-597 & Ch 12 pg. 708-722; V6 Ch 11 pg. 607-621 & Ch 12 748-758
4/20	Neural Pathways Cranial Nerves	V5 Ch 11 pg. 652-675 V6 Ch 11 pg. 686-711
4/22	Vascular & Ventricular Systems	V5 Ch 11 pg. 630-634; 603- 606; V6 Ch 11 pg. 663-667; 621-632
	Lab 8 Cranial Nerves Exam due Friday	
4/27	Neural Development & Disorders	V5 Ch 12 pg. 743-751 V6 Ch 12 pg. 782-790
4/29	Review Day	
	Lab 9 Circle of Willis due Friday	
5/4	No class – Exam 4 open	
5/6	Auditory Structures	V5 Ch 9 pg. 499-526 V6 Ch 9 pg. 515-543
	Lab 10 Build an Ear due Friday	
5/11	The Inner Ear	Continue reading Ch 9
5/13	Review Day	
Finals Week	Cumulative Final Exam open per final exam calendar	

Class notes:

1. **Lectures** will be live and include activities and discussion. Please make every effort to attend on lecture days. Lectures will be audio-recorded but *not* video-recorded to encourage students to participate in class. Comments in the chat function will not be saved.
2. **Labs** will be posted at the beginning of the module and due at midnight on Fridays. You may turn labs in early if you would like. Labs may be completed on your own or with peers.
3. **Exams** will be available to students for approximately 3 days (see schedule). You may take the exam whenever you like during the window. Once you open the exam, you will have 75 minutes to complete the exam. If you need extended time, please email the instructor directly.