



California State University, Sacramento

Department of Communication Sciences and Disorders

UNDERGRADUATE SYLLABUS & COURSE OUTLINE

Semester/Year: Spring 2023	Course: CSAD 125 Developmental and Acquired Neurogenic Language Disorders Across the Lifespan	Section: 01
Meeting Days: M, W	Meeting Times: 1:30-2:45	Location: Folsom Hall 1050
Instructor: Dr. Lisa D'Angelo	Email: dangelo@csus.edu	Phone: (530) 400-1970 text preferred
Office Location: Folsom Hall 2316/home!	Office Hours/Appointments: By appointment throughout week Mondays 12-1:30, Wednesday 3-4:30	

Catalogue Course Description:

CSAD 125. Developmental and Acquired Neurogenic Language Disorders Across the Lifespan.

3 Units

Prerequisite(s): [CSAD 112](#), [CHDV 30](#), [PSYC 2](#), [STAT 1](#), and [DEAF 51](#).

Term Typically Offered: Spring only

Language disorders and the dynamic, reciprocal relationships between the disability, the client, his/her family, and the environment. Developmental and acquired neurogenic language disorders from infancy through adulthood will be covered including neurophysiology and neuropathology.

Place of Course in Program

The focus of this 3-unit undergraduate seminar is on language disorders across the lifespan, including the dynamic and reciprocal relationship of the disorders among the following: the child, adolescent, or adult, his/her family, and the environment. Diagnostic categories discussed will include: Intellectually Disability, Language Delay, Developmental Language Disorder (DLD), Language Learning Disability (LLD), Autism Spectrum Disorder (ASD), Traumatic and Acquired Brain Injury (TBI/ABI), Neglect and Abuse, Right and Left Hemisphere Cerebrovascular Accident (CVA), and Progressive Disorders (e.g., the Dementias).

<u>Sacramento State Baccalaureate Learning Goals for the 21st Century (BLG)</u>	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 125 SPECIFIC STUDENT LEARNING OUTCOMES:

Segment 1:

1. Discuss and interpret Locke's theory of neurolinguistic development of language abilities.
2. Critically evaluate the relevance of a speech and language processing model in understanding language disorders in children and adults.
3. Distinguish among the multiple causes of language disorders and discuss complicating factors to language development (such as hearing deficit, cognitive deficit, etc.).
4. Recall and explain symptoms associated with a continuum of language disorders, categorize symptoms, and determine areas of greatest needs for intervention. Discuss associated etiology and anatomical/physiological, acoustic, psychological, developmental, linguistic, and cultural correlates. Identify and discuss relevant cognitive and social aspects of communication. Discuss prevention of language delays.
5. Design assessment plans to evaluate BOTH oral and written language, drawing from formal and informal testing procedures as appropriate. The client skills to be evaluated include auditory comprehension and expressive abilities as they are manifested in phonology, morphology, syntax, semantics, pragmatics, and oral narrative.
6. Identify and explain issues pertaining to parents' and caretakers' challenges in learning about and living with language disorders across the lifespan.
7. Identify and explain issues pertaining to teacher's challenges in working with children with language disorders with specific emphasis on the language arts curriculum.
8. Identify basic processes used in research about language disorders and the integration of research principles into evidence-based clinical practice.
9. Recognize and discuss the difference between a language difference and a language disorder. Discuss cultural considerations to language development.

Course Learning Outcome	Components Indicating Competence	Grades Received
1	Exam 1, HW 1, 2	
2	Exam 1, HW 1, 2	
3	Exam 1, HW 3, 4, 5	
4	Exam 2, HW 3, 4, 5	
5	Exam 2 , HW 3-5	
6	Exam 2 , HW 1-5	
7	Exam 2	
8	Exam 2	
9	Exam 2	

Segment 2

Student will:

1. Identify the historical roots and purpose of studying brain science in speech-language pathology.
2. Identify basic medical terminology including direction, planes, and anatomic orientation
3. Discuss policy and theoretical perspectives including the ASHA Scope of Practice, the World Health Organization's *International Classification of Functioning, Disability and Health*, history of persons with disabilities, and the Medical and Social Model Approaches to Disability.
4. Identify structures and systems within the Central Nervous System (CNS).
5. Identify structures and systems within the Peripheral Nervous System (PNS) and the Autonomic Nervous System and discuss the development of the Nervous System, and relevant principles of Neurologic Organization.
6. Identify structures of the neuronal function in the nervous system, including physiology, cellular potential, myelin development and related disorders, and central nervous system regeneration.
7. Identify the neurosensory organization of speech and hearing including the anatomical structures and clinical examination.
8. Identify the structures of the pyramidal and extrapyramidal systems, and the cerebellar system and related clinical signs.
9. Identify the cranial nerves including the names, structure, innervation, testing procedures, and signs of abnormal function.
10. Identify the clinical speech syndromes of the motor systems including dysarthria type, etiology, and associated neurologic characteristics.
11. Identify the central language mechanism including a model for language and its disorders
12. Identify acquired adult disorders of language (e.g., linguistic disorders and cognitive-communication disorders) in terms of definition, description, etiology, incidence & prevalence, clinical signs/symptoms, and progression by accessing/reviewing the literature and citing references using APA format.

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

Textbooks and Materials:

Segment 1:

Locke, J. 1997. A theory of neurolinguistic development. *Brain and Language* 58, 265-326. (Posted on CANVAS)

Owens, R. E. (2014). *Language disorders: A functional approach to assessment and intervention*. 6th edition. Boston, MA: Pearson (Posted to CANVAS))

Segment 2:

Webb, W. G., & Adler, R. K. (2008). *Neurology for the Speech-Language Pathologist*. 6th Edition. St. Louis, MO: Mosby Elsevier (DO NOT BUY-Available for free on Library website)

Recommended Readings:

Segment 2:

Sacks, O. (1998). *The man who mistook his wife for a hat*. New York, NY: Touchstone.

Online Resources:

Internet connection

Access to CANVAS Web site

Access to a computer/SMART device

Course Requirements/Components:

Laptop, netbook, iPad, or another device with internet capability (if device is not available, student(s) should let me know to access IRT needs (free), ASAP)

Download, bring relevant in-class learning activities and other documents, as uploaded to CANVAS by the instructor

Grading Policy:

Grading Policy: A total of 700 points are possible. Your final grade will be calculated as a % of points out of 700 points. Points possible are assigned as follows:

Segment 1:	
Exam 1	100 points
Exam 2	100 points
Segment 2:	
Exam 3	100 points
Project	100 points
Exam 4	100 points
Homework Assignments	200 points(20 points each)
Total possible points:	700 points

Letter grades are assigned according to the following scores

Points	Letter
94.5 - 100	A
89.5 - 94.4	A-
86.5 - 89.4	B+
83.5 - 86.4	B
79.5 - 83.4	B-
76.5 - 79.4	C+
73.5 - 76.4	C
69.5 - 73.4	C-
66.5 - 69.4	D+
63.5 - 66.4	D
59.5 - 63.4	D-
Below 59.5	F

Course Policies/Procedures:

Attendance: This course involves verbal interaction among the students and the instructor. You cannot really “get” what was covered in class via classmates’ notes. Class attendance is required. Report absences to the instructor in person or via voice mail or email *prior to class meeting*. Working as a Speech-Language Pathologist requires being present, on time, and prepared. Practicing those skills now will prepare you for what this career will be like. If you do need to miss a class, you are responsible for all materials covered in your absence.

Class meetings and participation: Lecture + discussion + observation format will be followed. Active listening and problem solving is expected. In class polling will be utilized for integration of material. We will also employ a somewhat Socratic method to facilitate critical thinking, stimulate discussion, and illuminate ideas.

Readings: You are responsible for all reading materials assigned. Not all assigned readings appear on this syllabus, as some short readings may be added during the course of the semester. You are expected to have completed the assigned readings *prior to class time* on topic discussion dates so that you are able to participate in discussion and ask questions.

Exams: A total of four (4) exams will be given during the semester. You are responsible for materials covered in required readings, classroom discussions, and handouts. Exams may include multiple choice, true/false, short answer, fill-in, and/or essay. Exams will be in-person in a paper format. *No make-up examinations or quizzes are given unless there is a documented medical emergency for which you have written proof provided by a doctor. Any approved make-up exams will be scheduled in the Testing Center and may be administered in essay format. You will need to make the appointment to take the test at the Testing Center and there is a nominal cost to use that service (\$6.00).*

Homework and Project: There are 10 homework assignments throughout the semester that relate to the topics. There will be one project due at the end of the semester. The details regarding these homework assignments and the project will be discussed in class and/or posted on CANVAS. Late submissions will lose points.

Homework Assignments (Will be posted to Canvas)

- 1) What is Language? ELL? Dialect?
- 2) Language disorders: What is a disorder of form? Content? Function?
- 3) Compare Reports
- 4) Language Sample
- 5) Goal Writing Practice and Therapy Techniques Chart

- 6) Neuroanatomy and Physiology Review Packet
- 7) Motor Speech Disorder: Injury and presentation
- 8) Adult Language Disorders
- 9) Cognitive-Communication Disorders
- 10) Adult Report Analysis and Goal Writing

Project: A project will be assigned. The details will be discussed in class and/or posted on Canvas. You will be creating an educational brochure or pamphlet/handout about a disorder and share with your class. Late submissions will lose points.

Cellphones/Smartphones/Audio Recording: Allowed.

TENTATIVE Course Schedule/Outline:

Tentative Course Schedule: PLEASE NOTE: Subject to change

DATE	TOPIC	ASSIGNED READINGS	Assignments/Activities
<i>Week of:</i> 1/23/23	Introduce Syllabus and Canvas Info Observe children and adults with language disorders. Discuss what you see and hear.	Start reading Locke's article	Introduction Lecture/PPT
	Observe children and adults with language disorders. Discuss what you see and hear. A review of theories on Language/Language Development		Lecture/PPT
<i>Week of:</i> 1/30/23	Begin Locke's neuro linguistic development of language abilities discussion Developmental Language disorders	Homework due 2/1/23 Be finished with Locke's article	Lecture/PPT
	Continue with Locke/Locke Class Activity		Lecture/PPT
<i>Week of:</i> 2/6/23	A Functional Language Approach Differential diagnosis Begin Language Impairments Introduction to an Information Processing Model across the lifespan	Homework due 2/8/23 Owens Ch 1 & 2	Lecture/PPT
<i>Week of:</i> 2/13/23	Fundamentals of Assessment Standardized Assessment Language Sampling	Owens Ch 4, 5	Lecture/PPT
	Exam 1 2/15/23 Controversies: NVIQ, Dialects, ELL	Owens Ch 5	Lecture/PPT

<i>Week of:</i> 2/20/23	Start Fundamentals of Treatment	Homework due 2/22/23 Owens Ch 9	Lecture/PPT
<i>Week of:</i> 2/27/23	Treatment of Infants, Toddlers	Homework due 3/1/23 Owens Ch 3	Lecture/PPT
	Treatment of Preschoolers	Owens Ch 11	
<i>Week of:</i> 3/6/23	School Age Treatment	Homework due 3/8/23 Owens Ch 10, 11	Lecture/PPT
	School Age Treatment Exam 2 3/8/23	Owens Ch 8	Lecture/PPT
<i>Week of:</i> 3/13/23	Segment 2: Intro to Speech-Language and Cognitive Neuroscience Hx of persons with disabilities Social and medical models ASHA Scope of Practice WHO ICF 2001 Both posted Canvas ASHA Scope of Practice ICF ASHA's webpage: http://www.asha.org/academic/curriculum/slp-aneuro/deskref.htm Oliver Sacks: <i>The Man Who Mistook His Wife for a Hat</i>	Webb & Adler, Ch. 1	
<i>Week of:</i> 3/20 to 3/24/23	SPRING BREAK!!!!	Woohooooo!	Sleep, fun!
<i>Week of:</i> 3/27/23	CSHA week! Organization of the Nervous System, I Structures and function Practice w/ Case Studies	Homework due/Review packet 3/29/23 Cranial Nerves, Neurons Webb & Adler, Ch. 2	Overview Lecture /PPT

	Asynchronous Lecture: Recorded Organization of the Nervous System, II Peripheral and Autonomic Systems Embryology of the Nervous system General principles of organization	Webb & Adler, Ch. 3,4, 7	Lecture /PPT
<i>Week of:</i> 4/3/23	Neurosensory Organization of Speech & Hearing Pathways & clinical signs/symptoms Practice w/ Case Studies	Webb & Adler, Ch. 5	Lecture/PPT
	Neuromotor Control of Speech Pathways & clinical signs/symptoms Practice w/ Case Studies	Homework due 4/5/23 Webb & Adler, Ch. 6	Lecture /PPT
<i>Week of:</i> 4/10/23	Fundamentals of Assessment of Acquired Language and Speech Disorders	handout	Lecture/PPT
	Clinical Speech Syndromes of the Motor Systems The Dysarthrias & Apraxias Signs & Symptoms, Diagnosis and Treatment Practice w/ Case Studies	Webb & Adler, Ch. 8	Lecture /PPT
<i>Week of:</i> 4/17/23	Cognition-Communication Disorders Language Mechanisms, Lesions, & Disorders Assessment and Treatment Exam 3 4/19/23	Webb & Adler, Ch. 10	Lecture/PPT
	Adult Disorders of Language Aphasia, Fluent & Non-fluent Assessment and Treatment	Homework due 4/19/23 Posted articles,	Lecture/PPT
<i>Week of:</i> 4/24/23	Adult Disorders of Cognitive-Communication Traumatic Brain Injury (TBI) Concussion Pediatric TBI and Concussions Assessment and Treatment	Webb & Adler, Ch. 11 Homework due 4/26/23 Posted articles	Lecture /PPT
<i>Week of:</i> 5/1/23	Adult Disorders of Cognitive-Communication Non-traumatic Brain Injury (NTBI) Dementias Cardiac Patients Assessment and Treatment Adult Disorders of Cognitive-Communication	Homework due 5/3/23 Posted articles and Webb & Adler, Ch. 11	Lecture/PPT

	Non-traumatic Brain Injury (NTBI) Dementias Cardiac Patients Assessment and Treatment		
	Start Disorder Brochure Presentations		
<i>Week of:</i> 5/8/23	Disorder Brochure Presentations		
<i>Week of:</i> 5/15/23	Final Examination (Exam 4)	TBD	Per University schedule

Additional Information

Pandemic Response

Note: In the event a faculty member is not available during the semester for whatever reason, students will be contacted and advised how the course will proceed. This may include a change in instructor and/or modality.

Course Modality: All Spring 2023 CSAD courses are being taught synchronously.

Attendance Policy: Students who become ill or are placed under quarantine during the COVID-19 pandemic will not be penalized. Please email me if you become sick, and follow the guidelines below.

Grading Policy: Course assignments (late work, due dates) will be adjusted so as not to penalize students who become ill or are placed under quarantine during the COVID-19 pandemic.

Health & Safety Information:

If you are sick, stay home. Notify your instructor. Please self-diagnose if you are experiencing any COVID- like symptoms (fever, cough, sore throat, muscle aches, loss of smell or taste, nausea, diarrhea, or headache) or have had exposure to someone who has tested positive for COVID contact Student Health & Counseling Services (SHCS) at 916-278-6461 to receive guidance and/or medical care. You are asked to report any possible COVID related illnesses/exposures to SHCS via this link COVID-19 Illness/Exposure Report Form. Expect a call from SHCS within 24 hours. The CDC provides a good source of information regarding COVID-19 and a way to self-check symptoms: <https://www.cdc.gov/coronavirus/2019-ncov/index.html>

Campus health and safety protocols regarding COVID-19 will be updated to match county, state, or CSU system standards. Please comply with campus requirements/protocols for vaccine certification and testing, indoor masking, physical distancing, COVID-19 symptom screening, contact tracing, and other safety measures to minimize the spread of COVID-19.

If you are attending an in-person class:

You must certify with the University that you are fully vaccinated or have an approved medical or religious exemption.

If you have any COVID-19-related symptoms or you are unvaccinated and have come into close contact with someone who has a confirmed positive COVID-19 test, please contact the Student Health Center or your medical provider. If you have symptoms, do not come to class until you have tested negative or have received clearance from the Student Health Center.

Illness due to COVID-19 or exposure to a confirmed positive individual that requires quarantine or isolation is a qualifying emergency and late work, make-up assignments, and virtual attendance will be allowed in consultation with me.

If you wish to confer privately with me about your vaccination, exposure, or positive test status, you should first affirm that you are voluntarily disclosing your medical information. Any information you share with me will be treated securely and only be shared with the Student Health Center to follow established safety protocols.

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.

Inclusivity:

Students in this class are encouraged to speak up and participate. Each of us must show respect for each other because our class represents a diversity of beliefs, backgrounds, and experiences. I believe that this is what will enrich all of our experiences together. I recognize that our individual differences can 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 me early in the semester so that we can work together to help you become an active and engaged member of our class and community. *This text was adapted from CSU Chico and Winona State University's posts.*

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/>

Title IX:

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, but is not limited to rape, relationship violence, or stalking, all faculty and staff members are obligated to report this disclosure to the university's Title IX Coordinator. Contact Sac State's Title IX Coordinator, Skip Bishop, at (916) 278-5770 or email at william.bishop@csus.edu. 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: www.csus.edu/shcs

Campus Confidential Advocate – Laura Swartzen Email: weave@csus.edu

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

WEAVE 24/7 Hotline: 916-920-2952

Accessibility/Equity: The goal for all of our students is for access to all information and remove as many barriers as possible to learning. If you feel that you have difficulty accessing the information for WHATEVER reason, please talk to me. We have ways of lending technology (through IRT), helping with disabilities and gaining accommodations (SSWD), and emergency needs for housing, food, etc.. If it doesn't fall into those categories, please talk to me anyways: we can figure it out.

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/>

CSAD 125 Developmental and Acquired Neurogenic Language Disorders Across the Lifespan.

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: receptive and expressive language disorders (phonology, morphology, syntax, semantics, pragmatics, prelinguistic communication, and paralinguistic communication) in speaking, listening, reading, writing, and manual modalities (including the etiologies, characteristics, and anatomical physiological, acoustic, psychological, developmental, linguistic, and cultural correlates.)
- 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.)
- The student will demonstrate the ability to analyze, synthesize and evaluate knowledge re: cognitive aspects of communication (e.g., attention, memory, sequencing, problem solving, and executive functioning), including the etiologies, characteristics, and anatomical physiological, acoustic, psychological, developmental, linguistic, and cultural correlates.
- The student will demonstrate the ability to analyze, synthesize and evaluate knowledge re: social aspects of communication (e.g., behavioral and social skills affecting communication), 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, assessment, and intervention regarding receptive and expressive language (phonology, morphology, syntax, semantics, pragmatics, prelinguistic communication, and paralinguistic communication) in speaking, listening, reading, writing, and manual modalities.
- 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.
- The student will demonstrate the ability to analyze, synthesize, and evaluate knowledge re: the principles and methods of prevention, assessment, and intervention regarding cognitive aspects of communication (e.g., attention, memory, sequencing, problem solving, and executive functioning).
- The student will demonstrate the ability to analyze, synthesize, and evaluate knowledge re: the principles and methods of prevention, assessment, and intervention regarding social aspects of communication (e.g., behavioral and social skills affecting communication).

Standard IV-B: Basic Human Communication Processes

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