

SPHS-SPEECH & HEARING SCIENCE

SPHS 2110. Introduction to Communication Disorders 3 Credits (3)

This introductory course provides an overview of common speech, language, and hearing disorders in children and adults including etiologies, characteristics, prevention, identification, assessment and intervention. The course provides an overview of the field of speech-language pathology and audiology. May be repeated up to 3 credits.

Learning Outcomes

1. Describe normal human communication anatomy and processes as they relate to speech and language production.
2. Describe the nature of speech, language, and hearing disorders and differences.
3. Describe the principles of prevention, assessment and intervention of communication disorders.
4. List requirements for licensure, certification, and other relevant professional credentials.
5. Exhibit basic knowledge of contemporary professional issues in speech-language pathology.
6. List possible psychosocial implications of various communication disorders.
7. Identify cultural, educational, legal, and ethical issues related to communication disorders.
8. Describe the scope of practice of speech-language pathologists and audiologists.

SPHS 3110V. Autism Spectrum Disorders - a Lifespan Perspective 3 Credits (3)

This course will introduce students to concepts related to autism spectrum disorder across the lifespan. Diagnostic criteria, etiologies, assessment, and intervention will be explored from a historical perspective. May be repeated up to 6 credits.

Learning Outcomes

1. Summarize the diagnostic criteria for autism spectrum disorder as presented in the DSM-5-TR and provide examples of its core features.
2. Discuss how to individualize an autism assessment based on an individual's developmental level (e.g., chronological age, language skills), including the specific materials/assessment(s) used.
3. Describe the continuum of autism intervention (discrete to naturalistic) and the pros and cons of methods on the continuum.
4. Describe specific issues for autistic individuals across the lifespan and how intervention/supports may be individualized to their needs.

SPHS 4510. Phonetics 3 Credits (3)

This course introduces you to articulatory and acoustic phonetics as well as transcription. In this course, you will gain the ability to recognize and describe phonetic symbols. You will learn to transcribe American English using the International Phonetic Alphabet (IPA). By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Prerequisite: B or better in SPHS 2110; Cumulative GPA of 3.0 or better.

Learning Outcomes

1. Students will be able to identify articulatory, acoustic and perceptual characteristics of speech sounds.

2. Students will be able to utilize the International Phonetic Alphabet (IPA) to transcribe speech sounds in single words, phrases, and connected speech.
3. Students will be able to classify speech sounds into natural classes, and describe the phonological organization of speech sounds, including prosodic organization.
4. Students will be able to identify common phonological processes during language acquisition and in varieties of English.
5. Students will be able to recognize phonological processes in disordered speech.

SPHS 4520. Audiology 3 Credits (3)

This course is an introductory course to the science and profession of Audiology. Simply stated, Audiology is the clinical profession that deals with hearing and balance disorders (Gelfand, 2009). By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Prerequisite: B or better in SPHS 2110, and a minimum GPA of 3.0 or better.

Learning Outcomes

1. Recall aspects of the history of the profession of Audiology.
2. Explain the key concepts related to sound.
3. Identify the anatomical structures of the auditory system and their respective function to hearing.
4. Explain the tests performed during a comprehensive hearing assessment.
5. Demonstrate the protocols used during hearing assessments.
6. Classify audiometric test results.

SPHS 4610. Language Acquisition 3 Credits (3)

This course introduces students to the study of the development of language, speech, and communication. Includes language sampling. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Prerequisite: B or better in SPHS 2110 Introduction to Communication Disorders; Cumulative GPA of 3.0 or higher.

Learning Outcomes

1. Describe the development of phonology, semantics, morphology, syntax, and pragmatics.
2. Describe biological, cognitive, social aspects of language acquisition.
3. Evaluate the current methods for studying language acquisition and critically evaluate their contributions to our understanding of how children learn language.
4. Compare and contrast current theories of language acquisition in relation to the available data and to each other.
5. Apply basic observational methods to draw conclusions about a child's level of language knowledge.

SPHS 4620. Speech and Hearing Science 3 Credits (3)

This course will introduce you to the field of speech and hearing science, including basic acoustics, the acoustics of speech sounds (consonants and vowels), and speech perception. You will examine the acoustic properties of speech sounds using acoustic analysis software (Praat). By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Prerequisite: B or better in SPHS 2110, C- or better in SPHS 4510, SPHS 4520; and minimum 3.0 GPA.

Learning Outcomes

1. Students will describe concepts of basic acoustic physics such as simple harmonic motion, complex waveforms, and resonances.
2. Students will correlate the acoustic properties of the sound source in human speech with characteristics of vocal fold function.
3. Students will describe and measure the acoustic characteristics of vowels and correlate these characteristics to the articulatory parameters of tongue height, tongue advancement, and lip rounding.
4. Students will describe and measure the acoustic properties of the consonant like approximants, nasals, fricatives, stops, and affricates.
5. Students will describe basic human hearing and psychoacoustic properties and understand and describe important theories of speech perception.

SPHS 4710. Speech Disorders Across the Lifespan**3 Credits (3)**

This course explores the bases, etiologies, and clinical management of disabilities specific to articulation, phonology, voice, resonance, motor speech, stuttering, and cluttering disorders. Building upon fundamental theories and knowledge regarding communication, we will review characteristics of various speech disabilities along with evidence-based methods of assessment and treatment. Throughout the course, we will critically examine and reflect upon the importance of identities specific to race, gender, language, socioeconomic status, and culture as it pertains to communication and the provision of clinical services. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Prerequisite: A grade of B or better in SPHS 2110, SPHS 4510, SPHS 4610 and minimum GPA of 3.0.

Learning Outcomes

1. Describe diverse etiologies of speech disorders and compare/contrast assessment procedures (ASHA Standard III-B).
2. Define and compare/contrast the classification for a variety of speech disorders (ASHA Standard III-C).
3. Differentiate between a speech disorder vs a difference that can be attributed to culturally and linguistically different groups (ASHA Standard III-D).
4. Describe evidence-based treatment; evaluate treatment-efficacy evidence for a variety of speech disorders (ASHA Standard III-D).

SPHS 4715. Language Disorders Across the Life Span**3 Credits (3)**

In this course, we will learn about developmental and acquired language disorders, including assessment and intervention. We will explore the bases, symptoms, etiologies, and treatment of language disorders. This course includes a short review of normal language acquisition. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Prerequisite: Grade of B or better in SPHS 2110 and SPHS 4610, minimum cumulative GPA of 3.0.

Learning Outcomes

1. Describe diverse etiologies of language disorders and compare/contrast assessment procedures (ASHA Standard III-B).
2. Define and compare/contrast the classification for a variety of language disorders (ASHA Standard III-C).
3. Differentiate between a disorder vs a difference that can be attributed to culturally and linguistically different groups (ASHA Standard III-D).
4. Describe evidence-based treatment; evaluate treatment-efficacy evidence for a variety of language disorders (ASHA Standard III-D).

SPHS 4720. Anatomy and Physiology of Speech Mechanisms**3 Credits (3)**

In this course, we will delve into the intricate mechanisms that enable human speech. From the complexities of vocal fold vibrations to the nervous system processes involved in speech production, we will explore how the human body orchestrates the art of communication. In this course, you will gain a comprehensive understanding of the biological foundations that shape our ability to speak. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Prerequisite: B or better in SPHS 2110, and minimum 3.0 GPA.

Learning Outcomes

1. Students will recognize key anatomical structures associated with speech swallowing.
2. Students will be able to explain the physiological function of systems involved in speech swallowing.
3. Students will be able to evaluate the functional integrity of systems involved in speech swallowing.
4. Students will classify speech swallowing symptoms according to their associated clinical syndromes.

SPHS 4810. Clinical Methods and Procedures**3 Credits (3)**

Clinical Methods and Procedures in Speech-Language Pathology is designed to provide the undergraduate Communication Disorders major with an introduction to clinical methods, clinical oral and written reporting, and clinical observation skills. May be repeated up to 6 credits. Must have completed SPHS 4510, SPHS 4520, SPHS 4620, SPHS 4610; and have a minimum GPA of 3.0.

Prerequisite: B or better in SPHS 2110.

Learning Outcomes

1. Articulate the scope of practice and the roles and responsibilities of Speech-Language Pathologists (SLP), Speech-Language Pathology Assistants (SLPAs), and graduate clinicians.
2. Use basic professional terminology specific to the field of Speech-Language Pathology.
3. Apply principles and therapeutic techniques to oral and written clinical reporting.
4. Identify on- and off-target behaviors, procedures, data collection, and maintenance strategies.
5. Summarize basic procedures for comprehensive clinical assessments.
6. Complete 25 of the 25 American Speech-Language-Hearing Association (ASHA) clock hours of required supervised clinical observation of speech, language, and hearing services.
7. Identify factors to consider when serving culturally and linguistically diverse patient populations.
8. Recognize the ASHA Code of Ethics.

SPHS 4820. Neural Bases of Communication Disorders**3 Credits (3)**

This course will cover the neurological bases for speech, language, and hearing. We will explore topics on neuroanatomy and neurophysiology of sensory and motor systems. Specific topics include Central Nervous System development, the structure and function of brain cells, and organization and function of the brain and spinal cord. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Prerequisite: B or better in SPHS 2110, must have taken SPHS 4720 and 3.0 GPA or better.

Learning Outcomes

1. Explain foundational principles of human neuroscience, including neuronal signaling, embryology, neuroplasticity, sensation/perception, and motor function.
2. Describe and identify the organization and function of major neural structures and pathways involved in speech, language, swallowing, and hearing processes.
3. Evaluate current research on the neural underpinnings of language and speech processing.
4. Interpret clinical case studies and neurological assessment results to hypothesize the likely site and nature of neural damage affecting communication.

SPHS 4830. Aural Rehabilitation**3 Credits (3)**

This course introduces you to the theories and procedures used to provide aural/audiological rehabilitation to children and adults who have hearing loss and to provide concomitant services to their family members. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Prerequisite: B or better in SPHS 2110, SPHS 4520, and 3.0 GPA or higher.

Learning Outcomes

1. Knowledge and understanding of basic concepts and components of aural/audiological rehabilitation.
2. Understanding of assessment procedures for determining aural rehabilitation needs, including means for assessing hearing status, auditory and audiovisual speech recognition, hearing-related disabilities, and conversational fluency.
3. Knowledge about the importance of auditory and visual cues in spoken communication.
4. Knowledge about how hearing loss affects conversational fluency.
5. Knowledge about auditory and speechreading training and communication strategies training.
6. Knowledge about counseling, psychosocial support, and assertiveness training.
7. Understanding how to develop and implement aural rehabilitation plans for children, adults, and their family members.
8. Procedures for developing and implementing auditory training for the pediatric population.
9. Knowledge about the challenges hearing loss poses for acquiring speech and language and learning to read and related assessments and interventions. 1
10. Define and use the appropriate terminology when discussing hard of hearing and deafness 1
11. Describe the effects of hearing impairment on various aspects of life (cognitive, educational, occupational, and psycho-social aspects in all age ranges). 1
12. Identify the communication needs and develop a basic understanding of common intervention options including communication strategies, auditory training, speech reading, hearing aids, assistive devices, and cochlear implantation. 1
13. Be acquainted with the relevant public laws.

SPHS 5010. Phonetics**3 Credits (3)**

This course introduces you to articulatory and acoustic phonetics as well as transcription. In this course, you will gain the ability to recognize and describe phonetic symbols. You will learn to transcribe American English using the International Phonetic Alphabet (IPA). By the time of

graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Students will be able to identify articulatory, acoustic and perceptual characteristics of speech sounds.
2. Students will be able to utilize the International Phonetic Alphabet (IPA) to transcribe speech sounds in single words, phrases, and connected speech.
3. Students will be able to classify speech sounds into natural classes, and describe the phonological organization of speech sounds, including prosodic organization.
4. Students will be able to identify common phonological processes during language acquisition and in varieties of English.
5. Students will be able to recognize phonological processes in disordered speech.

SPHS 5015. Audiology**3 Credits (3)**

This course is an introductory course to the science and profession of Audiology. Simply stated, Audiology is the clinical profession that deals with hearing and balance disorders (Gelfand, 2009). By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Recall aspects of the history of the profession of Audiology.
2. Explain the key concepts related to sound.
3. Identify the anatomical structures of the auditory system and their respective function to hearing.
4. Explain the tests performed during a comprehensive hearing assessment.
5. Demonstrate the protocols used during hearing assessments.
6. Classify audiometric test results.

SPHS 5020. Language Acquisition**3 Credits (3)**

This course introduces students to the study of the development of language, speech, and communication. Includes language sampling. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Describe the development of phonology, semantics, morphology, syntax, and pragmatics.
2. Describe biological, cognitive, social aspects of language acquisition.
3. Evaluate the current methods for studying language acquisition and critically evaluate their contributions to our understanding of how children learn language.
4. Compare and contrast current theories of language acquisition in relation to the available data and to each other.
5. Apply basic observational methods to draw conclusions about a child's level of language knowledge.

SPHS 5025. Language Disorders Across the Life Span**3 Credits (3)**

In this course, we will learn about developmental and acquired language disorders, including assessment and intervention. We will explore the bases, symptoms, etiologies, and treatment of language disorders. This course includes a short review of normal language acquisition. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Describe diverse etiologies of language disorders and compare/contrast assessment procedures (ASHA Standard III-B).
2. Define and compare/contrast the classification for a variety of language disorders (ASHA Standard III-C).
3. Differentiate between a disorder vs a difference that can be attributed to culturally and linguistically different groups (ASHA Standard III-D).
4. Describe evidence-based treatment; evaluate treatment-efficacy evidence for a variety of language disorders (ASHA Standard III-D).

SPHS 5030. Anatomy and Physiology of Speech Mechanisms
3 Credits (3)

In this course, we will delve into the intricate mechanisms that enable human speech. From the complexities of vocal fold vibrations to the nervous system processes involved in speech production, we will explore how the human body orchestrates the art of communication. In this course, you will gain a comprehensive understanding of the biological foundations that shape our ability to speak. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Students will recognize key anatomical structures associated with speech swallowing.
2. Students will be able to explain the physiological function of systems involved in speech swallowing.
3. Students will be able to evaluate the functional integrity of systems involved in speech swallowing.
4. Students will classify speech swallowing symptoms according to their associated clinical syndromes.

SPHS 5035. Speech and Hearing Science
3 Credits (3)

This course will introduce you to the field of speech and hearing science, including basic acoustics, the acoustics of speech sounds (consonants and vowels), and speech perception. You will examine the acoustic properties of speech sounds using acoustic analysis software (Praat). By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Students will describe concepts of basic acoustic physics such as simple harmonic motion, complex waveforms, and resonances.
2. Students will correlate the acoustic properties of the sound source in human speech with characteristics of vocal fold function.
3. Students will describe and measure the acoustic characteristics of vowels and correlate these characteristics to the articulatory parameters of tongue height, tongue advancement, and lip rounding.
4. Students will describe and measure the acoustic properties of the consonant like approximants, nasals, fricatives, stops, and affricates.
5. Students will describe basic human hearing and psychoacoustic properties and understand and describe important theories of speech perception.

SPHS 5040. Speech Disorders Across the Lifespan
3 Credits (3)

This course explores the bases, etiologies, and clinical management of disabilities specific to articulation, phonology, voice, resonance, motor speech, stuttering, and cluttering disorders. Building upon fundamental theories and knowledge regarding communication, we will review characteristics of various speech disabilities along with evidence-based methods of assessment and treatment. Throughout the course, we will

critically examine and reflect upon the importance of identities specific to race, gender, language, socioeconomic status, and culture as it pertains to communication and the provision of clinical services. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Describe diverse etiologies of speech disorders and compare/contrast assessment procedures (ASHA Standard III-B).
2. Define and compare/contrast the classification for a variety of speech disorders (ASHA Standard III-C).
3. Differentiate between a speech disorder vs a difference that can be attributed to culturally and linguistically different groups (ASHA Standard III-D).
4. Describe evidence-based treatment; evaluate treatment-efficacy evidence for a variety of speech disorders (ASHA Standard III-D).

SPHS 5045. Clinical Methods and Procedures
3 Credits (3)

Clinical Methods and Procedures in Speech-Language Pathology is designed to provide the undergraduate Communication Disorders major with an introduction to clinical methods, clinical oral and written reporting, and clinical observation skills. May be repeated up to 6 credits.

Learning Outcomes

1. Articulate the scope of practice and the roles and responsibilities of Speech-Language Pathologists (SLP), Speech-Language Pathology Assistants (SLPAs), and graduate clinicians.
2. Use basic professional terminology specific to the field of Speech-Language Pathology.
3. Apply principles and therapeutic techniques to oral and written clinical reporting.
4. Identify on- and off-target behaviors, procedures, data collection, and maintenance strategies.
5. Summarize basic procedures for comprehensive clinical assessments.
6. Complete 25 of the 25 American Speech-Language-Hearing Association (ASHA) clock hours of required supervised clinical observation of speech, language, and hearing services.
7. Identify factors to consider when serving culturally and linguistically diverse patient populations.
8. Recognize the ASHA Code of Ethics.

SPHS 5050. Neural Bases of Communication Disorders
3 Credits (3)

This course will cover the neurological bases for speech, language, and hearing. We will explore topics on neuroanatomy and neurophysiology of sensory and motor systems. Specific topics include Central Nervous System development, the structure and function of brain cells, and organization and function of the brain and spinal cord. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Explain foundational principles of human neuroscience, including neuronal signaling, embryology, neuroplasticity, sensation/perception, and motor function.
2. Describe and identify the organization and function of major neural structures and pathways involved in speech, language, swallowing, and hearing processes.
3. Evaluate current research on the neural underpinnings of language and speech processing.

- Interpret clinical case studies and neurological assessment results to hypothesize the likely site and nature of neural damage affecting communication.

SPHS 5055. Aural Rehabilitation

3 Credits (3)

This course introduces you to the theories and procedures used to provide aural/audiological rehabilitation to children and adults who have hearing loss and to provide concomitant services to their family members. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

- Knowledge and understanding of basic concepts and components of aural/audiological rehabilitation.
- Understanding of assessment procedures for determining aural rehabilitation needs, including means for assessing hearing status, auditory and audiovisual speech recognition, hearing-related disabilities, and conversational fluency.
- Knowledge about the importance of auditory and visual cues in spoken communication.
- Knowledge about how hearing loss affects conversational fluency.
- Knowledge about auditory and speechreading training and communication strategies training.
- Knowledge about counseling, psychosocial support, and assertiveness training.
- Understanding how to develop and implement aural rehabilitation plans for children, adults, and their family members.
- Procedures for developing and implementing auditory training for the pediatric population.
- Knowledge about the challenges hearing loss poses for acquiring speech and language and learning to read and related assessments and interventions. 1
- Define and use the appropriate terminology when discussing hard of hearing and deafness. 1
- Describe the effects of hearing impairment on various aspects of life (cognitive, educational, occupational, and psycho-social aspects in all age ranges). 1
- Identify the communication needs and develop a basic understanding of common intervention options including communication strategies, auditory training, speech reading, hearing aids, assistive devices, and cochlear implantation. 1
- Be acquainted with the relevant public laws.

SPHS 5110. Research Methods

3 Credits (3)

This course focuses on introduction to basic research methodology in CSD. The course presents information pertaining to research design and statistical analyses used in speech-language pathology with special consideration of the role of research in evidence-based practice. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

- Students will demonstrate understanding of the concepts of research ethics and integrity including protection of human subjects.
- Students will comprehend of concepts of evidence-based practice.
- Students will locate, use, and critically evaluate library and online sources that support the investigation of research questions pertinent to speech-language and hearing science.

- Students will interpret basic single variable and two-variable statistical procedures appropriate for single and group designs.
- Students will read and critically evaluate pertinent research.

SPHS 5120. Assessment of Communication Disorders

3 Credits (3)

Diagnostic theories and management of communication disorders using standardized and descriptive methodology. Includes the practice of interviewing, testing, and oral and written reporting. Restricted to: C DS,C D majors. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

- Demonstrate knowledge of testing statistics and basic concepts in psychometric assessment.
- Formulate, implement and summarize one complete successful and efficient assessments: including pre-planning meeting, interview design and implementation, administration of instruments, analysis and integration of results and report writing.
- Review, summarize and critique one assessment tool for design, use, interpretation and cultural/linguistic inclusivity to classmates.
- Given case study information, students will be able to: choose an appropriate instrument from assessment tools reviewed; develop an assessment plan for a client; write a report and develop treatment goals.

SPHS 5130. Pediatric Language and Disorders

3 Credits (3)

Normal communication development of neonates, infants, toddlers, and preschoolers; etiologies, and treatment of cognitive, linguistic and social elements of communication problems in family systems. Restricted to: C DS,C D majors. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

- Demonstrate a working knowledge of the major theories of language acquisition and theoretical perspectives of disorders.
- Demonstrate an understanding of the aspects related to dialect and second language acquisition of English.
- Demonstrate knowledge of the core principles of language assessment for the pediatric population (zero-five year old).
- Summarize and interpret content material relating to pediatric language development/disorders.

SPHS 5140. Speech Sound Disorders

3 Credits (3)

The purpose of this course is to provide graduate students with the knowledge necessary to effectively assess and provide intervention for individuals with speech sound disorders. The content of this course includes the anatomical, linguistic, cultural, and physiological basis of speech sound production; speech sound disorders of differing etiologies; phonetic transcription; culturally sensitive assessment and treatment approaches; appraisal of evidence-based treatment approaches; and discussion of power, privilege, and positionality in the field of speech, language and hearing sciences. Video examples and hands-on learning experiences will be provided to bolster student learning. Students will demonstrate their understanding through multiple modalities. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

- Identify the impact of anatomical, motor, sensory, cognitive-linguistic, and social factors in speech acquisition associated with typical and atypical development.

2. Transcribe American English speech using the International Phonetic Alphabet and identify the presence of phonological processes.
3. Identify and implement components of a comprehensive, culturally sensitive evaluation for a child with a suspected speech sound disorder.
4. Describe different treatment approaches, generate developmentally appropriate treatment goals, and design activities for a child with a speech sound disorder.
5. Analyze and interpret current and foundational research in the area of speech sound disorders.

SPHS 5210. School Age Language and Disorders

3 Credits (3)

This course will discuss normal communication-learning development of elementary, secondary, and postsecondary students; etiologies, diagnosis, and treatment of interpersonal communication and language-based academic disorders. Restricted to: C DS,C D majors. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Demonstrate a working knowledge of legislation governing service provision in the schools (IDEIA, NCLB) and implementation practices (IEP, five-hundred-four plan, RtI).
2. Demonstrate knowledge of normal language development of school-age children.
3. Demonstrate understanding of language disorders relevant to school-age children.
4. Demonstrate knowledge of evidence-based intervention methodologies for the treatment of language disorders in the school-aged population.

SPHS 5220. Adult Neurogenic Language Disorders

3 Credits (3)

Of the estimated 800,000 strokes that occur each year in the United States, more than one-third result in chronic aphasia or right-hemisphere disorder. Individuals with aphasia and right-hemisphere disorder following stroke report that their communicative difficulties contribute to feelings of social isolation and reduced functional autonomy, which together result in negative long-term mental health outcomes and reduced quality of life. Speech-language therapy may help to alleviate these hardships, and the skills that you learn in this course will prepare you to do so. As we progress through this course, we'll work to explore the neuropathological underpinnings of aphasia and RHD, while learning more about how such impairments may be assessed and treated. Restricted to: C DS,C D majors. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Characterize aphasia and its sub-types based on lesion data and behavioral profiles.
2. Specify standardized and non-standardized measures to evaluate clients with aphasia.
3. Describe principles and techniques to maximize linguistic recovery in individuals with aphasia.
4. Describe the etiology and patterns of recovery associated with aphasia and right-hemisphere disorder.
5. Describe cognitive processes and systems, including language, attention, memory, and executive function, and their relationship to adult neurogenic language disorders.

6. Apply theoretical perspectives of language, cognition, and neurological function as they relate to adult neurogenic language disorders.

SPHS 5230. Fluency Disorders

3 Credits (3)

This course explores theories, perspectives, advocacy, and clinical management relating to children and adults who stutter and/or clutter. We will discuss theoretical perspectives relating to topics such as etiology, persistence, disability, and identity through the evaluation of peer-reviewed research as well as the insights and lived experiences of people who stutter. You will learn about assessment practices, intervention strategies, and counseling principles specific to individuals who stutter and/or clutter. Restricted to: C DS,C D majors. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Identify terminology and theories associated with stuttering, cluttering, and typical disfluency.
2. Label, describe and discern typical from atypical disfluency across speakers of one or more languages.
3. Describe and practice using the variety of evidence-based assessment measures and intervention strategies appropriate for individuals who stutter and/or clutter.
4. Demonstrate an understanding of the lived experiences and intersecting identities (culture, gender, race, socioeconomic status) of people who stutter and/or clutter and their family members.
5. Design an advocacy project on behalf of the stuttering and/or cluttering community that may be implemented at the local, regional, national, or international level.

SPHS 5310. Introduction to Augmentative and Alternative

Communication

3 Credits (3)

Assessment and intervention for children and adults with developmental disabilities; Alternative communication strategies and systems for individuals with severe speech and/or language impairments. Restricted to: C DS,C D majors. May be repeated up to 3 credits.

Prerequisite: Graduate standing; overall GPA of 3.0.

Learning Outcomes

1. Understand and consider physical and psycho-social, linguistic, and cognitive characteristics of AAC users.
2. Describe assessment methods to determine the best fit of AAC systems to meet the needs of AAC users.
3. Understand how to provide training in the use of various AAC systems for AAC users, their families, and caregivers and educators.

SPHS 5320. Cognitive Communication Disorders

3 Credits (3)

What does it mean to be human? And what are the contents and functions of the human mind? Central to the human experience is cognition—the brain functions that allow us to reason, remember, attend, and communicate. While cognitive processes occur automatically for most people, those with neurological pathologies (such as dementia or traumatic brain injury) often experience cognitive impairments. In this course, we'll work to explore the nature of human cognition, the brain networks that support it, the underlying pathologies that lead to cognitive impairment, and how such impairments may be assessed and treated. Restricted to: C DS,C D majors. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Describe dementing diseases and how they affect cognitive-communicative functioning.
2. Specify standardized and non-standardized measures to evaluate clients with dementia.
3. Describe principles and techniques to maximize communicative functioning of individuals with dementia.
4. Describe the epidemiology and etiology of traumatic brain injury.
5. Specify the relationships between the mechanisms of traumatic brain injury and the nature and severity of cognitive-communicative impairments.
6. Specify appropriate diagnostic and treatment methods for individuals with different severity levels of traumatic brain injury.
7. Describe cognitive processes and systems, including attention, memory, and executive function, and their relationship to cognitive communication disorders.

**SPHS 5330. Dysphagia
3 Credits (3)**

Study of the anatomy and physiology of swallowing and upper aerodigestive systems. Review of the bases and etiologies of child and adult swallowing disorders, including diagnosis, assessment, and treatment. Restricted to: C DS,C D majors. May be repeated up to 3 credits.

Prerequisite: A course grade of B- or higher in all graduate courses and an overall GPA of 3.0 or higher.

Learning Outcomes

1. Define the anatomy and physiology of normal swallowing and causes of abnormal swallow in the pediatric to geriatric age ranges.
2. Define dysphagia team components.
3. Describe protocol for clinical and instrumental dysphagia evaluation.
4. Describe dysphagia diagnosis and treatment.

**SPHS 5335. Swallowing and its Disorders in the Pediatric Population
2 Credits**

This class is an introduction to swallowing disorders, normal and abnormal swallow function for the pediatric population. The primary focus of instruction will include normal and impaired swallow function, evaluation and treatment. Your instruction will include lecture, videos, small group discussion, and occasional labs. Of note, this is an introductory course to build a strong foundation of pediatric dysphagia. Your internships, fellowships and professional careers will help build upon this foundation. May be repeated up to 2 credits.

Prerequisite/Corequisite: SPHS 5330.

Learning Outcomes

1. Students will be able to define the anatomy and physiology of normal swallowing and causes of abnormal swallow in the pediatric population.
2. Students will be able to define dysphagia team components and describe protocol for clinical dysphagia evaluation in infants and children.
3. Students will demonstrate knowledge of dysphagia diagnosis and treatment as well as demonstrate ability to document diagnostic findings for the pediatric population.
4. Students will be able to explain indications and methods of non-oral nutrition and ethical considerations when working with pediatric clients from different cultural backgrounds.

**SPHS 5340. Motor Speech Disorders
3 Credits (3)**

The course will explore role of the central and peripheral motor systems in speech production and speech disorders related to abnormalities in these motor systems. We will emphasize the clinical characteristics, etiologies, neurological bases, and pathologies, assessment, and clinical management of the dysarthrias and apraxia of speech across the lifespan. Students will be able to recognize, assess, and serve the multiple needs of clients with dysarthria and apraxia. Restricted to: C DS,C D majors. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Analyze the neurological and physiological mechanisms underlying motor speech disorders, differentiating between dysarthria types (flaccid, spastic, unilateral upper motor neuron, ataxic, hypokinetic hyperkinetic mixed dysarthria and apraxia of speech).
2. Apply evidence-based assessment techniques to diagnose motor speech disorders across diverse clinical populations.
3. Develop individualized treatment plans incorporating motor learning principles and augmentative communication strategies for individuals with motor speech disorders.
4. Critique current research on motor speech disorders to determine best practices for clinical decision-making.
5. Synthesize patient data, interdisciplinary input, and clinical observations to formulate differential diagnoses and prognostic outcomes for individuals with motor speech disorders.
6. Justify the selection of treatment approaches for motor speech disorders based on current theories of neuroplasticity and motor learning.

**SPHS 5350. Voice Disorders/Head and Neck Anomalies
3 Credits (3)**

In this course, you will review the laryngeal and respiratory anatomy and physiology necessary for normal voice production. The course will further introduce you to the etiology of different voice disorders of structural, neurological, and psychogenic origin, including phonotraumatic behaviors. We will discuss the assessment and differential diagnosis of these voice disorders and you will have an opportunity to synthesize this knowledge by researching treatment protocols that adequately meet the needs of clients with different voice disorders. Restricted to: C DS,C D majors. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Students will be able to recognize and describe relevant anatomy and physiology of normal voice production including laryngeal and respiratory anatomy and physiology.
2. Students will be able to identify and discuss structural/organic voice disorders.
3. Students will be able to identify and differentially diagnose functional voice disorders.
4. Students will be able to rate different degrees of voice quality and voice characteristics using perceptual rating scales.
5. Students will be able to explain and demonstrate selected therapy techniques for functionally and structurally based voice disorders.

**SPHS 5360. Communication Disorders in Neurodiverse Populations
3 Credits (3)**

This course is primarily aimed at providing meaningful foundations for the application of evidence-based intervention designs that enhance the development of communication skills for individuals with Autism Spectrum Disorders across the lifespan. May be repeated up to 6 credits.

Learning Outcomes

1. Identify and implement evidence-based interventions for individuals with ASD across a range of ages and abilities
2. Evaluate several evidence-based interventions and determine the best fit based on a client scenario
3. Discuss key features of evidence-based interventions for individuals with ASD
4. Implement evidenced communication interventions with individuals with ASD

SPHS 5410. Professional Issues and Multicultural Practices in Communication Disorders**3 Credits (3)**

This course examines professional ethics and issues, reviews regulations and requirements for professional practice, provides an overview and discusses cultural considerations for studying, assessing and treating communication and swallowing disorders in culturally and linguistically diverse (CLD) populations. Restricted to: C DS,C D majors. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Demonstrate use of ASHA code of ethics to interpret specific situations and determine whether they have followed the code.
2. Demonstrate knowledge of professional issues that affect speech-language pathology: may include but are not limited to trends in professional practice; academic program accreditation standards; ASHA practice policies and guidelines; cultural competency and patient centered care; educational legal requirements or policies; and reimbursement procedures.
3. Demonstrate knowledge of appropriate ASHA certification and state licensure requirements.

SPHS 5510. Advanced Spanish Morpho-Syntax for Education**Professionals****3 Credits (3)**

This class has been designed for Heritage Speakers of Spanish who work in educational settings. It will cover the essential linguistic theory and fundamental structures of the Spanish language. This includes, but is not limited to, verb morphology, morphosyntactic and syntactic structures. The main goal of this course is to determine what usages fall within the norms of an individual's speech community, or if there are elements that fall outside those norms. Students have to be fluent in Spanish as course will be conducted in Spanish.

SPHS 5520. Best Practices in Bilingual/Multicultural Assessment for Practitioners**3 Credits (3)**

The purpose of this course is to provide future speech-language pathologists, educational diagnosticians and special educators with a foundation for evaluating the linguistic, cognitive and academic skills of students from any cultural linguistic background. The course covers a review of the literature on best practices for working with interpreters during assessments. Practitioners will be expected to gather qualitative information about cultural/linguistic and educational histories of school-age children and integrate those results with the results of standardized tests. Restricted to: C DS,C D majors. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 6 credits.

Learning Outcomes

1. Students will be able to summarize cross-cultural differences in communication styles of various cultural groups, and analyze and

critically evaluate how these differences impact speech-language services.

2. Students will be able to identify cultural and linguistic variables that may impact speech-language pathology services to members of specific culturally and linguistically diverse (CLD) groups.
3. Students will be able to use culturally and linguistically appropriate assessment tools and practice for diagnosing and distinguishing language disorder vs language difference, describe potential limitations of standardized tests with CLD clients and explain how to use alternative, nonstandardized methods for nonbiased assessment.
4. Students will learn to use culturally and linguistically appropriate intervention strategies for CLD children with speech-language disorders.

SPHS 5988. Clinical Education**1 Credit (1)**

This course will provide students with the knowledge base necessary to initiate and successfully complete clinical practicum in Communication Disorders. This course will complement SPHS 5990 (Clinical Practicum) during the first fall and spring semester of the the graduate program. Students will be introduced to current knowledge of the principles and methods of prevention, assessment, and intervention for persons with communication and swallowing disorders, including standards of ethical conduct and interprofessional education. Restricted to: C DS,C D majors. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 4 credits.

Prerequisite/Corequisite: SPHS 5990.

Learning Outcomes

1. Students will recognize treatment strategies used in various clinical settings to work with clients and their families from various cultural backgrounds.
2. Students will understand the importance of ethical and confidential service delivery, including HIPAA and the ASHA Code of Ethics.
3. Students will be able to identify characteristics of professional communication, including report writing, clinical documentation, and the creation of short and long-term clinical goals.
4. Students will demonstrate understanding of critical elements of professional verbal communication with clients, their families, and other professionals.

SPHS 5989. Externship in Communication Disorders**3-9 Credits (3-9)**

Students will engage in diagnostic and therapeutic contact with individuals who exhibit speech, language, communication, feeding and/or swallowing disorders. Students will be supervised by licensed Speech-Language Pathologists at the designated setting. The experience will include treatment planning, goal and report writing, patient/parent/family counseling and education, and any additional tasks required. Restricted to: C DS majors. By the time of graduation, all SPHS courses need to be passed with a B or better. May be repeated up to 15 credits.

Prerequisite: Completion of a minimum of 8 credits of SPHS 5990 with a grade of B or better.

Learning Outcomes

1. Students will demonstrate the skills necessary to plan and execute an assessment of clients with communication and swallowing disorders at varying severity levels while under the direction of a certified SLP.
2. Students will demonstrate the skills necessary to plan and implement the treatment of clients with communication and swallowing disorders at varying severity levels while under the direction of a certified SLP.

- Students will demonstrate the principles and methods of identifying and preventing communication swallowing disorders.

SPHS 5990. Practicum in Speech-Language Pathology

1-4 Credits (1-4)

Students will have the opportunity to engage in diagnostic and therapeutic contact with individuals who exhibit speech, language and feeding/swallowing disorders. The experience will include treatment planning, report writing, and patient/parent counseling. Students will be assigned to clients in the ERG Speech and Hearing Center, and may also be assigned to outside mini-externship sites. All students will be supervised by licensed Speech-Language Pathologists. Restricted to: C DS,C D majors. May be repeated up to 15 credits.

Prerequisite: Good standing in the graduate school; a course grade of B or higher in all graduate courses and an overall GPA of 3.0 or higher.

Learning Outcomes

- Students will be able to explain a variety of therapeutic approaches, and how to apply these approaches to different communication disorders.
- Students will be able to select appropriate methods of assessment and treatment based on client presentation.
- Students will collect clinical data and analyze the data to determine appropriate treatment goals.
- Students will create and implement treatment plans to target treatment goals.

SPHS 5996. Special Topics

1-9 Credits (1-9)

Individual and/or group study of special topics identified by subtitle. Restricted to: C DS majors. May be repeated up to 9 credits.

Prerequisite: Prior arrangement with faculty; a course grade of B or higher in all graduate courses and an overall GPA of 3.0 or higher.

Learning Outcomes

- Varies

SPHS 5999. Master's Thesis

1-15 Credits (1-15)

This is a thesis course and will require you to work with your thesis advisor independently to complete a thesis that meets the requirements of the Graduate School. May be repeated up to 15 credits.

Learning Outcomes

- Formulate research question(s) by (a) identifying a specific focus of research and (b) reviewing the current literature to identify gaps in the research.
- Implement an appropriate research method (experimental research project, literature review) – including, as appropriate, IRB approval, data collection, and data analysis – that (a) is aligned with standard procedures in the field, (b) sufficiently addresses the question(s) posed, and (c) is feasible given the time and resources available.
- Prepare a thesis that meets the standards set by the thesis advisor, the committee, and the Graduate School.