

# *Speech-Language Pathology and Audiology (SLPA)*

**SLPA 1000. College: An Introduction. (1 Hour)**

Introduces the university, college, and the speech-language pathology and audiology major. Seeks to enhance students' understanding of self and the decisions they make personally, academically, and professionally as members of the university's diverse community. Designed to help students gain knowledge and experiences that will ease the transition to Northeastern University and assist in developing strategies for success in college and in life beyond. Group activities, individual assignments, and active participation in a learning community are designed to help students adjust to life on an urban campus; develop a better understanding of the learning process; acquire essential academic and co-curricular skills; and make connections with faculty, students, and across majors in Bouvé College.

**SLPA 1101. Bridging Minds: Introduction to Speech, Language, and Hearing Sciences. (4 Hours)**

Presents an overview of speech, language, and hearing disorders. Examines assessment and treatment of disorders including a review of normal speech, language, and hearing development. Requires clinical observations of persons with speech, language, and hearing disorders.

**Attribute(s):** NUpath Difference/Diversity, NUpath Natural/Designed World

**SLPA 1102. Language Development. (4 Hours)**

Provides an overview of the development of the language system from birth to adolescence. Students compare different theories of language acquisition and understand their implications for intervention approaches; become familiar with broad developmental stages in infancy and childhood in the domains of motor skills, cognition, social skills, and speech and language, and the connections among these domains; understand the social dynamics between parents and children from which early gestures and prespeech vocalizations emerge; utilize some informal measures of language development covering form, content, and use; and understand broad differences in development in multicultural populations including Asian, Hispanic, and African-American children.

**SLPA 1103. Anatomy and Physiology of Speech and Hearing Mechanism. (4 Hours)**

Offers an in-depth study of the static structure, musculature, and physiology of the speech and hearing mechanism. Emphasizes current research in speech and hearing physiology.

**SLPA 1200. Phonetics. (4 Hours)**

Introduces students to articulatory, perceptual, and linguistic aspects of speech sounds, and phonetic transcription of normal and disordered speech using the International Phonetic Alphabet. Utilizes lectures, discussions, laboratory exercises, demonstrations, readings, audiotape exercises, problem sets, quizzes, and examinations.

**SLPA 1203. Introduction to Audiology. (4 Hours)**

Offers the opportunity to gain knowledge of the physics of sound and the anatomy/physiology of the human hearing mechanism, and how these two areas are interrelated. Familiarizes students with some of the diagnostic tests performed by the audiologist in order to assess the integrity of the hearing mechanism. Concludes with a brief overview of amplification and the rehabilitation process for hearing-impaired individuals.

**SLPA 1205. Speech and Hearing Science. (4 Hours)**

Introduces facts and theories related to the physical bases of sound as relevant to speech acoustics; anatomy of the hearing mechanisms; psychoacoustics; and speech perception. While primarily concerned with normal communication, the course also includes discussion of communication disorders. Lab demonstrations and problem sets augment lectures and discussions.

**SLPA 1555. Communication Disorders in Movies. (4 Hours)**

Seeks to increase student understanding of communication disorders through film. By watching Oscar-awarded, Oscar-nominated, and other Hollywood movies, students are offered an opportunity to develop a heightened sensitivity for how society views specific communication disorders. Through related lectures, discussion, structured activities, and assignments, studies the etiology and diagnosis of a variety of communication disorders and how individuals with these disorders may be helped.

**Attribute(s):** NUpath Natural/Designed World

**SLPA 1990. Elective. (1-4 Hours)**

Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

**SLPA 2000. Introduction to Co-op. (1 Hour)**

Designed to prepare students for all aspects of the cooperative education component of their curriculum by comparing the goals and expectations of the co-op employer, co-op faculty, and students themselves. Offers students an opportunity to obtain an understanding of the policies and procedures of the Department of Cooperative Education through professional goal exploration. Examines the spectrum of clinical settings for speech, language, and hearing professionals, as well as current trends in the job market. Focuses on job search strategies through developing resumés, preparing for interviews, and making informed choices. Examines on-the-job scenarios involving problem solving, ethical issues, and confidentiality and discusses appropriate ways to handle difficult workplace situations.

**SLPA 2400. Neuroscience of Language. (4 Hours)**

Offers an opportunity to examine language and its relation to other domains of science that have historically been studied in isolation, including memory, emotion, sensory processing, decision making, and motivation. Provides an overview of several areas of language, as well as what modern neuroscience teaches about how the brain processes language.

**SLPA 2990. Elective. (1-4 Hours)**

Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

**SLPA 2991. Research in Communication Sciences and Disorders. (1-4 Hours)**

Offers an opportunity to conduct introductory-level research or creative endeavors under faculty supervision. May be repeated once.

**SLPA 3990. Elective. (1-4 Hours)**

Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

**SLPA 4203. Advanced Audiology. (4 Hours)**

Covers the advanced study of the profession of audiology, including the assessment and treatment of patients with hearing loss, tinnitus, and central auditory processing disorders. Identifies the essential components of working in a clinical practice in order to provide basic audiometric assessments and the selection and fitting of hearing aids and hearing assistive technology for patients with various etiologies.

**Prerequisite(s):** SLPA 1203 with a minimum grade of C

**SLPA 4219. Introduction to Aural Rehabilitation. (3 Hours)**

Introduces the audiological information necessary to conduct aural habilitation and rehabilitation services for patients of all ages relevant to the scope of practice for speech-language pathologists. Introduces topics such as the identification, assessment, diagnosis, and treatment of hearing loss and the associated communication challenges. Offers students an opportunity to learn how to manage hearing loss including an overview of amplification, assistive listening devices, environmental modifications, lip/speech reading techniques, advocacy strategies, teaching strategies, and school/work accommodations.

**Prerequisite(s):** SLPA 1203 with a minimum grade of C

**SLPA 4500. Language Disorders across the Life Span. (4 Hours)**

Offers students an opportunity to obtain the foundation needed to work with children and adults with frequently referred language disorders that are typical consequences of congenital and acquired central and peripheral nervous-system impairments. Emphasizes the anatomy/etiology/neurology/physiology of common disorders, characteristics of these disorders, and intervention approaches (diagnostic and therapeutic). Addresses prevention, outcome, efficacy, and service-delivery considerations.

**Prerequisite(s):** SLPA 1102 with a minimum grade of C

**SLPA 4651. Speech Disorders across the Life Span. (4 Hours)**

Offers students an opportunity to obtain the foundation needed to work with adults and children who demonstrate delays and disorders of speech production across the life span. Discusses articulation and phonological development and disorders, phonological differences, disorders of fluency of speech, and disorders of resonance and voice. Presents formal and informal diagnostic and therapeutic intervention for each disorder/difference and discusses the impact of these communication problems in relation to the individual and family.

**Prerequisite(s):** SLPA 1103 with a minimum grade of C ; SLPA 1200 with a minimum grade of C

**SLPA 4990. Elective. (1-4 Hours)**

Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

**SLPA 4991. Research. (4 Hours)**

Offers an opportunity to conduct research under faculty supervision.

**Attribute(s):** NUpath Integration Experience

**SLPA 4992. Directed Study. (1-4 Hours)**

Offers independent work under the direction of members of the department on a chosen topic. Course content depends on instructor. May be repeated without limit.

**SLPA 5107. Clinical Procedures. (3-4 Hours)**

Reviews principles and procedures of the functional analysis of behavior and focuses on the application of behavioral theory and research to speech, language, and hearing training. Emphasizes clinical investigation in the experimental analysis of the behavior of communication disorders and experiences in the application of experimental procedures in assessment and treatment programs.

**Attribute(s):** NUpath Capstone Experience, NUpath Writing Intensive

**SLPA 5109. Neurology of Communication. (3 Hours)**

Provides students with the opportunity to acquire a basic understanding of human neuroanatomy and neurophysiology as related to normal aspects of speech, hearing, and language. Reviews central and peripheral nervous system anatomy and physiology developmentally from embryologic through the life span perspectives. Neurology of common speech-language pathologies are similarly addressed.

**SLPA 5152. Early Intervention: Planning and Evaluating Services. (3 Hours)**

Comprises a systematic, family-centered, team approach to service delivery. Cases are used as a focal point for learning how to plan and evaluate individualized family services and group service plans. Covers important aspects of teamwork and leadership in early intervention with respect to service and coordination. Addresses practical approaches to assessing needs for group programs, and evaluating the implementation and outcomes of programs. Also considers the impact of legal and financial issues on service coordination and approaches to service delivery.

**SLPA 5154. Early Intervention Practicum 1. (2 Hours)**

Provides students from school psychology, special education, speech-language pathology and audiology, physical therapy, nursing, and related fields with supervised field work experience in team-oriented interventions for infants and toddlers with disabilities or at risk for developmental delays and their families from linguistically and culturally diverse backgrounds. The practicum class sessions are conceptualized as the linchpin training experience between what the theory addresses in didactic courses and the student's fieldwork. Students are expected to master early intervention and team participation core competencies to work effectively with infants and toddlers and their families, interdisciplinary team members, and administrative personnel.

**SLPA 5155. Early Intervention Practicum 2. (2 Hours)**

Provides students from school psychology, special education, speech-language pathology and audiology, physical therapy, nursing, and related fields with supervised field work experience in team-oriented interventions for infants and toddlers with disabilities or at risk for developmental delays and their families from linguistically and culturally diverse backgrounds. The practicum class sessions are conceptualized as the linchpin training experience between what the theory addresses in didactic courses and the student's fieldwork. Students are expected to master early intervention and team participation core competencies to work effectively with infants and toddlers and their families, interdisciplinary team members, and administrative personnel.

**SLPA 5201. Diagnostic Testing in Speech-Language Pathology. (2 Hours)**

Offers students an opportunity to review diagnostic tests and test manuals in the field of speech-language pathology and to practice their administration. Discusses information about test content, reliability, and validity. Principles of standardized testing, norm referencing, and test scoring are reviewed and practiced.

**SLPA 5300. Intensive Phonetics. (3 Hours)**

Presents foundational concepts related to articulatory, perceptual, and linguistic aspects of speech sounds and phonetic transcription of typical, accented, and disordered speech using the International Phonetic Alphabet, or IPA. Examines speech sound production and perception within the context of clinical application of phonetic analysis.

**SLPA 5302. Intensive Language Development. (3 Hours)**

Presents a foundation in current research and theories regarding the development of first language in children, as well as communication changes relevant to adolescents. Discusses the application of various theoretical perspectives and examines how to recognize examples of communication development in the everyday behavior of children. Emphasizes techniques used to analyze and understand speech and language performance.

**SLPA 5303. Intensive Anatomy and Physiology of Speech and Hearing Mechanism. (3 Hours)**

Presents an in-depth study of the static structure, musculature, and physiology of the speech and hearing mechanism. Analyzes the specific structures, muscles, and functions of the respiratory, phonatory, articulatory, and hearing systems. Emphasizes the current research in speech and hearing physiology.

**SLPA 5305. Intensive Speech and Hearing Science. (3 Hours)**

Examines the principles of speech and hearing science, focusing on the analysis and interpretation of sound waves and their role in communication. Studies how to differentiate between wave patterns, measure and describe sound wave properties, and understand how speech signals are generated. Emphasizes analysis of spectrograms, integration of acoustic measurements in assessment and treatment, and application of theoretical knowledge to clinical practice.

**SLPA 5403. Applied Foundations of Audiology. (3 Hours)**

Presents the foundational knowledge and skills to work with individuals who are deaf or hard of hearing. Describes the history and current requirements of the audiology profession. Examines the anatomy and physiology of the auditory mechanism and discusses the subjective and objective assessments used for diagnosis. Provides instruction how to recognize the types, degrees, and etiology of various hearing losses; understand and differentiate amplification options; interpret audiograms; and analyze cases to formulate recommendations.

**SLPA 5976. Directed Study. (1-4 Hours)**

Allows students to pursue topics of individual interest beyond the scope of formal course work under the direction of faculty. May be repeated without limit.

**SLPA 6211. Research and Evidence-Based Practice. (3 Hours)**

Uses principles of evidence-based practice to prepare students primarily as consumers of clinically relevant research in the field of communication disorders. While consumers utilize research information in some shape or form in their daily practice, producers engage in the conduct of original or replicated research. Consumers and producers of research information should be concerned with internal and external validity of research. As consumers, for example, clinicians may consult research studies to determine suitable treatments for their clients. As producers, clinicians may document a treatment via the case study method or single-subject experimental research. Emphasizes the role of using research to guide practice, even though the role of clinicians as research producer is addressed as well.

**SLPA 6219. Aural Rehabilitation. (3 Hours)**

Provides a detailed examination of various approaches to speech reading and auditory training as they apply to children and adults. Offers an integrated approach to management of hearing-impaired individuals.

**SLPA 6300. Speech Science. (2 Hours)**

Focuses on the basics of acoustics and its relationship with speech production and speech perception. Highlights the relationship between physiological aspects of speech production and their influence on the resulting acoustics of speech. Considers both normative and disordered speech production and perception. Discusses acoustic analysis and clinical approaches to remediation.

**SLPA 6303. Stuttering. (3 Hours)**

Provides students with the information base needed to work with individuals of all ages who present with any type of fluency disorder. Focuses on theoretical background and assessment/treatment techniques for dysfluent individuals. Emphasizes outcome and efficacy considerations.

**SLPA 6304. Augmentative and Alternative Communication. (3 Hours)**

Provides an overview of augmentative and alternative communication (AAC) approaches for individuals with severe communication impairments. Helps students gain the foundation knowledge and skills for further independent study, continuing education, further course work, and practicum experience. For student who seek additional study or experience in AAC, the course should provide an enabling foundation for providing direct services in AAC or to serve as a consultant to meet the needs of individuals with severe communication impairments. For those who will not seek additional study in AAC, the course should provide the basic knowledge for appropriate referral and collaboration.

**SLPA 6305. Articulation and Phonology. (3 Hours)**

Familiarizes students with theoretical, empirical, and practical views of the etiology, assessment, and treatment of disorders of the speech sound system. Focuses on disorders that are developmental in nature (as opposed to emerging after normal speech sound development has occurred). Includes a review of articulatory phonetics, discussion of relevant linguistic principles, and study of theory and data relevant to the course of normal speech sound system development.

**SLPA 6307. Voice Disorders. (3 Hours)**

Examines voice disorders, which are prevalent across the life span in both professional and lay voice users. Evaluation and treatment of organic and/or functional vocal pathologies are key focuses of speech-language pathologists across clinical settings (educational and medical). Provides students with the information base needed to work with these interesting and rewarding populations. Emphasis is on anatomy and physiology of normal and impaired voice production, instrumental and noninstrumental assessment, and treatment techniques for remediation. Emphasizes prevention, outcome, and efficacy considerations.

**SLPA 6308. Dysphagia. (3 Hours)**

Evaluating and treating swallowing disorders are key focuses of the speech-language pathologies in most clinical work settings (educational and medical), with individuals of all ages. Provides students with the information base needed to work with these challenging and rewarding populations. Focuses on theoretical background and assessment/treatment techniques for dysphagia individuals. Emphasizes outcome and efficacy considerations.

**SLPA 6311. Counseling in SLP. (3 Hours)**

Provides students with a theoretical framework from which specific counseling strategies may be implemented for individuals and their families with various communication disorders. Stresses conversational interactive strategies.

**SLPA 6313. Counseling in Speech-Language Pathology. (2 Hours)**

Offers a theoretical framework from which specific counseling strategies may be implemented for individuals and their families with various communication disorders. Stresses conversational interactive strategies. Emphasizes the role of cultural humility and cultural responsiveness in counseling strategies. Offers students an opportunity to role-play counseling issues with individuals across the life span.

**SLPA 6320. Autism. (1 Hour)**

Reviews the autism spectrum, including theories of causation, developmental aspects, descriptive and diagnostic characteristics, an overview of assessment and intervention, and legal and social issues as they relate to speech-language pathologists. Presents the most current research findings and best practices needed to gain a clear understanding of individuals diagnosed with autism and how to apply current research to treatment.

**SLPA 6321. Motor Speech Disorders. (3 Hours)**

Focuses on the neurology, SLP evaluation, and SLP treatment of individuals presenting with any type/types of anarthria/dysarthria and apraxia/dyspraxia of speech. Many of the neurologically impaired children and adults that speech-language pathologists work with present with motor speech disorders. Diagnostically, studies how to complete oral motor examinations (including an assessment of those cranial nerves involved in respiration, phonation, resonance, and articulation) and intelligibility testing. Therapeutically, studies a variety of therapy approaches for the range of motor speech disorders based on severity of impairment and prognosis for recovery/improvement including verbal, nonverbal, prosthetic, and pharmacologic.

**SLPA 6325. Accent Modification for Speech-Language Pathology. (1 Hour)**

Offers a professional-level introduction to content, processes, and practices associated with accent modification (AM) and "speech coaching" for clients who present with communication differences that are not considered pathologic. Seeks to facilitate consideration and discussion of cultural-linguistic, ethical, business, and other related factors. Offers student clinicians opportunities to observe and to practice various assessment and training approaches in accent modification and speech training and to demonstrate their knowledge and skills through the development of a practical training plan.

**SLPA 6329. Diversity, Equity, and Inclusion in Speech-Language Pathology. (2 Hours)**

Introduces intersectional thinking and cultural responsiveness for speech-language pathologists through topics related to diversity, equity, and inclusion. Offers students an opportunity to gain comfort in engaging with these topics and to develop actionable steps toward more reflective and accountable practices. Facilitates engagement in culturally responsive care through participation in the process of unlearning and understanding the needs of diverse populations.

**SLPA 6332. Seminar in Communication Disorders. (1-3 Hours)**

Allows for the advanced study of current diagnostic and intervention strategies, applications of theoretical and applied research, and exploration of current topics in speech-language pathology. Topics may range from the treatment of underserved populations to the analysis of complex clinical cases requiring interdisciplinary management. May be repeated twice.

**SLPA 6339. Language Literacy in Practice. (1 Hour)**

Focuses on early literacy skill acquisition in the field of speech-language pathology. Introduces the historical framework of learning to read, elements of reading, reading assessment and intervention, and the integration of theoretical knowledge and clinical experience in school-based therapy settings. Offers students an opportunity for hands-on delivery of language-based early literacy services to young school-age children who may be at risk for delayed language and/or early reading difficulties.

**SLPA 6340. Language Disorders in Children 1. (3 Hours)**

Explores communication disorders from infancy through the preschool period. Considers at-risk populations, as well as those with known etiologies. Addresses information on incidence, characteristics, principles and methods of assessment and intervention, multicultural issues, service delivery models, and current issues in the research literature. Examines theoretical issues and their implication for language intervention.

**SLPA 6341. Language Disorders in Children 2. (3 Hours)**

Offers students an opportunity to obtain a foundation of knowledge about the etiology and characteristics of language disorders in school-age children. Addresses the evolving language demands children encounter as they progress through school, the impact of language disorders on academic performance and social interaction in the classroom, the relationship between oral and written language development, as well as the role of the speech-language pathologist in the assessment and treatment of written language disorders. Also designed to teach students in the field of communication disorders about literacy skill use and evaluation and treatment of literacy impairments beyond early childhood.

**SLPA 6342. Speech-Language Disorders In Adults 1. (3 Hours)**

Offers students an opportunity to obtain foundational skills needed to work with frequently referred adults with aphasia across clinical settings. Speech, language, and cognitive-communication disorders are typical consequences of acquired central and peripheral nervous system adult impairments. Emphasizes the anatomy, etiology, neurology, and physiology of different types of aphasia, characteristics of these, and intervention approaches (diagnostic and therapeutic). Addresses prevention, outcome, efficacy, and service-delivery considerations.

**Prerequisite(s):** SLPA 5109 with a minimum grade of B or SLPA 5109 with a minimum grade of B

**SLPA 6343. Speech-Language Disorders in Adults 2. (3 Hours)**

Offers students an opportunity to obtain foundational skills needed to work with frequently referred adults with acquired neurologic cognitive-communicative impairments across clinical settings. Speech, language, and cognitive-communication disorders are typical consequences of acquired central and peripheral nervous system adult impairments. Emphasizes the anatomy, etiology, neurology, and physiology of different types of cognitive-communicative impairments, characteristics of these, and intervention approaches (diagnostic and therapeutic). Addresses prevention, outcome, efficacy, and service-delivery considerations.

**Prerequisite(s):** SLPA 5109 with a minimum grade of B or SLPA 5109 with a minimum grade of B

**SLPA 6350. Speech-Language Pathology in Medical Settings. (2 Hours)**

Provides an overview to the adult and pediatric medical settings in which speech-language pathologists are employed. Offers students an opportunity to learn about the role(s) of the SLP in various settings (e.g., acute care, rehabilitation, outpatient services, private practice, home health, and day habilitation); the SLPs' scope of practice; the variety of patient populations/diagnoses; and the medical team approach to service delivery across the continuum of care and across the life span.

**SLPA 6360. Diversity, Equity, and Inclusion in Speech-Language Pathology. (3 Hours)**

Introduces intersectional thinking and cultural responsiveness for speech-language pathologists through topics related to diversity, equity, and inclusion (DEI). Offers an opportunity to build mastery with these topics and to develop actionable steps towards more reflective and accountable practices. Facilitates engagement in culturally responsive care through participating in the process of unlearning and applying the needs of diverse populations, while navigating implicit bias. Provides opportunities to apply theoretical knowledge to practical contexts to develop the skills needed to identify and analyze key challenges, explore possible solutions, and implement transformative, equity-driven practices in the field.

**SLPA 6415. Speech-Language Pathology Advanced Clinical Practicum 1. (3 Hours)**

Offers supervised clinical experience in speech-language pathology for beginning graduate students at Northeastern University on-campus clinics. Requires student to be available a minimum of twenty-five hours per week during the academic year. Requires attendance at on-campus seminar meetings held weekly. May be repeated twice.

**Prerequisite(s):** SLPA 5107 with a minimum grade of B or SLPA 5107 with a minimum grade of B

**SLPA 6416. Speech-Language Pathology Advanced Clinical Practicum 2. (2 Hours)**

Offers supervised clinical experience in speech-language pathology for students at Northeastern University on-campus clinics and off-campus practicum sites. Uses practical experience to emphasize advanced diagnostic and therapeutic techniques, stressing the application of theory to practice. Requires student to be available a minimum of twenty-five hours per week during the academic year. Requires attendance at weekly on-campus seminar meetings. May be repeated once.

**Prerequisite(s):** SLPA 6415 with a minimum grade of S or SLPA 6415 with a minimum grade of S

**SLPA 6417. Speech-Language Pathology Advanced Clinical Practicum 3. (2 Hours)**

Offers supervised clinical experience in speech-language pathology for advanced graduate students at Northeastern University on-campus clinics and off-campus practicum sites. Uses practical experience to emphasize advanced diagnostic and therapeutic techniques, stressing continued integration of theory to practice. Requires students to be available a minimum of twenty-five hours per week during the academic year. Requires attendance at weekly on-campus seminar meetings. May be repeated once.

**Prerequisite(s):** SLPA 6416 with a minimum grade of S

**SLPA 6418. Speech-Language Pathology Advanced Clinical Practicum 4. (2 Hours)**

Offers supervised clinical experience in speech-language pathology for advanced graduate students at the Northeastern University on-campus clinics and off-campus practicum sites. Uses practical experience to emphasize advanced diagnostic and therapeutic techniques, stressing continued application of theory to practice. Requires students to be available a minimum of twenty hours per week during the academic year. Requires attendance at weekly on-campus seminar meetings. May be repeated once.

**Prerequisite(s):** SLPA 6417 with a minimum grade of S

**SLPA 6420. Practical Statistics for Speech-Language Pathology. (3 Hours)**

Introduces basic concepts in data collection, organization, and analysis using statistical methods with an overall focus on profession-specific application and interpretation.

**SLPA 6962. Elective. (1-4 Hours)**

Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

**SLPA 6964. Co-op Work Experience. (0 Hours)**

Provides eligible students with an opportunity for work experience. May be repeated once for a total of two completions.

**SLPA 6990. Thesis. (1-3 Hours)**

Offers a research activity that is the first of a two-course thesis sequence with the recommendation of the advisor. May be repeated twice for a maximum of 6 semester hours.