Communication Sciences and Disorders

Website (http://www.northeastern.edu/bouve/csd)

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The Department of Communication Sciences and Disorders (CSD) offers two undergraduate minors.

These flexible minors allow students from various fields of study to enhance their academic courses related to the field of communication sciences in general, as well as specific courses covering topics such as audiology or speech/language disorders across the lifespan. Advisors assist students minoring in this area with accommodating their interests, aptitudes, or graduate plans.

The minor in CSD includes courses that offer exposure to a variety of aspects of the CSD field. Students can go on to graduate programs in fields such as applied psychology, linguistics, neuroscience, and education, among others, but does not by itself prepare students for admission to graduate programs in speech-language pathology or audiology. Speech-language pathology and audiology courses are designed to help students develop entry-level competencies that will enable them to function in a preprofessional capacity in educational settings, medical and rehabilitation centers, and private-practice clinics.

The minor in clinical speech-language pathology and audiology (SLPA) seeks to prepare students for admission into a graduate program in speech-language pathology or audiology. Speech-language pathologists and audiologists (which requires graduate education to practice) are involved with the evaluation and treatment of, and counseling and research in, human communication and its disorders. They provide clinical services to a full range of communicatively impaired individuals, from infants through geriatrics. Speech-language pathologists treat disorders such as developmental language and articulation disorders; voice and resonance problems; stuttering; pediatric and adult swallowing disorders; and language and cognitive impairments due to stroke, head injury, and progressive neurological diseases. Audiologists specialize in the prevention, identification, assessment, and rehabilitation of hearing disorders. Individuals with congenital and acquired hearing impairments are seen for services by audiologists. They prescribe and dispense hearing aids and instruct individuals in the use of amplification.

Communication Sciences and Disorders Minor
The CSD minor consists of one required foundation course taken prior to any core or elective courses, then two core courses and one elective from either the remaining core courses in the list or from a specified set of elective courses that are taught by units other than the Department of CSD. Students may consult with an advisor in the CSD department concerning the current listing of eligible elective courses for the CSD minor.

Clinical Speech-Language Pathology and Audiology Minor
The clinical SLPA minor seeks to prepare students for admission into a graduate program in speech-language pathology or audiology (http://catalog.northeastern.edu/graduate/health-sciences/communication-sciences-disorders/speech-language-pathology-audiology-minor). In particular, students in this minor are on a track that, if supplemented with certain elective choices within their major, would meet all admissions requirements for our department’s own MS/SLP (http://catalog.northeastern.edu/graduate/health-sciences/communication-sciences-disorders/speech-language-pathology- ms) program.

Students pursuing this minor are advised to consult early and regularly with their academic advisors in order to ensure a timely completion of the combination of their major and the clinical SLPA minor requirements.

Students pursuing this minor who wish to go to graduate school at institutions other than Northeastern are advised to carefully check admissions requirements for those programs.

Programs

Minors
• Communication Sciences and Disorders (http://catalog.northeastern.edu/undergraduate/health-sciences/communication-sciences-disorders/communication-sciences-disorders-minor)
• Speech-Language Pathology and Audiology (http://catalog.northeastern.edu/undergraduate/health-sciences/communication-sciences-disorders/speech-language-pathology-audiology-minor)

Courses

Speech-Language Pathology and Audiology Courses
SLPA 1000. College: An Introduction. 1 Hour. Provides an introduction to the University, college, and health professions to enhance students’ understanding of self and the decisions they make academically and socially as members of the University’s diverse, multicultural community. Group activities and individual assignments along with active participation in a learning community help students adjust to life on an urban campus, develop a better understanding of the learning process, acquire essential academic skills, and make connections with the faculty and students in the college.

SLPA 1101. Introduction to Communication Disorders. 4 Hours. Offers an overview of disorders of speech and hearing and their treatment, and a review of normal speech and hearing development. Requires clinical observations of persons with speech, language, and hearing disorders.

SLPA 1102. Language Development. 3-4 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. 3-4 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. 3-4 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 1202. Neurological Bases of Communication. 4 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. Central and peripheral nervous system anatomy and physiology are reviewed developmentally from the embryologic through the life-span perspectives.

SLPA 1203. Introduction to Audiology. 3-4 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. 3-4 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.

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.
Prepares students for all aspects of the cooperative education component of their curriculum by comparing the goals and expectations of co-op employer, co-op faculty, and students themselves. Through professional goal exploration, students gain an understanding of the policies and procedures of the Department of Cooperative Education. The spectrum of clinical settings for speech, language, and hearing professionals is examined as well as current trends in the job market. Effective job search strategies through developing rTsumTs, preparing for interviews, and making informed choices are targeted. Also examines on-the-job scenarios involving problem solving, ethical issues, and confidentiality, and discusses appropriate ways to handle difficult workplace situations.

SLPA 2990. Elective. 1-4 Hours.
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

SLPA 3990. Elective. 1-4 Hours.
Offers elective credit for courses taken at other academic institutions. May be repeated without limit.

SLPA 4501. Language Disorders in Children. 4 Hours.
Covers a variety of common speech and language disorders in children with both biological and environmental foundations. Covers models of speech and language processing, definitions of disorders in relation to those models, and a range of intervention methodologies. Considers issues of bilingualism and bidialectalism and how they impact speech and language learning and academic success. Also considers the implications of these disorders for academic achievement, particularly reading and writing. The course is taught using a case-based approach. A portion of the credit for the course is earned through Web-based learning.

SLPA 4550. Seminar in SLP and Audiology. 4 Hours.
Offers students a transition into clinical practice. Students develop hands-on skills in either assessment or treatment, understand the ethics of clinical practice, and develop professional communication skills in a clinical setting.

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.

SLPA 4652. Seminar in SLP and Audiology Abroad: Achieving Cultural Competency. 4 Hours.
Offers students opportunities to improve their cultural awareness; to develop their knowledge of different cultures; to increase their appreciation of—and sensitivity to—cultural differences; and to experience rehabilitation-related, culturally diverse experiences while abroad. Rehabilitation services are provided in a variety of educational, medical, and community settings. Effectiveness of rehabilitation across these settings is impacted by many factors, including the interaction between cultural influences of the clinician and the clients/patients with whom he or she is working. May be repeated without limit.

SLPA 4700. Directed Observation Workshop. 1 Hour.
Offers students an opportunity to learn about assessment and intervention of individuals with communication disorders across the life span through guided observation of speech and language sessions. Discusses integrating principles of evidence-based practice into intervention. Reviews recent journal articles regarding treatment options applicable to clients. As part of the course, students have an opportunity to accrue a minimum of four hours of videotaped observations toward the twenty-five observation hours required by the American Speech-Language Hearing Association (ASHA) to meet clinical requirements as part of ASHA standards.

SLPA 4701. Clinical Research Directed Study. 1 Hour.
Allows undergraduate students the opportunity to pursue a research interest beyond the confines of a specific course. Under the direction of a faculty adviser, students jointly develop a plan of study. Gives students a first exposure to all or some of the steps of the research process relative to their interest areas, beginning with the formulation of the problem and ending with the dissemination of the findings. May be repeated without limit.
SLPA 4702. Clinical Research Directed Study. 2 Hours.
Allows undergraduate students the opportunity to pursue a research interest beyond the confines of a specific course. Under the direction of a faculty adviser, students jointly develop a plan of study. Gives students a first exposure to all or some of the steps of the research process relative to their interest areas, beginning with the formulation of the problem and ending with the dissemination of the findings. May be repeated without limit.

SLPA 4703. Clinical Research Directed Study. 3 Hours.
Allows undergraduate students the opportunity to pursue a research interest beyond the confines of a specific course. Under the direction of a faculty adviser, students jointly develop a plan of study. Gives students a first exposure to all or some of the steps of the research process relative to their interest areas, beginning with the formulation of the problem and ending with the dissemination of the findings. May be repeated without limit.

SLPA 4704. Clinical Research Directed Study. 4 Hours.
Allows undergraduate students the opportunity to pursue a research interest beyond the confines of a specific course. Under the direction of a faculty adviser, students jointly develop a plan of study. Gives students a first exposure to all or some of the steps of the research process relative to their interest areas, beginning with the formulation of the problem and ending with the dissemination of the findings. May be repeated without limit.

SLPA 4891. Research Abroad. 4 Hours.
Offers an opportunity to conduct research under faculty supervision as part of an international study experience.

SLPA 4970. Junior/Senior Honors Project 1. 4 Hours.
Focuses on in-depth project in which a student conducts research or produces a product related to the student’s major field. Combined with Junior/Senior Project 2 or college-defined equivalent for 8-credit honors project. May be repeated without limit.

SLPA 4971. Junior/Senior Honors Project 2. 4 Hours.
Focuses on second semester of in-depth project in which a student conducts research or produces a product related to the student’s major field. May be repeated without limit.

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.

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 4993. Independent 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 4994. Internship. 4 Hours.
Offers students an opportunity for internship work. May be repeated without limit.

SLPA 4995. Practicum. 1-4 Hours.
Offers eligible students an opportunity for practical experience. May be repeated without limit.

SLPA 4996. Experiential Education Directed Study. 4 Hours.
Draws upon the student’s approved experiential activity and integrates it with study in the academic major. Restricted to those students who are using the course to fulfill their experiential education requirement. May be repeated without limit.

SLPA 5100. Diagnostic Audiometry. 3 Hours.
Presents an in-depth examination of the various uses of pure tone, speech, and impedance measures as they relate to the standard audiological assessment. Covers case history and case reporting.

SLPA 5101. Electrophysiology. 1 Hour.
Focuses on the interaction of measuring equipment and specific body responses to auditory stimulation. Explores in detail the acoustic and nonacoustic reflex, the otoacoustic emission, and the evoked auditory potential.

SLPA 5102. Anatomy and Physiology of the Ear. 2 Hours.
Details anatomy, physiology, and neurology of the outer, middle, and inner ear, as well as structure and function of the eighth cranial nerve.

SLPA 5103. Language Disorders in Children for Non–Speech-Language Pathology and Audiology Majors. 3 Hours.
Emphasizes current theories of language behavior and their practical application to the assessment and remediation of language disturbances in children. Uses lectures, discussions, and case presentations to focus on what constitutes a language problem, what assessment tools and therapeutic techniques are currently available, and what underlying principles are involved in selecting and organizing the content of a remediation program.

SLPA 5104. Differential Diagnosis in Audiology. 3 Hours.
Examines in detail the site of lesion test battery approach to differential diagnosis in audiology. Includes consideration of Bekesy, ENG, SISI, tone decay tests, ABLB, acoustic reflex, and auditory evoked potentials (ABR).

SLPA 5105. Auditory Pathologies. 3 Hours.
Provides an overview of temporal bone and eighth nerve anatomy. Discusses physiology of the auditory system. Covers the more frequently encountered pathologies affecting the auditory system as well as medical/surgical treatment of those disorders.

SLPA 5106. Amplification. 4 Hours.
Explores physical characteristics of hearing aids and their performance. Offers theoretical approaches to selection and fitting of hearing aids, and analysis of hearing aid dispensing systems.

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.

SLPA 5108. Rehabilitation Audiology. 3 Hours.
Provides information about the effects of hearing loss on communication, the role of the audiologist in the rehabilitation process, approaches to counseling, uses of amplification, and issues in industrial and educational hearing conservation.

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 5110. Language Disorders across the Life Span. 3-4 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.

SLPA 5111. Anatomy and Physiology of the Auditory System. 3 Hours.
Details the anatomy, physiology, and neurology of the outer, middle, and inner ear, as well as providing basic coverage of the higher peripheral and central auditory mechanisms.

SLPA 5150. Early Intervention: Assessment and Intervention. 3 Hours.
Offers an opportunity to learn the assessment models and multidomain tests used in early intervention. Familiarizes students with formal and informal tests. Offers an opportunity to learn a variety of intervention models, methods, and strategies.

SLPA 5201. Diagnostic Testing in Speech-Language Pathology. 1 Hour.
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 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 5978. Independent 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 5984. Research. 1-4 Hours.
Offers an opportunity to conduct research under faculty supervision. May be repeated without limit.