# SPEECH, LANGUAGE, AND HEARING SCIENCE (SLHS)

## Explanation of Course Numbers

- Courses in the 1000s are primarily introductory undergraduate courses
- Those in the 2000s to 4000s are upper-level undergraduate courses that also may be taken for graduate credit with permission and additional work assigned
- Those in the 6000s and 8000s are for master's, doctoral, and professional-level students
- The 6000s are open to advanced undergraduate students with approval of the instructor and the dean or advising office

**SLHS 1000. Dean's Seminar. 3 Credits.**
The Dean's Seminars provide Columbian College first-year students focused scholarship on specific intellectual challenges. Topics vary by semester; see department for more details.

**SLHS 1011. Voice and Diction. 3 Credits.**
Increased knowledge and experience of oral communication, including presentation skills specifically naturalness, correctness, and clarity through the study of phonetics, rate, volume, pitch, and quality.

**SLHS 1071. Foundations of Human Communication. 3 Credits.**
Fundamental principles of the biology of speech, hearing and language, language structure and use, and human communicative interaction. Practice in the identification of specific verbal and nonverbal aspects of communication behavior.

**SLHS 1071W. Foundations of Human Communication. 3 Credits.**
Fundamental principles of the biology of speech, hearing and language, language structure and use, and human communicative interaction. Practice in the identification of specific verbal and nonverbal aspects of communication behavior. Includes a significant engagement in writing as a form of critical inquiry and scholarly expression to satisfy the WID requirement. Credit cannot be earned for this course and SLHS 1071.

**SLHS 1072. Multicultural Issues in Human Communication. 3 Credits.**
The influences of culture and bilingualism on language development and use, and on communicative interaction; experimental and ethnographic methods for studying language and communication in a multicultural society.

**SLHS 1081. American Sign Language I. 3 Credits.**
Acquisition of proficiency in American Sign Language (ASL) through a linguistic, communicative, and cultural approach to language learning. Development of receptive and expressive signing skills and acquisition of fundamentals of applied grammar.

**SLHS 1082. American Sign Language II. 3 Credits.**
The purpose of this course is to enable students to enhance proficiency in American Sign Language (ASL) through a linguistic, communicative, and cultural approach to language learning. There is a continued emphasis on the development of receptive and expressive signing skills and on the acquisition of the fundamentals of applied grammar; cross-cultural understanding is fostered and real-life applications are emphasized throughout the course. Prerequisites: SPHR 1081.

**SLHS 1084. Perspectives in Deaf Culture. 3 Credits.**
Analysis and evaluation of the roles and impact of deaf people in various spheres, including history, education, communication, technology, political activism, and current events.

**SLHS 2083. American Sign Language III. 3 Credits.**
We will focus mainly on grammatical features including non-manual signals (i.e., facial expression and inflection), semantics, and syntax. Through assignments inside and outside of classroom, cultural perspectives of the Deaf Community will be examined and discussed; this class is taught primarily in ASL. Prerequisites: SPHR 1082.

**SLHS 2101. Research Methods. 3 Credits.**
Introduction to fundamental research principles, designs, and methods used in the study of speech, language, and hearing. A related course in anthropology or psychology may be substituted for the prerequisite. Prerequisites: SPHR 1071 or SLHS 1071.

**SLHS 2104. Speech and Language Disorders. 3 Credits.**
Survey of the nature and causes of developmental and acquired disorders of speech and language. Emphasis on prevention and effective communication with persons having a speech–language impairment. Same As: SLHS 2104W.

**SLHS 2104W. Speech and Language Disorders. 3 Credits.**
Survey of the nature and causes of developmental and acquired disorders of speech and language. Emphasis on prevention and effective communication with persons having a speech-language impairment. Includes a significant engagement in writing as a form of critical inquiry and scholarly expression to satisfy the WID requirement. Same As: SLHS 2104.

**SLHS 2105. Anatomy and Physiology for Speech, Language, and Hearing. 3 Credits.**
Anatomy and physiology of the respiratory, phonatory, articulatory, and resonatory subsystems of speech; swallowing; cranial nerves.

**SLHS 2106. Neural Substrates of Speech, Language, and Hearing. 3 Credits.**
General introduction to neuroanatomy and neurophysiology; neuroanatomy and neurophysiology of speech, language, hearing, swallowing. Recommended background: Prior completion of SLHS 2105.

**SLHS 2107. Acoustics. 3 Credits.**
Speech acoustics, with emphasis on how the speech signal is produced and the elements of speech important for speech perception. The prerequisite courses may be taken concurrently. Recommended background: Prior completion of SLHS 2105 or SPHR 2105; and SLHS 3136, or SPHR 2136, or SPHR 3136.

**SLHS 2108. Introduction to Audiology. 3 Credits.**
Survey of the field of audiology, including the measurement of hearing, the nature and causes of hearing impairment, hearing aids and habilitation/rehabilitation of the hearing impaired. SPHR 2106 may be taken as a corequisite. Laboratory fee. Prerequisites: SPHR 2106 and SPHR 2107.

**SLHS 2131. Language Acquisition and Development. 3 Credits.**
Theories of language acquisition; development of language from birth through adolescence; emphasis on development of semantics, syntax, morphology, and pragmatics; multicultural issues in language development. Prerequisite: SPHR 2135.

**SLHS 2133. Autism. 3 Credits.**
How the study of autism and related disorders may shed light on the characteristics of the mind. The broad characteristics of autism spectrum disorders, including cognitive, behavioral, and neural aspects; definitions of typical vs. atypical development; and difficulties associated with diagnosis and treatment.

**SLHS 2135. Language: Structure, Meaning, and Use. 3 Credits.**
Survey of basic linguistic terminology and the components of language structures. Language structure (syntax, morphology, phonology), meaning (semantics), and the use of language as a means of communication among individuals (pragmatics).

**SLHS 2136. Phonetics. 2 Credits.**
Overview of phonetics of American English and an introduction to sounds of languages of the world. General principles of phonetic description and analysis, speech production mechanisms, classification of consonants and vowels of English and other languages, suprasegmental aspects of speech, and acoustic characteristics of speech sounds. Allophonic variation and phonetic characteristics of connected speech and social and regional phonetic variation. Instruction and practice in transcription using the International Phonetic Alphabet.

**SLHS 3108. Introduction to Audiology. 3 Credits.**
Survey of the field of audiology, including the measurement of hearing, nature and causes of hearing impairment, hearing aids, and habilitation/rehabilitation of the hearing impaired. Corequisites: SLHS 2016.

**SLHS 3109. Auditory Learning and Aural Rehabilitation. 3 Credits.**
Introduction to the theories and procedures used to provide aural and audiological (re)habilitation to children and adults who have hearing loss, and to provide concomitant services to their family members. Credit cannot be earned for this course and SPHR 3109.

**SLHS 3116. Brain and Language. 3 Credits.**
How the brain operates for language production and understanding and how damage to the brain can interrupt neural processes with a variety of neurolinguistic consequences. Neuroimaging and behavioral research that informs the understanding of the bases of neurolinguistic communication disorders. Prerequisites: SLHS 2106 or SPHR 2106. Corequisites: SLHS 2106 may be taken concurrently. Credit cannot be earned for this course and PSYC 3116.

**SLHS 3117. Hearing and Perception. 3 Credits.**
Acoustics and anatomy/physiology of auditory mechanism and the psychoacoustics of the normal auditory system in terms of auditory sensitivity, loudness, pitch, masking, and binaural hearing. Psychoacoustics and speech acoustics and speech perception. Prerequisites: SLHS 2108 or SPHR 2108.

**SLHS 3131. Language Acquisition and Development. 3 Credits.**
Development of phonology, morphology, syntax, semantics, and pragmatics in children prior to schooling. Survey of scientific literature. Cross-cultural perspective on variation in global child rearing practices. Recommended background: Prior completion of the following: SLHS 1071, SLHS 1071W, or SLHS 2135.

**SLHS 3132. Literacy. 3 Credits.**
Overview of literacy development (thinking, listening, speaking, reading, spelling, writing) with emphasis on reading and writing development. Prerequisites: SLHS 1071 or SLHS 1071W or SPHR 1071 or SPHR 1071W.

**SLHS 3133. Autism. 3 Credits.**
Clinical diagnosis and treatment of autism spectrum disorder epidemiology, etiology, and developmental factors, including neural and cognitive features. Viewed through the broader sociocultural context.

**SLHS 3135. Language: Structure, Meaning, and Use. 3 Credits.**
Survey of basic linguistic terminology and the components of language structures. Language structure (syntax, morphology, phonology), meaning (semantics), and the use of language as a means of communication among individuals (pragmatics).

**SLHS 3136. Phonetics. 2 Credits.**
Overview of phonetics of American English and an introduction to sounds of languages of the world. General principles of phonetic description and analysis, speech production mechanisms, classification of consonants and vowels of English and other languages, suprasegmental aspects of speech, and acoustic characteristics of speech sounds. Allophonic variation and phonetic characteristics of connected speech and social and regional phonetic variation. Instruction and practice in transcription using the International Phonetic Alphabet.

**SLHS 3199. Selected Topics. 3 Credits.**
Topic vary by semester. May be repeated for credit provided the topic differs. Consult the Schedule of Classes for more details.

**SLHS 3603. Psycholinguistics. 3 Credits.**
Language as species-specific property of the human mind. Psychological processes involved in the encoding and decoding of language; first and second language acquisition and bilingualism. Same As: ANTH 3603.

**SLHS 4118W. Senior Research Seminar in Communication Sciences and Disorders. 3 Credits.**
Critical evaluation of the research literature on speech and hearing; the process of scientific writing and analysis; how research can inform and improve clinical practice. For departmental majors in the senior year. Restricted to students majoring in speech, language and hearing sciences with a concentration in communication sciences and disorders. Prerequisites: One of the following: SPHR 1071, SPHR 1071W,, SPHR 2104, or SPHR 2104W. Includes a significant engagement in writing as a form of critical inquiry and scholarly expression to satisfy the WID requirement.

**SLHS 4119. Principles and Methods in Speech-Language Pathology. 3 Credits.**
Principles and methods of clinical intervention performed by practicing speech-language pathologists working with clients of all ages with communication disorders. Restricted to department majors in their senior year.

**SLHS 4196. Independent Study. 1-6 Credits.**
Independent research and special projects. Prior to enrollment, students must submit a written proposal of the plan of study and obtain the approval of the staff member who directs the study and of the department chair.

**SLHS 4201. Social Communication Development. 3 Credits.**
Exploration of in-depth the development of social concepts (agency, belief, goals, groups, cooperation) from infancy to early childhood and their role in uniquely-human forms of communication. Based on readings of the primary literature. Prerequisites: SPHR 1071, SPHR 1071W, SLHS 1071, or SLHS 1071W.

**SLHS 6201. Clinical Practicum in Speech–Language Pathology. 1-6 Credits.**
Supervised clinical practice in the evaluation and treatment of speech and language disorders; counseling of clients and families; development of treatment plans and writing of evaluation and progress reports. Permission of the instructor is required prior to enrollment. Restricted to graduate students in the speech-language pathology program.

**SLHS 6205. Professional and Clinical Issues in Speech and Hearing. 1 Credit.**
Current professional issues and leading edge research topics in the speech and hearing science field. Professional and clinical issues in the assessment and treatment of speech-language functioning relevant to a range of disorders across the life-span. Communication, ethics, and multicultural issues in communication and service delivery. Restricted to graduate students in the speech-language pathology program.

**SLHS 6207. Diagnostic Procedures in Speech and Hearing. 3 Credits.**
Fundamental philosophical and conceptual issues in the assessment of speech-language functioning across a wide range of disorders and diverse populations. Consideration of how assessment procedures guide treatment decisions. Restricted to graduate students in the speech-language pathology program.

**SLHS 6210. Research in Communication Sciences and Disorders. 1,3 Credit.**
Fundamental issues and methods in clinical research; group and single-subject experimental designs; application of clinical research methodology and findings to assessment and treatment. Students who are not writing a thesis register for 3 credits. Students who are writing a thesis register for 1 credit and register concurrently in SPHR 6211 for 2 credits. Restricted to graduate students in the speech-language pathology program.

**SLHS 6211. Preparing the Thesis Prospectus. 2 Credits.**
The fundamentals of quantitative research design and procedures in the speech and hearing sciences. Critical evaluation of research in speech and hearing sciences; scientific writing skills; process and expectations for conducting research. Restricted to graduate students in the speech-language pathology program. Corequisites: SPHR 6210 for 1 credit.

**SLHS 6220. Disorders of Articulation and Phonology. 3 Credits.**
Survey of the nature and causes of impairments of speech sound production in children and adults. Differential diagnosis of oral motor versus phonological disorders; treatment approaches; identification and modification of regional dialects and foreign accents. Restricted to graduate students in the speech-language pathology program.

**SLHS 6222. Acquired Neuromotor Disorders of Speech Production. 2 Credits.**
Examination of the neuroanatomical and neurophysiological bases and acoustic and perceptual characteristics of acquired dysarthrias and apraxia of speech. Evidence-based approaches to the assessment, differential diagnosis, and treatment of these disorders. Restricted to graduate students in the speech-language pathology program.

**SLHS 6230. Pediatric Language and Speech Disorders I. 3 Credits.**
Current approaches for assessing and treating language delays and disorders in infants, toddlers, preschoolers, school-age children, and adolescents. Standardized, observational, and ethnographic approaches used in language assessment and current models of intervention and service delivery. Restricted to graduate students in the speech-language pathology program.

**SLHS 6231. Pediatric Language and Speech Disorders II. 3 Credits.**
Advanced study of selected theoretical and clinical issues relevant to various aspects of practice in speech-language pathology involving pediatric populations. Medically complex acquired and developmental school age and adolescent language disorders and their educational and life care planning impacts. Restricted to graduate students in the speech-language pathology program.

**SLHS 6240. Neurogenic Communication Disorders. 3 Credits.**
Differential diagnosis of acquired speech and language disorders, with an emphasis on the aphasias acquired in adulthood. Evidence-based approaches to the assessment and treatment of adult neurogenic language disorders. Restricted to graduate students in the speech-language pathology program.

**SLHS 6241. Applied Neuroanatomy. 3 Credits.**
Neuroanatomy and neurophysiology of systems underlying speech, language, and hearing. Neuroimaging techniques and investigations. Applications to the assessment and treatment of communication disorders. Restricted to graduate students in the speech-language pathology program.

**SLHS 6251. Speech Fluency Disorders Seminar. 3 Credits.**
Consideration of stuttering and other disorders of speech rate and rhythm from developmental, linguistic, physiological, and psychosocial perspectives. Investigation of evidence-based approaches to assessment and treatment. Restricted to graduate students in the speech-language pathology program.

**SLHS 6260. Voice Disorders: Evaluation and Treatment. 3 Credits.**
Normal anatomy and physiology of the human vocal mechanism. Nature, causes, and clinical management of functional and organic voice disorders, including laryngectomy. Restricted to graduate students in the speech-language pathology program.

**SLHS 6276. Aural Rehabilitation. 3 Credits.**
Habilitation/rehabilitation of the hearing impaired, including auditory training, speech reading, hearing aids, assistive listening devices, communication strategies, and counseling. Restricted to Graduate students in the speech-language pathology program.

**SLHS 6278. Advanced Aural Rehabilitation, Hearing Loss Counseling, and Hearing Device Management. 1 Credit.**
Analysis of approaches that maximize listening and aural/auditory potential in individuals with hearing loss. Consolidates clinical information about aural rehabilitation and builds foundations for aural rehabilitation evaluation and treatment. Restricted to student in the speech-language pathology program.

**SLHS 6281. Dysphagia. 2 Credits.**
Anatomy and physiology of normal swallowing. Nature and causes of dysphagia in adults. Assessment, including clinical examination, and radiologic methods. Treatment. Restricted to graduate students in the speech-language pathology program.

**SLHS 6282. Augmentative Communication and Computer Applications in Communication Disorders. 2 Credits.**
Overview of augmentative and alternative communication systems (AAC) and the process of selecting and implementing these systems for children and adults. Basic processes; issues related to individuals with developmental disabilities who require AAC services; and AAC for those with acquired communication disabilities.

**SLHS 6284. Autism. 2 Credits.**
The various facets of Autism Spectrum Disorder (ASD); clinical aspects and how speech-language pathologists are involved in the assessment, diagnosis, and treatment of ASD. The relationship between typical cognitive and brain development throughout the lifespan and how it is manifested in ASD. Restricted to graduate students in the speech-language pathology program.

**SLHS 6286. Bilingualism. 2 Credits.**
Theoretical and methodological frameworks used to study bilingualism as it relates to clinical language assessment and intervention; language assessment and intervention for bilingual persons; application of existing bilingualism research. Restricted to graduate students in the speech-language pathology program.

**SLHS 6287. Providing Services to Young Children. 2 Credits.**
Explores issues related to etiology, pathology, disabilities, cultural perspectives, mental health, knowledge related to disabilities, and typical development. Emphasis on interaction among body structure/function, activity, and participation. Restricted to graduate students in the speech-language pathology program.

**SLHS 6288. Gathering Information to Determine Eligibility and to Program Plan. 2 Credits.**
Early identification of young children with disabilities, using a variety of information collection strategies, such as screening, evaluation, and assessment of the physical, social, psychological, and behavioral aspects of development. Restricted to graduate students in the speech-language pathology program.

**SLHS 6291. Special Topics in Speech–Language Pathology. 1-3 Credits.**
Advanced study of selected theoretical and clinical issues related to aspects of practice in speech–language pathology.Topics vary by semester. May be repeated for a maximum total of 6 credits provided the topic differs. Consult the Schedule of Classes for more details.

**SLHS 6295. Independent Research in Speech, Language, and Hearing. 1-12 Credits.**
Independent study under the guidance of a faculty advisor. May be repeated for credit.

**SLHS 6998. Thesis Research. 2 Credits.**
May be repeated for credit. Restricted to graduate students in the speech-language pathology program.

**SLHS 6999. Thesis Research. 2 Credits.**
May be repeated for credit. Restricted to graduate students in the speech-language pathology program.

**SLHS 8100. Communication Disorders Across the Lifespan. 3 Credits.**
The study of communication disorders across the lifespan. Communication, language, speech, cognition, and swallowing in developmental and acquired disorders. Restricted to doctoral students in the speech, language, and hearing sciences program.

**SLHS 8200. Research Methods and Ethics and Grant Writing. 3 Credits.**
Knowledge and skills related to development and dissemination of research and to grant writing and development in communication sciences and disorders.

**SLHS 8201. Research Rotation. 2 Credits.**
Students gain experience working in another laboratory and establish and cultivate professional collaborations. Students become involved in one of the research projects in the lab, playing a role in the research process. The expected outcome of the rotation is participation in a research project and submission of a presentation or paper on the project, as agreed upon by the research mentor and student, and approved by the student's advisory committee. Restricted to doctoral students in the speech, language, and hearing sciences program.

**SLHS 8202. Teaching Rotation. 2 Credits.**
Mentored teaching experience under the direction of faculty member in the Department of Speech, Language, and Hearing Sciences. Students give lectures, evaluate student performance, attend periodic discussions on pedagogy, and write a teaching philosophy. Restricted to doctoral students in the speech, language, and hearing sciences program.

**SLHS 8203. Doctoral Seminar Leadership. 2 Credits.**
Students are provided with opportunities for leadership within the department's research community. Students plan and carry out the department's monthly research seminar series, including inviting speakers, coordinating speaker visits, and advertising the presentations to the greater GW and DC communities. Students participate in faculty-led discussions on leadership topics and make presentations. Restricted to doctoral students in the speech, language, and hearing sciences program.

**SLHS 8300. Statistical Applications for Translational Research. 3 Credits.**
Interactive statistical analyses in the R programming environment with focus on research problems with psycholinguistics, speech perception, speech productions, language, and neuroimaging data, using approaches that include mixed models, generalized mixed models, nested model testing, and visualization through graphical facilities.

**SLHS 8999. Dissertation Research. 3-9 Credits.**
For students who have progressed to candidacy. Restricted to doctoral students in the speech, language, and hearing sciences program.