

SPEECH, LANGUAGE AND HEARING SCIENCES

The graduate curriculum in speech, language and hearing sciences (SLHS) leads to either a master's or a doctoral degree including clinical degrees and research degrees. The clinical-training programs in speech-language pathology and audiology are accredited by the Council on Academic Accreditation (CAA) and the Colorado State Department of Education.

Prospective students should read the Master's Degree (<https://catalog.colorado.edu/graduate/degree-requirements/masters-degree-requirements/>) or Doctoral Degree Requirements (<https://catalog.colorado.edu/graduate/degree-requirements/doctoral-degree-requirements/>) sections of this catalog.

Course code for this program is SLHS.

Accreditation

Degree programs in Speech-Language Pathology (SLP) and Audiology are designed to provide a theoretically and clinically rich learning experience for students planning to work as audiologists or speech-language pathologists in medical, educational and private practice settings. States have varied requirements for practitioners of speech-language pathology and audiology (e.g. additional externship hours, earning the Certificate of Clinical Competence (<https://www.asha.org/certification/>), etc.). Students are reminded to contact the applicable licensing board in the state where they are planning on looking for employment. Information is also available on the university's Accreditation & State Authorization (<https://www.colorado.edu/accreditation/professional-licensure-programs-degrees/>) website.

The MA education program in speech-language pathology and the Doctor of Audiology (AuD) education program in audiology at CU Boulder is accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association. (Address: 2200 Research Boulevard, #310, Rockville, MD 20850. Phone: 800-498-2071 or 301-296-5700)

Master's Degree

- Speech, Language and Hearing Sciences - Master of Arts (MA) (<https://catalog.colorado.edu/graduate/colleges-schools/arts-sciences/programs-study/speech-language-hearing-sciences/speech-language-hearing-sciences-master-arts-ma/>)

Doctoral Degrees

- Audiology - Doctor of Audiology (AuD) (<https://catalog.colorado.edu/graduate/colleges-schools/arts-sciences/programs-study/speech-language-hearing-sciences/audiology-doctor-audiology-aud/>)
- Speech, Language and Hearing Sciences - Doctor of Philosophy (PhD) (<https://catalog.colorado.edu/graduate/colleges-schools/arts-sciences/programs-study/speech-language-hearing-sciences/speech-language-hearing-sciences-doctor-philosophy-phd/>)

Certificate

- Speech-Language Pathology Assistant - Graduate Certificate (<https://catalog.colorado.edu/graduate/colleges-schools/arts-sciences/>)

[programs-study/speech-language-hearing-sciences/speech-language-pathology-assistant-graduate-certificate/](https://catalog.colorado.edu/graduate/colleges-schools/arts-sciences/programs-study/speech-language-hearing-sciences/speech-language-pathology-assistant-graduate-certificate/))

Faculty

While many faculty teach both undergraduate and graduate students, some instruct students at the undergraduate level only. For more information, contact the faculty member's home department.

Arehart, Kathryn H. (https://experts.colorado.edu/display/fisid_105561/)
Professor; PhD, University of Washington

Baiduc, Rachael (https://experts.colorado.edu/display/fisid_157676/)
Assistant Professor; PhD, University of Washington

Brennan, Christine (https://experts.colorado.edu/display/fisid_155861/)
Assistant Professor; PhD, Northwestern University

Fredrickson, Tammy L. (https://experts.colorado.edu/display/fisid_148888/)
Clinical Associate Professor; PhD, University of Colorado Boulder

Hilger, Alexandra (https://experts.colorado.edu/individual/fisid_167224/)
Assistant Professor; PhD, Northwestern University

Kan, Pui Fong (https://experts.colorado.edu/display/fisid_145806/)
Associate Professor; PhD, University of Minnesota Twin Cities

Kates, James
Scholar in Residence; MS, Massachusetts Institute of Technology

Lemke, Alison (https://experts.colorado.edu/display/fisid_164203/)
Clinical Associate Professor; MA, University of Iowa

Lewon, Jennifer (https://experts.colorado.edu/display/fisid_147362/)
Clinical Assistant Professor; MA, Northern Arizona University

Meyers-Denman, Christina Nicole (https://experts.colorado.edu/display/fisid_155857/)
Assistant Professor; PhD, University of Arizona

Pollard, Ryan D. (https://experts.colorado.edu/display/fisid_153106/)
Clinical Assistant Professor, Lecturer; PhD, University of Colorado Boulder

Ramig, Peter R.
Professor Emeritus

Ramsberger, Gail (https://experts.colorado.edu/display/fisid_100943/)
Associate Professor; ScD, Boston University

Schick, Brenda (https://experts.colorado.edu/display/fisid_110058/)
Professor Emeritus; PhD, Purdue University

Sharma, Anu (https://experts.colorado.edu/display/fisid_143814/)
Professor, Associate Chair; PhD, Northwestern University

Sommerfeldt, Kristin
Clinical Assistant Professor; AuD, University of Florida

Sweetman, Richard H.
Professor Emeritus

Tennant, Sherri
Instructor; MS, University of Wisconsin Madison

Tucker, Kathryn
Instructor; MA, University of Colorado Boulder

Werner, LJ (https://experts.colorado.edu/display/fisid_154952/)
Scholar in Residence; MA, University of Colorado Denver

Courses

SLHS 5012 (3) Evidence-based Practice and Research Methods

Focuses on the knowledge of research methods and the application of research principles into clinical practice. In particular, covers quantitative research methods that are in speech-language pathology clinical settings. Will cover (1) clinical practice and research methods in speech, language and hearing sciences; (2) single-subject designs in clinical settings; (3) introduction to data collection, data organization and data analysis; (4) interpretation and presentation of clinical data. Formerly SLHS 5000.

Grading Basis: Letter Grade

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5032 (3) Competencies and Strategies for the SLPA

This course includes content regarding roles and responsibilities of the SLPA, Codes of Ethics and ethical issues, standard health precautions and infection control, health and safety policy and procedures, confidentiality (FERPA & HIPAA), culture of public schools, service delivery models, screening protocols, intervention processes and procedures, data collection and documentation, assistive technology, special populations and cultural-linguistic diversity, reflective practice and continuing professional growth. Students must be accepted in the SLPA certification program to enroll in this course.

Requisites: Requires a prerequisite course of SLHS 4918 (minimum grade D-).

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5112 (2) Clinical Practice I

Provides entering graduate students a framework for beginning their clinical education and building the relationship of theory and research to current clinical practice in speech-language pathology.

Key topics for exploration include contemporary professional issues, licensure, professionalism, ethics and ethical conduct, scope of practice, competency development, teaming and collaboration, accountability and multicultural issues. Formerly SLHS 5110.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Grading Basis: Letter Grade

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5122 (1) Clinical Practice II: Assessment and Treatment Planning

Explores critical elements associated with assessment and treatment planning in speech-language pathology. Topic areas include assessment style, interviewing, test selection and techniques of test administration. Diagnosis and treatment planning section includes differential diagnoses, ethics of diagnoses, goal writing and treatment rationale.

Requisites: Requires a prerequisite course of SLHS 5112 (minimum grade B). Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5132 (3) Clinical Practice II: Clinical Practice in Varied Work Settings

Explores knowledge and skills specific to working in public school, medical, and private practice settings. Coursework will address required data collection, reporting, and accountability for specific work settings; aspects of billing, coding, and reimbursement where applicable; working effectively on interdisciplinary teams; supervision of support personnel; aspects of diversity, equity, and inclusion including cultural humility, responsiveness, and competence; overview of education and healthcare landscapes with implications for service delivery; service delivery models; and implementation of federal and state regulations and rules in different clinical settings.

SLHS 5242 (3) Language Disorders in School Age Children

Addresses the nature, assessment, and treatment of developmental language disorders in school age children.

Requisites: Restricted to graduate students only.

Recommended: Prerequisite undergraduate background in SLHS.

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5252 (3) Acquired Language Disorders in Adults

Introduces the neural bases and medical etiologies of acquired language disorders in adults, explores the ways in which normal language processing may become disordered, and studies current methods of evaluation and treatment design.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Recommended: Prerequisite undergraduate background in SLHS.

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5262 (3) Dysphagia

Provides students with background in the anatomical, physiological, and neurological bases of swallowing function and disorders across the lifespan. Etiological factors are presented, as well as various assessment tools and principles of treatment of swallowing disorders in children and adults.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5272 (1) Augmentative Alternative Communication: Theory and Use

Provides an overview of the application of current technology to alternative/augmentative communication. Emphasizes assessment and intervention with nonverbal children and adults with need for alternative/augmentative communication systems. Presents various technological devices and systems. Addresses system selection, programming, development and integration of use in environmental contexts.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5282 (3) Acquired Cognitive Disorders

Explores the theoretical and clinical management of acquired cognitive disorders that impact communication. Includes basic functional neuroanatomy.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5292 (3) Neurogenic Speech Disorders in Adults

Presents the neural bases of normal and disordered speech motor control, teaches assessment and treatment of motor speech disorders in adults, and applies motor control research to clinical problems.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5302 (3) Speech Sound Disorders in Children

Provides overview of phonological development, perception, and production. Presents factors related to articulation and focuses on critical evaluation of traditional and phonological based assessment and intervention procedures. Includes coverage of phonological awareness, metaphonological skills as related to literacy, as well as treatments and principles specific to children with motor speech disorders.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5312 (2) Aging and Communication

Examines normal age-related changes to communication systems. Anatomic and physiological changes to the mechanisms of speech production, audition and the brain will be included, with a focus on the functional impacts of such changes for speech production and perception, cognition, language and social communication.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Grading Basis: Letter Grade

SLHS 5322 (2) Complex Medical Speech-Language Pathology Cases

Expands upon the basic knowledge learned in SLHS 5252 (acquired language disorders), 5332 (voice disorders), 5282 (acquired cognitive disorders), 5262 (dysphagia), 5292 (neurogenic speech disorders) and 5362 (fluency disorders). Students will explore clinical management options for complex medical cases created by factors such as multiple and/or rare diagnoses, medical complications, socioeconomic factors and behavioral or personality issues.

Requisites: Requires prerequisite courses SLHS 5252 and SLHS 5332 and SLHS 5282 (all minimum grade B). Requires corequisite course SLHS 5292. Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5332 (3) Voice and Resonance Disorders

Examines the anatomical and physiological bases for normal and disordered laryngeal and velopharyngeal function including functional, organic, and neurogenic voice disorders, and velopharyngeal insufficiency and incompetence. Emphasis on evidence-based assessment and treatment of individuals with voice and resonance disorders, including special populations.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5342 (2) Counseling in Speech-Language Pathology

Designed to demonstrate the principles of counseling for individuals with communication disorders and their families throughout the client's lifespan. Counseling systems and techniques for specific communication disorders will be included. The course will focus on the basic theory of counseling and how counseling skills can be used in the treatment of various communication disorders. Provides an introduction to the basic counseling skills necessary to help speech-language pathologists achieve the greatest success possible when working with individuals exhibiting communication disorders.

Grading Basis: Letter Grade

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5352 (3) Bilinguals with Communication Disorders

Covers current empirical research regarding the linguistic and cognitive system of bilinguals with and without communication disorders. Address cross-cultural and cross-linguistic issues in selection and implementation of assessment and intervention procedures. Discuss various intervention strategies for working with bilinguals and their families.

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5362 (3) Fluency Disorders

Exploration of the nature, differential diagnosis and treatment of fluency disorders across the life-span. Students will develop the requisite skills and knowledge base to provide prevention, consultation, assessment and intervention for fluency disorders. Research bearing on affective, behavioral and cognitive components of stuttering will be reviewed, along with recent data on the neural bases of the disorder. A broad range of treatment approaches will be discussed and demonstrated.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5372 (1) Cleft and Resonance: Fundamentals for Evaluation and Treatment

Provides an overview of fundamental awareness and knowledge of the etiology, development and treatment of children with cleft lip and palate and other disorders of resonance. It covers general parameters of care for speech language pathologists across various age groups (birth, toddler, preschool, and school age) with this population. Students will learn the methods for identifying and treating compensatory mis-articulation patterns and abnormal resonance patterns and the aspects of multidisciplinary team care for families and individuals with cleft lip and palate.

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5555 (3) Advanced Topics in Social Communication: Autism Spectrum Disorders

Students will acquire knowledge and skills in the appropriate selection, application and evaluation of interventions for children, adolescents and adults with autism spectrum disorders (ASD) and their families. Evaluation and diagnosis, including development of the IFSP and IEP, will be addressed.

Grading Basis: Letter Grade

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5576 (3) Neuroanatomy and Neurophysiology of Communication

Provides an introduction to the neuroanatomy and neurophysiology that collectively give rise to human communication including speech perception and production. We will consider how speech, language and hearing are represented in and controlled by the central nervous system and how neuropathologies affect processes of communication.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: All-Department

SLHS 5602 (3) Communication Challenges in Children: Birth to Six

Emphasizes nature and profile of language and communication disorders affecting infants and young children. Facilitates integration of clinical and theoretical perspectives with specific approaches for family-centered assessment and intervention principles, models and techniques.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Grading Basis: Letter Grade

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5612 (3) Language Learning Disabilities

Expands upon the nature of Language Disorders in SLHS 5242 (School Age Language Disorders) including language-based difficulties in reading, written language and mathematical achievement, as well as deficits in executive functioning. Students will explore clinical management options through studies of intervention methods as well as through clinical case examples. Specifically, we will examine adaptive instruction and evidence-based intervention.

Requisites: Requires a prerequisite course of SLHS 5242 (minimum grade B).

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5622 (2) Advanced Topics in Learning Disabilities

Expands upon the nature of Language Learning Disabilities learned in SLHS 5612 (Learning Disabilities) and SLHS 5242 (School Age Language Disorders) including language-based difficulties in reading, written language and mathematical achievement, as well as deficits in executive functioning. Students will explore clinical management options through studies of intervention methods as well as through clinical case examples. Specifically, we will examine adaptive instruction and evidence-based intervention.

Requisites: Requires prerequisite courses of SLHS 5242 and SLHS 5612 (all minimum grade B).

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5674 (2) Signals, Systems, and Calibration in Audiology

Provides in-depth study of instrumentation used by audiologists for hearing aid evaluation and fitting, signal generation and modification, and signal measurement and calibration.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 5848 (1-4) Independent Study

Repeatable: Repeatable for up to 7.00 total credit hours. Allows multiple enrollment in term.

Additional Information: Departmental Category: Practica

SLHS 5849 (1-4) Independent Study 1, M.A.

Repeatable: Repeatable for up to 7.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Independent Study

SLHS 5859 (1-4) Independent Study 2, M.A.

Repeatable: Repeatable for up to 7.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Independent Study

SLHS 5898 (1-4) Practicum 1: Speech-Language-Learning Diagnosis, Assessment, and Intervention

Offers on-campus and off-campus supervised clinical practice in diagnosis, assessment, and intervention of speech-language-hearing disorders in children and adults.

Repeatable: Repeatable for up to 12.00 total credit hours.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Grading Basis: Letter Grade

Additional Information: Departmental Category: Practica

SLHS 5918 (1-3) Audiology Clinical Practicum: Lab

Provides clinical training in the on site Speech, Language and Hearing Center in skills including audiology identification, evaluation and management for adults and children with hearing loss.

Repeatable: Repeatable for up to 16.00 total credit hours.

Requisites: Restricted to Speech, Language, and Hearing Sciences (SLHS) OR Audiology (AUDD) graduate students only.

Grading Basis: Letter Grade

Additional Information: Departmental Category: Practica

SLHS 5928 (1-4) Audiology Clinical Practicum: Level 1

Provides clinical training in an off-campus educational audiology facility in identification, evaluation and management for adults and children with hearing loss. Schedule is variable with a minimum requirement of 16 hours on rotation per week.

Repeatable: Repeatable for up to 15.00 total credit hours.

Requisites: Requires a prerequisite course of SLHS 5918 (minimum grade B). Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

SLHS 5930 (4) Speech Language Pathology Assistant Internship

Placement for 15-18 hours per week for a total of 180 clock hours including a minimum of 50% supervised provision of 80 hours of direct intervention (in-person/virtual) with students on caseload. SLPA interns will complete tasks for mentor/supervisor including file reviews, scheduling, research of evidence-based practices, materials preparation, observation of intervention and IEP meetings, and provide other assistance as specified by mentor and within the scope of practice of an SLPA (Asha, 2013). Competency development and professional growth will be documented through midterm formal conferences and final semester ratings of specific competencies and completion of internship assignments. Students must be accepted into the SLPA certificate program to enroll in this course.

Requisites: Requires a prerequisite course of SLHS 4918 (minimum grade D-).

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 5938 (1-4) Audiology Clinic Practicum: Level 2 Educational

Provides clinical training in an off campus educational audiology facility in identification, evaluation and management for adults and children with hearing loss. Schedule is variable with a minimum requirement of 16 hours on rotation per week.

Repeatable: Repeatable for up to 15.00 total credit hours.

Requisites: Requires prerequisite courses of SLHS 5918 and SLHS 6544 and SLHS 6614 (all minimum grade B). Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Grading Basis: Letter Grade

Additional Information: Departmental Category: Practica

SLHS 5948 (1-4) Audiology Clinic Practicum: Level 2 Medical

Provides clinical training in an off campus medical audiology facility in identification, evaluation and management for adults and children with hearing loss. Schedule is variable with a minimum requirement of 16 hours on rotation per week.

Repeatable: Repeatable for up to 15.00 total credit hours. Allows multiple enrollment in term.

Requisites: Requires prerequisite courses of SLHS 5918 and SLHS 6544 and SLHS 6614 (all minimum grade B). Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Grading Basis: Letter Grade

Additional Information: Departmental Category: Didactic: Audiology

SLHS 6000 (1-4) Advanced Topics in Speech, Language and Hearing Sciences

Studies selected topics related to the theory and management of communication disorders, and theoretical/scientific information related to speech, language, and hearing.

Repeatable: Repeatable for up to 7.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: All-Department

SLHS 6006 (3) Advanced Hearing Science

Provides advanced study in hearing science, including physical, physiological, and psychological acoustics of both normal and impaired auditory systems. Department enforced prerequisite: graduate standing in SLHS; undergraduate course work in biology or anatomy.

Additional Information: Departmental Category: Didactic: Speech-Hearing Science

SLHS 6402 (3) Issues and Methods in Cognitive Science

Interdisciplinary introduction to cognitive science, examining ideas from cognitive psychology, philosophy, education, and linguistics via computational modeling and psychological experimentation. Includes philosophy of mind; learning; categorization; vision and mental imagery; consciousness; problem solving; decision making, and game-theory; language processing; connectionism. No background in Computer Science will be presumed.

Equivalent - Duplicate Degree Credit Not Granted: CSCI 6402 and EDUC 6504 and LING 6200 and PHIL 6310 and PSYC 6200

Requisites: Restricted to graduate students only.

SLHS 6504 (1) Professional Ethics in Audiology

Overview of ethics and ethical issues in the profession of audiology.

Topics to be discussed include code of ethics by professions, approaches to analyzing ethical dilemmas, ethics in relationships with manufacturers, and ethical considerations in teaching, clinical practice and research.

Requisites: Restricted to graduate students only.

Recommended: Prerequisite undergraduate background in SLHS.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 6514 (1) Professional Issues in Audiology

Overview of professional issues related to the profession of audiology.

Topics to be discussed include certification, licensure, professional associations, infection control, practice management, federal regulations related to audiology, professional communications and professional relationships.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Recommended: Prerequisite undergraduate background in SLHS.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 6544 (3) Auditory Processes: Adult Assessment

Advanced study on the current science surrounding hearing assessment of adults across the age span. Includes theoretical foundations and clinical applications.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 6554 (3) Auditory Processes: Child Assessment

Provides advanced study in hearing assessment and management of children across the age span. Topics include epidemiological, medical, audiological, developmental, and habilitative aspects of normal and impaired hearing in children.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Recommended: Prerequisite undergraduate background in SLHS.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 6564 (3) Auditory Processes: Neurodiagnostics

Provides advanced study in the neural bases of hearing. Includes theoretical foundations and clinical assessment of neurological functioning in auditory systems with both normal and impaired function.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 6614 (3) Fundamentals of Amplification

Discusses theoretical and clinical issues regarding the design, fitting, and evaluation of amplification technology for individuals with hearing loss. Includes the use of behavioral, psychological, electroacoustic, and physiological (real ear) measures in the selection and evaluation of digital and analog hearing aid technology.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 6642 (3) Development and Intervention in Childhood Hearing Loss

Reviews development and intervention with children who are deaf and hard-of-hearing, birth through school age. Focuses on speech, auditory training, language, literacy and cognitive development. Formerly SLHS 6640.

Requisites: Restricted to graduate students only.

Additional Information: Departmental Category: Didactic: Speech-Language Pathology

SLHS 6650 (3) Counseling and Multicultural Issues in SLHS

Explores counseling theories and techniques following the diagnosis of a communication disorder across the life span. Considers issues related to grieving and mourning, parenting, disability, cultural customs, attachment, and relationships. Covers professional ethics and ethical responsibilities.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: All-Department

SLHS 6670 (3) Aging and Hearing Loss

The course will address research and evidence-based practice regarding hearing loss in adults across the age span. Topics will include aural rehabilitation, co-morbidities associated with hearing loss (e.g., cognition and dementia; mental health; sensory-perceptual-motor skills; other health/medical conditions), and impacts of hearing loss on functioning, disability, health, and health services.

Requisites: Requires a prerequisite course of SLHS 6544 (minimum grade B). Restricted to graduate students only.

Recommended: Prerequisites SLHS 7418 and SLHS 7540.

Additional Information: Departmental Category: Didactic: All-Department

SLHS 6918 (7) Practicum 2: Medical-Clinical Internship

Gives an off-campus experience in a clinical or medical setting that provides in-depth practice in management of communication disorders of children and adults.

Repeatable: Repeatable for up to 14.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Practica

SLHS 6928 (7) Practicum 2: Public School Internship

Provides an off-campus supervised experience providing extended and in-depth practice involving school-age children in a school classroom.

Repeatable: Repeatable for up to 14.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Practica

SLHS 6938 (1-10) Audiology Clinic Externship Educational

Provides students with full time off campus experience in an educational audiology facility offering in-depth and advanced procedures for identification, evaluation and management of hearing loss in adults and children.

Repeatable: Repeatable for up to 21.00 total credit hours.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Practica

SLHS 6940 (1) Master's Candidate for Degree

Registration intended for students preparing for a thesis defense, final examination, culminating activity, or completion of degree.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: All-Department

SLHS 6948 (1-10) Audiology Clinic Externship: Medical

Provides students with full time off campus experience in a medical audiology facility offering in-depth and advanced procedures for identification, evaluation and management of hearing loss in adults and children.

Repeatable: Repeatable for up to 21.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 6950 (1-7) Master's Thesis

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: All-Department

SLHS 7000 (3) Research Designs in Human Communication Sciences and Disorders

Offers an advanced seminar in research designs for human behavior: efficacy, ethnographic, single-subject, quasi-experimental, and experimental designs. Designed to familiarize students with terminologies and research designs frequently used in speech-language-hearing areas.

Recommended: Prerequisite basic statistics.

Additional Information: Departmental Category: Didactic: All-Department

SLHS 7200 (3) Business, Management and Ethics in Audiology

Focuses on the business aspects of managing an audiology practice. Addresses developing a business plan, contracting for services, legal issues, financial reporting, budgeting, pricing, billing and reimbursement, regulatory issues, marketing, personnel management, risk abatement, and business ethics.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Recommended: Prerequisite good standing in the SLHS graduate program or instructor consent will be required.

Additional Information: Departmental Category: Didactic: All-Department

SLHS 7418 (2) Cognitive Science Research Practicum

Independent, interdisciplinary research project in cognitive science for advanced graduate students pursuing a joint PhD in an approved core discipline and cognitive science. Research projects integrate at least two areas within the cognitive sciences: psychology, computer science, linguistics, education, philosophy. Students need commitments from two mentors for their project.

Equivalent - Duplicate Degree Credit Not Granted: CSCI 7412 and EDUC 6506 and LING 7415 and PHIL 7415 and PSYC 7415

Requisites: Restricted to graduate students only.

Recommended: Prerequisite EDUC 6505.

SLHS 7428 (2) Cognitive Science Research Practicum 2

Independent, interdisciplinary research project in cognitive science for advanced graduate students pursuing a joint Ph.D in an approved core discipline and cognitive science. Research projects integrate at least two areas within the cognitive sciences: psychology, computer science, linguistics, education, philosophy. Students need commitments from two mentors for their project.

Equivalent - Duplicate Degree Credit Not Granted: CSCI 7422 and EDUC 6516 and LING 7425 and PHIL 7425 and PSYC 7425

Requisites: Restricted to graduate students only.

SLHS 7450 (3) Audiology Capstone Project

Provides an individualized project for AUD, completed prior to initiation of final clinical year. May be in the form of research-based investigation, an evidence-based position paper, a clinical protocol based on peer-reviewed literature, a grant proposal, or another format approved by AUD committee. Project requires approved proposal by AUD committee and focused study supervised by capstone advisor.

Requisites: Restricted to Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: All-Department

SLHS 7520 (3) Auditory Processes: Medical and Genetic Bases

Discusses current developments in epidemiology, pathogenesis, and symptomatology of hearing loss. Investigates the genetic bases of hearing loss and deafness. Incorporates clinical decision theory in assessment and intervention. Explores cross-disciplinary topics from genetics, radiology, pharmacology, pathology, and otology.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 7530 (3) Auditory Processes: Theory and Application in the School Environment

Focuses on application of routine audiological practices such as screening, assessment, rehabilitation, and instrumentation to children in educational settings. Emphasizes federal education regulations and pertinent case law.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 7540 (3) Auditory Processes: Physiology, Assessment, and Management of the Vestibular System

Emphasizes current research on physiology of the vestibular system, including both structure and function. Considers the etiology of both peripheral and central pathologies of the vestibular system. Discusses ways to assess function of the vestibular system as well as theoretical and practical considerations of vestibular rehabilitation.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 7550 (3) Prevention of Hearing Loss from a Public Health Perspective

Discusses the prevention of hearing loss from public health perspectives. Includes the effects of noise and other damaging agents on the auditory physiology. Discusses prevention, screening, identification, and management of occupational and recreational hearing loss. Considers noise measurement and monitoring. Addresses local, national and global initiatives and legislation regarding hearing health.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 7614 (3) Implantable Devices: Technology and Clinical Application

Examines technological aspects and clinical applications of implantable prostheses such as cochlear implants, brainstem implants, hybrid cochlear implants, Baha devices and middle ear implants. Topics will include: history of implantable devices, anatomy and histopathology of the inner ear, speech processing in implants, mapping devices, candidacy criteria, behavioral and electrophysiologic techniques for assessment and outcomes in implanted children and adults.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Recommended: Prerequisite good standing in the SLHS graduate program or instructor consent will be required.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 7640 (3) Communication Processes and Hearing Loss: Birth through Six

Provides in-depth study of current research literature and its implications for clinical practice regarding development of communication processes in the first six years of life and impact of hearing loss. Investigates development of language, auditory perception, speech production, social-emotional abilities, and cognition.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 7714 (3) Advanced Topics in Amplification

Discusses advanced issues in the design and fitting of hearing aid technology, including advanced signal processing, outcomes assessment, evidence-based practice and specialized fitting protocols for pediatric and geriatric populations. Current research is integrated with clinical case studies to guide the development of evidence-based practice in hearing aid fittings.

Requisites: Restricted to graduate students only.

Additional Information: Departmental Category: Didactic: Audiology

SLHS 7775 (1) Topics in Cognitive Science

Reading of interdisciplinary innovative theories and methodologies of cognitive science. Students participate in the ICS Distinguished Speakers series that hosts internationally recognized cognitive scientists who share and discuss their current research. Session discussions include analysis of leading edge and controversial new approaches in cognitive science.

Equivalent - Duplicate Degree Credit Not Granted: CSCI 7772 and EDUC 7775 and LING 7775 and PHIL 7810 and PSYC 7775

Repeatable: Repeatable for up to 4.00 total credit hours.

Requisites: Restricted to graduate students only.

Additional Information: Departmental Category: Didactic: All-Department

SLHS 7800 (1) Seminars in Audiology: Advanced Topics

Graduate seminar exploring advanced topics in the field of audiology as they relate to diagnosis and (re)habilitation. Topics will include novel clinical issues and topics including tinnitus, intraoperative monitoring, pharmacology, hyperacusis/misophonia, auditory processing. Discussion of the evidence-based literature surrounding these advanced topics will be central to this seminar.

Requisites: Requires prerequisite course of SLHS 6544 (minimum grade B). Restricted to graduate students only.

Grading Basis: Letter Grade

SLHS 7849 (1-4) Independent Study 1, PhD

Repeatable: Repeatable for up to 7.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Independent Study

SLHS 7859 (1-4) Independent Study 2, PhD

Repeatable: Repeatable for up to 7.00 total credit hours. Allows multiple enrollment in term.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Independent Study

SLHS 7918 (3) Practicum 3: Clinical Supervision

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Practica

SLHS 8918 (3) Practicum 3: Classroom Instruction

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Practica

SLHS 8928 (3) Practicum 3: Research Coordination

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Practica

SLHS 8990 (1-10) Doctoral Dissertation

All doctoral students must register for not fewer than 30 hours of dissertation credit as part of the requirements for the degree. For a detailed discussion of doctoral dissertation credit, refer to the Graduate School section.

Repeatable: Repeatable for up to 30.00 total credit hours.

Requisites: Restricted to Speech, Language and Hearing Sciences (SLHS) or Audiology (AUDD) graduate students only.

Additional Information: Departmental Category: Didactic: All-Department