## Communication Sciences and Disorders Courses (CSD)

This is a list of all communication sciences and disorders courses. For more information, see Communication Sciences and Disorders.

### CSD:1000 First-Year Seminar 1 s.h.
Small discussion class taught by a faculty member; topics chosen by instructor; may include outside activities (e.g., films, lectures, performances, readings, visits to research facilities). Requirements: first- or second-semester standing.

### CSD:1015 Introduction to Speech and Hearing Processes and Disorders 2 s.h.
Introduction to communication sciences and disorders field; clinical and research works; wide range of readings; survey course with less emphasis on specific disorders.

### CSD:1200 Intellectual and Developmental Disabilities 3 s.h.
Introduction and overview of issues pertaining to children and adults with intellectual or developmental disabilities (IDD); focus on their communication needs, relationship with the broader community, and careers which serve this population; interaction with individuals with IDD; their family members, professionals; lifespan and health issues; genetics, diagnosis, literacy, historical perspectives, adaptive arts and theater, disabilities in the media, social life and sexuality, issues specifically relevant to aging, and controversial topics. GE: Diversity and Inclusion.

### CSD:1800 Aging Matters: Introduction to Gerontology 3 s.h.
Overview of the field of gerontology from a bio-psycho-social framework; how the human body and brain age, effects of these biological changes on physical and cognitive functions, and interaction of these individual factors with societal contexts; broad perspective to give students a foundation in gerontology, paving the way for more advanced courses in biology of aging, psychology of aging, and global aging; for students from a wide range of disciplines and levels, no prior knowledge of aging required. GE: Social Sciences. Same as ASP:1800, NURS:1800, SSW:1800, TR:1800.

### CSD:2110 Phonetics: Theory and Applications 3 s.h.
Basic concepts: articulatory and acoustic description of speech sound production, dialect variations, and language differences; development of phonetic transcription skills with emphasis on English phonetics and clinical applications to developing and disordered speech.

### CSD:2111 Basic Acoustics for Speech and Hearing 3 s.h.
Principles of sound, simple harmonic motion, sound pressure and intensity, decibels, complex waves, Fourier analysis, resonance and filters, distortion, transmission of sound. Requirements: completion of departmental math requirement (MATH:1440 or MATH:1460 or MATH:1850).

### CSD:2140 Manual Communication 1 s.h.
Training in use of sign systems in manual communication.

### CSD:3097 Honors Seminar 2 s.h.
Research topics and procedures in speech and hearing sciences; ongoing faculty research, research opportunities, possible research projects. Requirements: honors standing with intent to complete an honors thesis.

### CSD:3112 Anatomy and Physiology of Speech Production 4 s.h.
Normal anatomy and physiology of structures used to produce speech; principles and methods for instrumental study of speech production.

### CSD:3113 Introduction to Hearing Science 4 s.h.
Normal auditory process; anatomy and physiology of auditory system; subjective correlates of auditory stimuli.

### CSD:3116 Basic Neuroscience for Speech and Hearing 3 s.h.
Basic anatomy, physiology of central nervous system; emphasis on neural systems involved in normal and disordered communication. Offered fall semesters. Requirements: biology, zoology, or physiology course. Same as LING:3116.

### CSD:3117 Psychology of Language 3 s.h.
Introduction to scientific study of language use; language approached from a multidisciplinary perspective, integrating theories and methods of psycholinguistics, neuropsychology, and communication sciences and disorders. GE: Social Sciences. Same as LING:3117.

### CSD:3118 Language Acquisition 1-3 s.h.

### CSD:3122 Speech Production: Anatomy and Physiology 4 s.h.
Anatomy and physiology of respiratory, phonatory, and articulatory systems; systems' roles during speech production; approaches to instrumental assessment of speech physiologic events. Requirements: nonmajor.

### CSD:3185 Hearing Loss and Audiometry 3 s.h.
Introduction to profession of audiology; overview of hearing disorders, evaluation, and treatment; basic pure-tone and speech audiometry.

### CSD:3187 Early Literacy Instruction for Young Children 3 s.h.
Service-learning involving lecture, class discussion, and student participation in an early literacy program for preschoolers; concepts and skills necessary to conduct story time groups with young children that target development of print knowledge; application of learning by reading to small groups of preschool children. Recommendations: CSD:3118. Same as EDTL:3187.

### CSD:3993 Research Practicum arr.
Individual or small group participation in faculty research projects.

### CSD:4098 Honors Thesis 2 s.h.
Close work with a faculty mentor.

### CSD:4114 Introduction to Voice Disorders 2 s.h.
Basic foundations for management of voice disorders.
CSD:4115 Structural Disorders 2 s.h.
Therapy approaches used to treat speech production and swallowing disorders associated with disorders that affect structure and physiology of the speech and swallowing mechanism; basic knowledge necessary for clinical practice by clinicians who do not specialize in management of patients with head and neck cancer, cleft palate, or neurological disorders.

CSD:4120 Introduction to Clinical Methods and Observation 3 s.h.
Observation of the diagnosis and treatment of a wide range of speech, language, or hearing disorders in a variety of settings; basic understanding of evaluation process, goal setting, behavior management, pacing of therapy, shaping of behavior, tracking performance/learning, and professional and ethical behavior through observation of clinical interactions; completion of 25 hours of observation as required by the American Speech-Language-Hearing Association for obtaining national certification. Recommendations: senior or graduate standing in communication sciences and disorders.

CSD:4145 Developmental Language Disorders 3 s.h.
Nature of developmental disorders; basic concepts including behavioral characteristics, developmental patterns, and etiology theories; assessment and intervention principles in semantics, morphology, and syntax.

CSD:4148 Developmental Speech Disorders 3 s.h.
Review of typical phonological development in children; introduction to assessment and intervention practices for articulation and phonological disorders in children; may include apraxia, cerebral palsy, and cleft palate.

CSD:4165 Communication Disorders and Aging 2 s.h.
Introduction to speech, language, and hearing processes and disorders among older adults; survey of characteristics of communication and communication breakdown, remediation, and strategies for improving communication with older adults with communication disorders; primarily for nonmajors and service providers other than speech-language pathologists and audiologists. Same as ASP:4165.

CSD:4183 Introduction to Stuttering 2 s.h.
Theoretical perspectives on the nature of stuttering including onset and development, basic phenomena, and beginning treatment principles.

CSD:4186 Problems: Speech/Hearing Processes and Disorders arr.
Independent readings or research experience through mutual arrangement between student and faculty; goals and requirements determined by participating faculty members.

CSD:4244 Rehabilitative Audiology 3 s.h.
Theory, procedures for assessment, and rehabilitation of speech, hearing, and language deficits of people with hearing impairment.

CSD:5104 Language Disorders in School-Aged Children 3 s.h.
Emphasis on elementary grades; usually taken in conjunction with EDTL:4192, which provides approximately 70 hours of supervised clinical practice in elementary schools. Recommendations: primarily for communication sciences and disorders majors. Same as EDTL:5104.

CSD:5135 Foundations of Clinical Practice I 2 s.h.
Basic concepts of clinical practice including models of diagnosis, fundamentals of clinical data collection and measurement, treatment planning, and professional writing. Corequisites: CSD:4145.

CSD:5136 Foundations of Clinical Practice II 1 s.h.
Advanced concepts of clinical practice including professionalism, clinical decision making, developing client-clinician alliance, examining biases and prejudices in clinical practice, and developing empathy.

CSD:5137 Foundations of Clinical Practice III 1 s.h.
Advanced principles of clinical practice including risk management, public policy, and models of third-party reimbursement; professional issues.

CSD:5146 Neurogenic Disorders of Language 3 s.h.
Overview of communication disorders secondary to acquired brain damage in adults; focus on aphasia, communication disorders arising from dementia, right-hemisphere stroke, traumatic brain injuries; general principles of diagnosis and intervention.

CSD:5203 Counseling in Communication Disorders 1 s.h.
Development of appropriate intervention plans that meet client/patient needs in collaboration with client/patient and relevant others; communicating effectively and recognizing needs, values, preferred mode of communication, and cultural linguistic background of client/patient; family, caregivers, relevant others; providing counseling to clients/patients, family, and caregivers regarding communication and swallowing disorders.

CSD:5206 Language Disorders: Birth to Five Years 3 s.h.
Disorders resulting from phonological, semantic, pragmatic, and morphosyntactic deficits; receptive and expressive problems; special assessment and intervention procedures.

CSD:5213 Voice Habilitation 2 s.h.
Application of methods of intervention in development, training, rehabilitation of vocal behavior; motor learning, efficacy of treatment strategies, factors affecting compliance with recommended therapy. Offered fall semesters. Same as MUS:5555.

CSD:5219 Fundamentals of Laboratory Instrumentation 2 s.h.
Introduction to instrumentation commonly used in research in speech and hearing sciences; basic audiometric calibration.

CSD:5222 Gross Anatomy of Speech/Voice Production 2 s.h.
Anatomy of speech and hearing mechanisms; instruction in dissection techniques; laboratory.

CSD:5223 Pediatric Feeding and Swallowing Disorders 1 s.h.
Development of anatomy and physiology of feeding and swallowing in infants and children; assessment and treatment of pediatric feeding and swallowing disorders. Prerequisites: CSD:4115.

CSD:5224 System and Signal Theory for Speech and Hearing Science 3 s.h.
Introduction to signals and systems with emphasis on their relevance to the fields of audiology and speech-language pathology. Requirements: introductory calculus.

CSD:5233 Aphasia 2 s.h.
Assessment, diagnosis, and treatment of aphasia and other acquired language and cognition-based communication disorders. Corequisites: CSD:5136. Requirements: CSD:5146 or a course that provides an overview of acquired language disorders.
CSD:5234 Acquired Cognitive-Communication Disorders  arr.
Cognitive, neuropsychological, and social aspects of communication and the management of acquired cognitive-communication disorders associated with traumatic brain injury, right hemisphere damage, and neurodegenerative diseases.

CSD:5236 Neurogenic Disorders of Speech and Swallowing  3 s.h.
Provides future speech-pathologists with a strong foundation for career-long learning about the nature and classification of neurogenic motor-speech and swallowing disorders, symptomatology, etiology, diagnosis, treatment, and management options.

CSD:5237 Cleft Palate and Related Disorders  2 s.h.

CSD:5240 Hearing Aids I  3 s.h.
Hearing aids and diagnostic procedures; laboratory emphasis on measurement procedures.

CSD:5246 Advanced Audiology  3 s.h.
Theory and procedures for assessment of hearing loss in adult and pediatric populations; experience in test administration through supervised laboratory sessions.

CSD:5253 Speech Perception in Listeners with Hearing Loss  1-2 s.h.
Introduction to study of speech perception in listeners with normal hearing and those with hearing loss; overview of speech acoustics; theories of speech perception; contributions of auditory, visual, and indexical (talker-specific) information in speech signal; assessment techniques; benefits of hearing aid and/or cochlear implant use; factors influencing speech perception by children and adults with hearing loss.

CSD:5255 Educational Audiology  2 s.h.
Training in skills necessary for working with school-age population; case management and aural rehabilitation, amplification and classroom hearing technology, identification and assessment practices, federal legislation that affects services. Requirements: CSD:5240 for Au.D. students.

CSD:5256 Anatomy and Physiology of Hearing  3-4 s.h.
Anatomy of auditory system, cochlear mechanics, and electrophysiology of peripheral and central auditory nervous system; laboratory emphasis on physiological techniques for study of ear.

CSD:5260 Augmentative and Alternative Communication  2 s.h.
Theories, assessment, and intervention in augmentative and alternative communication (AAC) for individuals with severe communication disorders resulting from a variety of developmental and acquired conditions.

CSD:5282 Phonological Development and Disorders  2 s.h.
Advanced topics in phonological development and disorders; current theoretical approaches to phonological analysis and typical phonological acquisition applied to assessment and intervention with children who have phonological disorders.

CSD:5283 Clinical Problems  1-2 s.h.
Issues and approaches to treatment of children and adults.

CSD:5301 Practicum: Speech-Language Pathology  arr.
Requirements: M.A. professional emphasis.

CSD:5304 Speech Pathology Outplacement: School  0-4 s.h.
Supervised teaching and observation in speech-language pathology in an elementary school setting.

CSD:5305 Speech Pathology Outplacement: Non-School  0-4 s.h.
Supervised clinical work and observation in speech-language pathology in a non-school setting.

CSD:5310 Scientific Writing  2 s.h.
Principles of writing for scientific posters, journal articles, grant proposals; effective communication of concepts and data. Requirements: Ph.D. standing.

CSD:5311 Audiology Clinic Management and Community Engagement  2 s.h.
Variety of professional issues important to clinical practice; incorporates professional and community engagement as well as service learning; topics directly related to clinical work and covered by clinical faculty and guest speakers with special expertise in each area; student presentations. Requirements: M.A. professional emphasis or Au.D. enrollment.

CSD:5313 Accounting and Marketing in Audiology Business Practice  2 s.h.
Introduction to business aspects of developing and managing an audiology practice related to accounting and marketing; varied professional issues important to clinical practice; topics covered by clinical faculty and guest speakers with special expertise in each area; student presentations. Requirements: M.A. professional emphasis or Au.D. enrollment.

CSD:5314 Audiology Student Teaching  arr.

CSD:5315 Clinical Rotations in Audiology  arr.

CSD:5316 Professional, Ethical, and Legal Issues in Audiology Business Practice  2 s.h.
Introduction to business aspects of developing and managing an audiology practice related to professional liability, certification, and licensure; legal and ethical issues in business practice; varied professional issues important to clinical practice; topics directly related to clinical work and covered by clinical faculty and guest speakers with special expertise in each area; student presentations. Requirements: M.A. professional emphasis or Au.D. enrollment.

CSD:5317 Compliance, Billing, Coding, and Reimbursement in Audiology Business Practice  2 s.h.
Introduction to business aspects of developing and managing an audiology practice related to compliance, billing, coding, and reimbursement; varied professional issues important to clinical practice; topics covered by clinical faculty and guest speakers with special expertise in each area; student presentations. Requirements: M.A. professional emphasis or Au.D. enrollment.
CSD:5320 Applied Statistics and Principles of Evidence-Based Practice in Audiology 3 s.h.
Combination of applied statistics and principles of evidence-based clinical practice with emphasis on applications in audiology and hearing science; review of statistical techniques widely used in audiology research including nonparametric and descriptive statistics, correlation, regression, and ANOVA; examples taken from studies published in scientific journals in communication sciences and disorders; principles of evidence-based practice that focus on topics and methods of establishing treatment efficacy, meta analyses, levels of evidence, and methods of assessing research quality. Requirements: introductory course in statistics.

CSD:5350 Seminar in Supervision 1 s.h.
Process and procedures in clinical education and supervision in a graduate program.

CSD:5511 Introduction to Doctoral Research 1 s.h.
Topics related to development and execution of research; doctoral program, use of library, human and animal subject issues, philosophy of science, use of common research tools, reading and writing research papers, and research grant preparation.

CSD:6101 Cognitive Science of Language Proseminar I 3 s.h.
Survey of five major disciplines within language sciences: formal linguistic, communication disorders, psychological, neuroscience, and computational approaches. Requirements: graduate standing in communication sciences and disorders, linguistics, psychology, or neuroscience. Same as LING:6101.

CSD:6102 Cognitive Science of Language Proseminar II 3 s.h.
Survey of five major disciplines within language sciences: formal linguistic, communication disorders, psychological, neuroscience, and computational approaches. Requirements: graduate standing in communication sciences and disorders, linguistics, psychology, or neuroscience. Same as LING:6102.

CSD:6202 Methods of Teaching Voice 3 s.h.
Attitude, musicianship, foreign language aptitude, physical and emotional characteristics; mental images used to modify respiratory, phonatory, articulatory behavior; vocal hygiene; performance anxiety; student-teacher relationships; administration in vocal schools, professional organizations. Same as MUS:6520.

CSD:6230 Psychoacoustics 2 s.h.
Basic properties of auditory perception or psychoacoustics from material covered in CSD:5256; perception of loudness, masking frequency selectivity, temporal processing, and spatial perception; basic perceptual properties, methods of measurement, and physiological basis for performance; properties of perception in normal ears, hearing impairment, and auditory prostheses (e.g., cochlear implants).

CSD:6242 Hearing Aids II 3 s.h.
Evaluation and verification procedures; emphasis on advanced technologies and strategies.

CSD:6245 Pediatric Audiology 1.5 s.h.
Theory and procedures for assessment and rehabilitation of pediatric populations; laboratory emphasis on test administration.

CSD:6247 Medical Audiology 2 s.h.
Review of a wide range of pathologic conditions that have an impact on hearing; focus on understanding the underlying pathophysiology and how the disorder is diagnosed and treated.

CSD:6249 Cochlear Implants 1-3 s.h.
Introduction to cochlear implants; history of cochlear implantation, introduction to cochlear implant technology, basics of device programming and troubleshooting, candidacy issues, outcomes in children and adults; auditory rehabilitation specific to cochlear implant recipients.

CSD:6290 Auditory Evoked Potentials 3 s.h.
Introduction to the wide range of electrophysiologic measures of auditory function used in clinical practice.

CSD:6291 Vestibular Assessment 2 s.h.
Introduction to vestibular anatomy, physiology theory, and testing techniques.

CSD:6292 Advanced Rehabilitative Audiology 2 s.h.
Current and developing procedures for assessment and habilitation of adults and children with hearing losses.

CSD:6293 Vestibular Rehabilitation 2 s.h.
Introduction to vestibular management and rehabilitation.

CSD:6311 Professional Issues in Audiology 1 s.h.
Information on a variety of professional issues important to clinical practice; topics directly related to clinical work; written assignments required as a means for students to reflect on and share clinical experiences related to topics. Corequisites: CSD:6316. Requirements: M.A. professional emphasis or Au.D. fourth-year enrollment.

CSD:6316 Advanced Externship in Audiology arr.

CSD:6317 Audiology Practice: Business Start-Up and Interprofessional Practice 1 s.h.
Introduction to business aspects of developing and managing an audiology practice related to business start-up as well as short- and long-range business planning; interprofessional education and practice; interprofessional education/interprofessional practice (IPE/IPP) training focuses on students’ collaboration with multiple service providers from other professions in order to improve outcomes for individuals, families, and/or communities served; topics are covered by clinical faculty and guest speakers with special expertise in each area; presentations by students. Requirements: M.A. professional emphasis or Au.D. enrollment.

CSD:6318 Occupational Audiology 2 s.h.
Incidence and prevalence of hearing loss; risk factors and assessment; noise exposure guidelines; hearing protection devices; education and motivation.

CSD:6515 Professional Seminar 0 s.h.
Weekly presentation of research projects, ideas, and clinical initiatives by faculty, students, and guests; required for Ph.D., Au.D., and M.A.-SLP first-year graduate students.

CSD:6519 Seminar: Evidence-Based Practice 2 s.h.
Introduction to design and conduct of research and evidence-based clinical practice. Offered fall semesters. Recommendations: clinical graduate standing in audiology or speech-language pathology.

CSD:6538 Seminar: Hearing Science 1 s.h.
Varied topics related to auditory function, assessment, and rehabilitation; discussion based.
CSD:7238 Capstone Requirement 1 s.h.
Work with a faculty mentor to complete a project that focuses on an area of student's interest.

CSD:7590 Research arr.
Individual laboratory research training in speech-language pathology or audiology.