Communication Sciences and Disorders

Interim Chair

• Anu Subramanian

Undergraduate major: speech and hearing science (B.A.)
Undergraduate minor: communication sciences and disorders
Graduate degrees: M.A. in speech pathology and audiology; Au.D.; Ph.D. in speech and hearing science
Faculty: https://csd.uiowa.edu/people
Website: https://csd.uiowa.edu

Courses

Communication Sciences and Disorders Courses

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:3119 Interdisciplinary Science of Sound and Hearing 3 s.h.
Introduction to physics of sound, biology/psychology of hearing, and audio technology; theories and experimental methods; music, speech, and environmental sounds. Same as MUS:3055, PSY:3055.

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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>CSD:4029</td>
<td>Experiential Learning in Audiology</td>
<td>1 s.h.</td>
</tr>
<tr>
<td>CSD:4098</td>
<td>Honors Thesis</td>
<td>1-3 s.h.</td>
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<tr>
<td>CSD:4114</td>
<td>Introduction to Voice Disorders</td>
<td>2 s.h.</td>
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<tr>
<td>CSD:4115</td>
<td>Structural Disorders</td>
<td>2 s.h.</td>
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<tr>
<td>CSD:4120</td>
<td>Introduction to Clinical Methods and Observation</td>
<td>3 s.h.</td>
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<tr>
<td>CSD:4130</td>
<td>Diversity, Equity, and Inclusion in Communication Sciences and Disorders</td>
<td>1 s.h.</td>
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<tr>
<td>CSD:4145</td>
<td>Developmental Language Disorders</td>
<td>3 s.h.</td>
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<tr>
<td>CSD:4148</td>
<td>Developmental Speech Disorders</td>
<td>3 s.h.</td>
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<tr>
<td>CSD:4165</td>
<td>Communication Disorders and Aging</td>
<td>1-2 s.h.</td>
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<tr>
<td>CSD:4183</td>
<td>Introduction to Stuttering</td>
<td>2 s.h.</td>
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<tr>
<td>CSD:4186</td>
<td>Problems: Speech/Hearing Processes and Disorders</td>
<td>arr.</td>
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<td>CSD:4244</td>
<td>Rehabilitative Audiology</td>
<td>3 s.h.</td>
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<tr>
<td>CSD:5104</td>
<td>Language Disorders in School-Aged Children</td>
<td>3 s.h.</td>
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<tr>
<td>CSD:5135</td>
<td>Foundations of Clinical Practice I</td>
<td>2 s.h.</td>
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<tr>
<td>CSD:5136</td>
<td>Foundations of Clinical Practice II</td>
<td>1 s.h.</td>
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<tr>
<td>CSD:5137</td>
<td>Foundations of Clinical Practice III</td>
<td>1 s.h.</td>
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<tr>
<td>CSD:5146</td>
<td>Neurogenic Disorders of Language</td>
<td>3 s.h.</td>
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<tr>
<td>CSD:5203</td>
<td>Counseling in Communication Disorders</td>
<td>1 s.h.</td>
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<td>CSD:5213</td>
<td>Voice Habilitation</td>
<td>2 s.h.</td>
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<td>CSD:5219</td>
<td>Fundamentals of Laboratory Instrumentation</td>
<td>2 s.h.</td>
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<tr>
<td>CSD:5222</td>
<td>Gross Anatomy of Speech/Voice Production</td>
<td>2 s.h.</td>
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<tr>
<td>CSD:5223</td>
<td>Pediatric Feeding and Swallowing Disorders</td>
<td>1 s.h.</td>
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CSD:4029: Students build a foundation of skills to develop in advanced degree program; for students interested in obtaining an Au.D. or learning more about audiology. Prerequisites: CSD:3185. Requirements: third- or fourth-year standing.

CSD:4098: Close work with a faculty mentor.

CSD:4114: Basic foundations for management of voice disorders. Prerequisites: CSD:3112.

CSD:4115: 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: 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. Prerequisites: CSD:4145. Recommendations: senior or graduate standing in communication sciences and disorders.

CSD:4130: Discussion of diversity, equity, and inclusion in communication sciences and disorders field; historical perspectives as related to current practices. Recommendations: graduate standing in speech language pathology, or junior or senior standing in speech language pathology or audiology.

CSD:4145: 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: 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: 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 majors and other health care service providers. Same as ASP:4165.

CSD:4183: Theoretical perspectives on the nature of stuttering including onset and development, basic phenomena, and beginning treatment principles.

CSD:4186: Independent readings or research experience through mutual arrangement between student and faculty; goals and requirements determined by participating faculty member.
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 1 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, PSY: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, PSY:6102.

CSD:6202 Vocal Pedagogy 3 s.h.
History of voice pedagogy, various pedagogical techniques of voice training, vocal anatomy, voice classification, critical listening, postural alignment, managing breath, tonal production, connecting registers, articulation, interpretation, vocal health, pharmacological effects on the voice, vocal gadgets, requirements for a professional career, teaching in the 21st century, and teaching practicum; diagnosis and correction of vocal faults. Same as MUS:6520.

CSD:6230 Psychoacoustics 2-3 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 2 s.h.
Evaluation and verification procedures; emphasis on advanced technologies and strategies.

CSD:6245 Pediatric Audiology 1.3 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 1-2 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:6312 Professional Issues in Audiology II and Capstone 1 s.h.
Information on a variety of professional issues important to clinical practice; topics directly related to clinical work; presentations, discussions, and written assignments required as a means for students to reflect on and share clinical experiences related to topics; capstone project. Requirements: Au.D. fourth-year enrollment.
CSD:6316 Advanced Externship in Audiology arr.

CSD:6317 Audiology Practice: Business Start-Up 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; presentation of topics by clinical faculty and guest speakers with special expertise in each area; student presentations. Requirements: M.A. professional emphasis or Au.D. enrollment.

CSD:6318 Occupational Audiology 1 s.h.
Incidence and prevalence of hearing loss; risk factors and assessment; noise exposure guidelines; hearing protection devices; education and motivation.

CSD:6319 Interprofessional Practice and Community Engagement in Communication Sciences and Disorders 1 s.h.
Advanced knowledge and experiences related to interprofessional education and practice (IPE/IPP) in communication sciences and disorders; IPE/IPP training focus on students' collaboration with multiple service providers from other professions to improve outcomes for individuals, families, and/or communities; presentation of topics by clinical faculty and guest speakers with special expertise in each area; student presentations. Requirements: M.A. professional emphasis or Au.D. enrollment.

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 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 Advanced Topics in Speech, Language, and Hearing Research 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.