Communication Sciences and Disorders

Chair
  • Eric J. Hunter

Undergraduate major: speech and hearing science (BA)
Undergraduate minor: communication sciences and disorders
Graduate degrees: MA in speech pathology and audiology; AuD; PhD in speech and hearing science
Graduate certificate: multilingualism and culturally responsive practice in SLP
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: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: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.

CSD:4029 Experiential Learning in Audiology 1 s.h.
Students build a foundation of skills to develop in advanced degree program; for students interested in obtaining an AuD or learning more about audiology. Prerequisites: CSD:3185. Requirements: third- or fourth-year standing.
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
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<tbody>
<tr>
<td>CSD:4030</td>
<td>Experiential Learning: Community Engagement Through Communication and Literacy Programs</td>
<td>2-3 s.h.</td>
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<tr>
<td>CSD:4098</td>
<td>Honors Thesis</td>
<td>1-3 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>Reducing Disparities and Inequities in Communication Sciences and Disorders</td>
<td>1 s.h.</td>
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<tr>
<td>CSD:4140</td>
<td>Manual Communication</td>
<td>1 s.h.</td>
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<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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<td>CSD:4186</td>
<td>Problems: Speech/Hearing Processes and Disorders</td>
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<td>CSD:4244</td>
<td>Rehabilitative Audiology</td>
<td>3 s.h.</td>
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<td>CSD:5104</td>
<td>Language Disorders in School-Aged Children</td>
<td>3 s.h.</td>
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<td>CSD:5114</td>
<td>Introduction to Voice and Resonance Disorders</td>
<td>3 s.h.</td>
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<td>CSD:5115</td>
<td>Structural Disorders</td>
<td>2 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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<td>CSD:5183</td>
<td>Introduction to Stuttering</td>
<td>2 s.h.</td>
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<tr>
<td>CSD:5203</td>
<td>Counseling in Communication Disorders</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>
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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:5115.

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 3 s.h.
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 Neurological and Structural Disorders of 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 1-2 s.h.

CSD:5238 Motor Speech Disorders 2 s.h.
Provides future speech-pathologists with a strong foundation for career-long learning about the nature and classification of neurogenic motor-speech disorders, symptomatology, etiology, diagnosis, treatment, and management options.

CSD:5240 Hearing Aids 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 AuD 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:5258 Multilingualism and Culturally Responsive Practice in Communication Sciences and Disorders 3 s.h.
Trajectories of multilingual language acquisition in typical contexts and in context of communication disorders; connections between language, cognition, culture, and cultural-linguistic experiences to develop and apply culturally responsive speech and language assessment and intervention skills in context of cultural and linguistic diversity.

CSD:5301 Practicum: Speech-Language Pathology School 0-4 s.h.

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:5306 Speech-Language Pathology Multilingual/Multicultural Outplacement: School 3-4 s.h.
Supervised multilingual and multicultural teaching and observation in speech-language pathology in an elementary school setting.

CSD:5307 Speech-Language Pathology Multilingual/Multicultural Outplacement: Non-School 3-4 s.h.
Supervised clinical work and observation in speech-language pathology in a multilingual and multicultural non-school setting.

CSD:5308 Practicum: Speech-Language Pathology Multilingual/Multicultural 3 s.h.

CSD:5310 Scientific Writing 2 s.h.
Principles of writing for scientific posters, journal articles, grant proposals; effective communication of concepts and data. Requirements: PhD standing.
CSD:5311 Advanced Clinical Topics in Audiology 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.

CSD:5314 Audiology Student Teaching arr.
Requirements: AuD first-, second-, or third-year enrollment.

CSD:5315 Clinical Rotations in Audiology arr.
Supervised clinical practice in audiology. Requirements: AuD first-, second-, or third-year enrollment.

CSD:5317 Advanced Clinical Practice in Audiology 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.

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.
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<tr>
<td>CSD:6312</td>
<td>Professional Issues in Audiology II and Capstone</td>
<td>1 s.h.</td>
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<tr>
<td>CSD:6316</td>
<td>Advanced Externship in Audiology</td>
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<tr>
<td>CSD:6317</td>
<td>Audiology Practice: Business Start-Up</td>
<td>1 s.h.</td>
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<tr>
<td>CSD:6318</td>
<td>Occupational Audiology</td>
<td>1 s.h.</td>
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<tr>
<td>CSD:6319</td>
<td>Interprofessional Practice and Community Engagement in Communication Sciences and Disorders</td>
<td>1 s.h.</td>
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<tr>
<td>CSD:6515</td>
<td>Professional Seminar</td>
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<td>CSD:6519</td>
<td>Evidence-Based Practice</td>
<td>2 s.h.</td>
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<tr>
<td>CSD:6538</td>
<td>Advanced Topics in Speech, Language, and Hearing Research</td>
<td>1 s.h.</td>
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<tr>
<td>CSD:7238</td>
<td>Capstone</td>
<td>1 s.h.</td>
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<tr>
<td>CSD:7239</td>
<td>Speech-Language Pathology Capstone in Multilingualism and Culturally Responsive Practice</td>
<td>1-3 s.h.</td>
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<td>CSD:7590</td>
<td>Research</td>
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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. Corequisites: CSD:6316. Requirements: AuD fourth-year enrollment.


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.

Incidence and prevalence of hearing loss; risk factors and assessment; noise exposure guidelines; hearing protection devices; education and motivation.

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.

Weekly presentation of research projects, ideas, and clinical initiatives by faculty, students, and guests; required for PhD, AuD, and MA-SLP first-year graduate students.

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.

Varied topics related to auditory function, assessment, and rehabilitation; discussion based.

Work with a faculty mentor to complete a project that focuses on an area of student's interest.

Work with a faculty mentor to complete a project that focuses on multilingualism and/or multiculturalism in speech-language pathology.

Individual laboratory research training in speech-language pathology or audiology.