

CSD - Communication Sciences and Disorders

Courses numbered 500 to 799 = *undergraduate/graduate*. (Individual courses may be limited to undergraduate students only.) Courses numbered 800 to 999 = *graduate*.

CSD 504. Aural Rehabilitation (3).

Discussion and labs concerning the role of speech-language pathologists and audiologists in evaluation and treatment of hearing-impaired children, adolescents, adults and their families. Students focus on understanding psychological, social, educational and occupational impacts of hearing loss; on applying a rehabilitative model, technology, individual and group therapies, and collaboration with families and professionals to help hearing-impaired persons improve or cope better with their communication problems. For majors only. Prerequisite(s): CSD 351 or instructor's consent.

CSD 504H. Aural Rehabilitation Honors (3).

Discussion and labs concerning the role of speech-language pathologists and audiologists in evaluation and treatment of hearing-impaired children, adolescents, adults and their families. Students focus on understanding psychological, social, educational and occupational impacts of hearing loss; on applying a rehabilitative model, technology, individual and group therapies, and collaboration with families and professionals to help hearing-impaired persons improve or cope better with their communication problems. For majors only. Prerequisite(s): CSD 351 or instructor's consent.

CSD 506. Acoustic and Perceptual Phonetics (3).

Cross-listed as LING 506. Studies the physical patterns (acoustic) of speech sounds and the importance of these acoustic patterns to speech recognition (perception). Focuses on segmental phonemes (vowels and consonants) and on suprasegmental characteristics such as stress and intonation. Introduces different types of speech analysis techniques and discusses how they may be used to study the acoustic patterns of speech sounds. Studies how different aspects of the speech signal relate to listener perception. Note: The CSD 506 or 506H sections must be taken in order for this course to count toward the CSD undergraduate major. Non-CSD majors should enroll in LING 506.

CSD 506H. Acoustic and Perceptual Phonetics Honors (3).

Cross-listed as LING 506. Studies the physical patterns (acoustic) of speech sounds and the importance of these acoustic patterns to speech recognition (perception). Focuses on segmental phonemes (vowels and consonants) and on suprasegmental characteristics such as stress and intonation. Introduces different types of speech analysis techniques and discusses how they may be used to study the acoustic patterns of speech sounds. Studies how different aspects of the speech signal relate to listener perception. Note: The CSD 506 or 506H sections must be taken in order for this course to count toward the CSD undergraduate major. Non-CSD majors should enroll in LING 506.

CSD 512. Communication in Special Populations: Children (3).

Discusses communication differences, delays and disorders in children. Emphasizes the potential impact on quality of life and on academics resulting from communication disorders associated with special populations of children with speech-language impairments, intellectual disabilities, hearing impairment, acquired language disorders and craniofacial anomalies. Restricted to CSD majors. Non-CSD majors and graduate students need departmental approval. For undergraduate credit only. Prerequisite(s): completion of in-class HIPAA training.

CSD 512H. Communication in Special Populations: Children Honors (3).

Discusses communication differences, delays and disorders in children. Emphasizes the potential impact on quality of life and on academics resulting from communication disorders associated with special populations of children with speech-language impairments, intellectual disabilities, hearing impairment, acquired language disorders and craniofacial anomalies. Restricted to CSD majors. Non-CSD majors and graduate students need departmental approval. For undergraduate credit only. Prerequisite(s): completion of in-class HIPAA training.

CSD 517. Communication in Special Populations: Aging (3).

Focuses on how communication is affected by aging, what communication problems may be experienced by older persons, and what the implications are for speech-language pathologists and audiologists providing services to older persons. Explores prevention activities geared toward maintaining functional communication abilities in older adults as well as functional treatment approaches geared toward the specific communication needs of older persons. For CSD majors, but students from other fields may enroll with departmental consent. *Course includes diversity content.*

CSD 517H. Communication in Special Populations: Aging Honors (3).

Focuses on how communication is affected by aging, what communication problems may be experienced by older persons, and what the implications are for speech-language pathologists and audiologists providing services to older persons. Explores prevention activities geared toward maintaining functional communication abilities in older adults as well as functional treatment approaches geared toward the specific communication needs of older persons. For CSD majors, but students from other fields may enroll with departmental consent. *Course includes diversity content.*

CSD 518. Deaf Culture (3).

Examines various cultural aspects of the deaf community. Presents the interrelationship of language and culture along with a study of socialization, norms and values. *Course includes diversity content.* For undergraduate credit only.

CSD 519. Genetic and Organic Syndromes (4).

Introduces human genetics and the impact of chromosomal and structural anomalies of communication disorders. Assessment and remediation of cleft palate speech. Prerequisite(s): admission into the BA in CSD program and completion of in-class HIPAA training.

CSD 519H. Genetic and Organic Syndromes Honors (4).

Introduces human genetics and the impact of chromosomal and structural anomalies of communication disorders. Assessment and remediation of cleft palate speech. Prerequisite(s): admission into the BA in CSD program and completion of in-class HIPAA training.

CSD 523. Workforce Readiness and Preparation (3).

Cross-listed as ISLE 523, PSY 523. Designed for neurodivergent college students who are interested in developing pre-employment skills in a simulated work environment. *Course includes diversity content.*

CSD 605. Neuroscience of Communication Sciences and Disorders (3).

An introductory course for the anatomy and physiology of the human nervous system. The mechanisms of the peripheral and central nervous systems are covered in order for students to obtain an understanding of the neurology of speech, language and hearing. Neurological pathology, especially related to speech and hearing impairment, is covered as well. Prerequisite(s): admission into the BA in CSD program.

CSD 635H. Senior Practicum Honors (1).

Focuses on techniques and methods for developing clinical skills for a selected supervised practicum setting in speech-language pathology at the university's Evelyn Hendren Cassat Speech-Language-Hearing Clinic. Clinical practice skills include knowledge related to universal precautions, procedures for assessment/intervention, and electronic record keeping. Restricted to senior CSD honors students who have applied and been accepted according to department guidelines.

CSD 705. Counseling in Communication Sciences and Disorders (3).

Provides information on the structure and conduct of interviews, basic counseling strategies, and consideration of the "helping" role as practiced by communication disorders professionals. Focuses on information supportive of developing effectiveness in these roles. Considers multicultural concerns. *Course includes diversity content.*

CSD 710. Autism Spectrum Disorder (3).

Overview of the characteristics and etiology of autism spectrum disorder and the knowledge needed to conduct effective communication and language assessments and develop evidence-based treatment strategies for individuals with ASD. Covers guidelines for the assessment and intervention of communication skills, including decision making for the selection of functional communication systems, structured teaching and positive environmental supports for effective learning. *Course includes diversity content.*

CSD 740. Selected Topics in Communication Sciences and Disorders (1-3).

An umbrella course created to explore a variety of subtopics differentiated by letter (e.g., 740A, 740B). Not all subtopics are offered each semester – see the course schedule for availability. Students enroll in the lettered courses with specific topics in the titles rather than in this root course. Prerequisite(s): instructor's consent.

CSD 740V. Aural Rehabilitation (3).

For graduate students who did not complete an aural rehabilitation course during the undergraduate degree. Discussion and labs concerning the role of speech-language pathologists and audiologists in evaluation and treatment of hearing-impaired children, adolescents, adults and their families. Students focus on understanding psychological, social, educational and occupational impacts of hearing loss; on applying a rehabilitative model, technology, individual and group therapies, and collaboration with families and professionals to help hearing-impaired persons improve or cope better with their communication problems.

CSD 750. Workshop in Communication Sciences and Disorders (1-4).

An umbrella course created to explore a variety of subtopics differentiated by letter (e.g., 750A, 750B). Not all subtopics are offered each semester – see the course schedule for availability. Students enroll in the lettered courses with specific topics in the titles rather than in this root course.

CSD 781. Cooperative Education (1-4).

Academic program that expands a student's learning experiences through paid employment in a supervised educational work setting related to the student's major field of study or career focus. May not be used toward degree requirements. Repeatable for credit.

CSD 803. Introduction to Psychoacoustics (3).

Fundamental principles, measurement methods, research findings, laboratory practice and readings relating physical properties of nonspeech and speech sounds to people's subjective sensations and perception responses.

CSD 804. Clinical Audiology I (3).

Lectures, labs and case studies concerning measurement of hearing sensitivity with the pure tone audiogram. Topics include types and features of audiometers, audiometric test environments, behavioral and electro-acoustic calibration, pure tone air-conduction and bone-conduction threshold testing, clinical masking, audiometric tuning fork testing, and verbal and written interviewing and reporting of pure tone results.

CSD 805. Clinical Audiology II (3).

Lectures, labs and case studies concerning auditory evaluation beyond the pure tone audiogram, focusing on differential diagnosis of auditory site-of-lesion. Topics include speech audiometry, acoustic immittance testing, behavioral testing of cochlear versus retro cochlear sensorineural hearing loss, auditory processing evaluation in adults, and assessing nonorganicity. Prerequisite(s): CSD 804, and admission into the AuD program or instructor's consent.

CSD 806. Advanced Anatomy and Physiology of the Auditory and Vestibular Systems (3).

An in-depth study of the structure and function of the ear, focusing on the conductive and sensory mechanisms and cochlear processes of acoustic signals. It introduces neuroanatomy and electrophysiology of the auditory system, including the efferent system. This course highlights major clinical and pathologic correlates to link basic science principles and practice. Additionally, it presents information on the structure and function of the vestibular system. Prerequisite(s): admission into the AuD program or instructor's consent.

CSD 807. Acoustics and Instrumentation (3).

Studies basic acoustics for the hearing and speech sciences, including physical and mathematical concepts in sound generation, transmission, manipulation, measurement and wave analysis. Introduces the fundamentals of electricity and electronics related to research and clinical application in audiology, including essential concepts and function of circuits and electronic devices, and technical knowledge of major forms of instrumentation.

CSD 809. Language and Literacy for Young Children: Assessment and Intervention (3).

Emphasis on etiology and characteristics of language deficits of young children. Provides current evidence relevant to language assessment and intervention strategies for children birth to school age. Includes examination and development of culturally sensitive individual and family treatment plans, facilitation of emergent literacy, and problem-based application of the descriptive developmental treatment model. Prerequisite(s): previous coursework in typical language development.

CSD 810. Motor Speech Disorders (2).

Studies the neurologic bases for motor speech production and dysfunction: dysarthrias and apraxia. Covers assessment of motor speech disorders and clinical management principles and strategies for the speech subsystems of respiration, phonation, articulation, resonance and prosody. Pre- or corequisite(s): coursework in neuroscience.

CSD 812. Aphasia (3).

Prepares students for clinical work with people with aphasia. Students integrate background information from neurophysiology to understand aphasia. Emphasizes psycholinguistic and neurolinguistics theories of language processing, assessment, differential diagnosis of neurogenic language disorders, and developing appropriate restorative and compensatory intervention plans. Also focuses on the clinical description and characteristics of the impairments as well as on the psychosocial changes in life activities and participation of people who live with aphasia.

CSD 814. Speech-Sound Disorders (2).

Reviews current theories on the etiology and development of the disorder. Considers behaviorally based diagnostic procedures for children and adults, as well as methods for clinical intervention, including procedures for parent interviewing and counseling, and multicultural concerns. Provides opportunities for observation, one focus being demonstration of intervention methods.

CSD 815. Augmentative and Alternative Communication (1).

Provides information about assistive technology for persons with special needs across the life span (e.g., cerebral palsy, degenerative neurological diseases, autism). Considers physical, linguistic and cognitive factors in designing and implementing assistive technology resources. Provides resources for assessment, intervention, partner training and report writing. Studies use of augmentative and alternative communication systems and computer applications/modifications. Explores resources for purchase and funding of AAC systems. *Course includes diversity content.*

CSD 816. Language and Literacy for School-Age and Adolescents (3).

Examines various approaches to working with children and adolescents with language and literacy deficits which compromise school success. Explores the multidimensional nature of the language and literacy needs of students in the classroom to meet Common Core standards. Includes multicultural aspects and collaboration strategies.

CSD 817. Voice Disorders (3).

Reviews current knowledge on the symptomatology and etiology of commonly encountered voice disorders in children and adults. Presents procedures for differential diagnosis and clinical intervention, based on a working knowledge of the anatomy and physiology of normal voice production. Considers multicultural issues.

CSD 818. Fluency Disorders (3).

Reviews current theories on the etiology and development of the disorder. Considers behaviorally based diagnostic procedures for children and adults, as well as methods for clinical intervention, including procedures for parent interviewing and counseling, and multicultural concerns. Provides opportunities for observation, one focus being demonstration of intervention methods.

CSD 819. Cognitive Communication Disorders (2).

Addresses cognitive communication disorders that result from brain injuries (e.g., traumatic brain injury, right hemisphere stroke and dementia). The similarities and differences between cognition and the language are considered. Evaluation and treatment methods are introduced for adult clients with these acquired disorders.

CSD 821. Educational Settings Practicum (1-3).

Provides supervised clinical experiences in identification, diagnosis, evaluation, treatment, referral and counseling of children with speech or language impairments in a school setting. Demonstration of applied clinical skills in the elementary and/or secondary school levels is completed. Repeatable up to 3 credit hours. Prerequisite(s): CSD 809, CSD 816, CSD 822, medical clearance, liability insurance and departmental approval one year prior to enrollment.

CSD 822. General Clinic Practicum (1-2).

Provides supervised clinical experiences in settings with preschoolers, school-aged children and adults with a wide variety of communication disorders. Covers concepts of clinical practice, including diagnosis, data collection, report writing, counseling and treatment techniques. Repeatable for credit. Prerequisite(s): admission to CSD graduate program on a clinical track, medical clearance and liability insurance.

CSD 823. Medical Settings Practicum (1-3).

Provides supervised clinical experiences in individual and group therapy diagnostics, documentation, consultations and interdisciplinary staffings in a medical setting. Repeatable up to 3 credit hours. Prerequisite(s): CSD 810, CSD 812, CSD 822, medical clearance, liability insurance and departmental approval one year prior to enrollment.

CSD 824. External Placement Practicum (1).

Supervised clinical experiences in off-site locations for advanced clinical experiences in a variety of settings as well as a wide spectrum of speech and language disorders. Prerequisite(s): CSD 822, medical clearance, liability insurance and departmental approval.

CSD 831. Auditory Assessment — SLP Practicum (1).

Discusses proper hearing screening techniques for all age groups that are commonly conducted by speech-language pathology students. Students engage in practical experiences throughout the semester.

CSD 832A. Critical Thinking in Clinical Practice I (2).

Introduces critical thinking and problem solving related to clinical practice in speech-language pathology. Includes introduction to evidence-based evaluation/assessment, goal writing, data collection, treatment models and report writing. Case-based inquiry is used along with clinical role playing and cooperative/interprofessional learning. Prerequisite(s): admission to CSD graduate program.

CSD 832B. Critical Thinking in Clinical Practice II (1).

Provides further introduction to critical thinking and problem solving related to clinical practice in speech-language pathology. Content includes further discussion of evidence-based evaluation/assessment, goal writing, data collection, treatment models and report writing. Case-based inquiry is used along with clinical role playing and cooperative/interprofessional learning. Prerequisite(s): CSD 832A.

CSD 832C. Critical Thinking in Clinical Practice III (1).

Further development of critical thinking and problem solving related to clinical practice in speech-language pathology. Content includes further discussion of evidence-based evaluation/assessment, goal writing, data collection, treatment models and report writing. Case-based inquiry is used along with clinical role playing and cooperative/interprofessional learning. Prerequisite(s): CSD 832A, 832B.

CSD 834. Interprofessional Evidence-Based Practice (1).

Cross-listed as PA 834. This interprofessional course uses small group discussion and practical exercises to advance skills in evidence-based practice, interpersonal skills, critical thinking, leadership and teamwork. Students practice a patient-centered approach to integrate clinical expertise and patient preferences/values with the best available health evidence to optimize individual healthcare, public health outcomes and healthcare systems. Students practice and develop skills in interprofessional consultations and patient education. This course assumes advanced knowledge and skills in research methods and evidence-based practice. Prerequisite(s): admission into PA or CSD graduate program.

CSD 836. Professional Writing and Clinical Documentation (1).

A study of basic clinical writing skills and professional writing, particularly for assessment reports, treatment plans, progress reports, and professional correspondence in speech-language pathology and audiology.

CSD 837. Clinical Assessment of Speech-Language Disorders (1).

Studies the basic diagnostic procedures used in speech-language pathology. Emphasizes criteria for test selection, techniques in test administration, and interpretation of test results. *Course includes diversity content.*

CSD 838. Supervisory Process in Speech-Language Pathology and Audiology (1).

Studies theories and strategies used in supervising student speech-language pathology and audiology clinicians. Discusses professional standards and methods for analyzing the teacher-learning process. *Course includes diversity content.*

CSD 839. Pediatric Dysphagia (2).

Study and labs targeting specific populations — from infant to 18 years of age — having various feeding and swallowing issues. Hands-on practice with instrumentation for dysphagia, and supervised observation/participation on teams and with patients live or through video presentation/case studies. Additional coursework to enhance knowledge and skills concerning specific disease groups and populations, with accompanying evaluation and treatment considerations. *Course includes diversity content.*

CSD 840. Adult Dysphagia (2).

Covers the disorder of dysphagia as it affects adults of all ages. Participants learn foundational knowledge of the biological, neurological, lifespan, psychological and cultural bases of swallowing processes. Participants examine evidence-based prevention, screening, assessment and intervention procedures and address the importance of multidisciplinary intervention and ethical issues. *Course includes diversity content.*

CSD 841. Augmentative and Alternative Communication Lab (1).

Study and labs targeting specific populations across the life span (e.g., cerebral palsy, degenerative neurological diseases, and developmental delays and disorders). Hands on practice with patients live or through video presentation/case studies (considers physical, linguistic and cognitive factors in designing and implementing assistive technology resources). Provides resources for assessment, intervention, partner training and report writing to support and enhance knowledge and skills for specific groups and populations with accompanying evaluation and treatment considerations. *Course includes diversity content.* Prerequisite(s): CSD 815.

CSD 842. Cultural and Linguistic Diversity in SLP (1).

Designed to provide students with introductory experience/information related to cultural and linguistic diversity in speech-language pathology. Course content includes discussion about second language acquisition, appropriate evaluation/assessment procedures for individuals who are culturally and linguistically diverse, ethics, and other topics related to the field of speech-language pathology and cultural-linguistic diversity. *Course includes diversity content.*

CSD 843. Orofacial Myofunctional Disorders (1).

Provides the student with the knowledge of orofacial myofunctional disorders as they pertain to children and adults. Orofacial myofunctional disorders and related issues are discussed to identify, evaluate, treat and refer clients appropriately. A thorough understanding of how orofacial myofunctional disorders affect overall development as well as quality of life for all individuals is studied. Research and case studies are reviewed to determine best practice for treatment as it relates to overall function of oral structures. *Course includes diversity content.* Prerequisite(s): admission to MA-CSD program or instructor's consent.

CSD 844. Clinical Applications for AEPs and OAEs (2).

Explores applications of otoacoustic emissions (OAEs) and auditory evoked potentials (AEPs) in audiology clinical practice. Students gain practical, hands on experience in selecting, administering and interpreting OAE and AEP protocols. Prerequisite(s): CSD 866 and admission into the AuD program or instructor's consent.

CSD 845. Research in Communication Sciences and Disorders (2).

Covers the fundamentals of designing, interpreting and presenting methodologies typically found in communication sciences and disorders

research and evidence-based practice. Covers descriptive techniques, inferential techniques in single subject and group designs, and critically evaluating qualitative and quantitative data. Students are exposed to the development and organization needed for the publication and presentation processes for dissemination of research findings. Prerequisite(s): admission into AuD program or instructor's consent.

CSD 846. Advanced Audiologic Rehabilitation (3).

Advanced discussion of audiologists' roles with current and developing procedures for auditory (re)habilitation of adults and children with hearing loss. Psychoacoustic and psycholinguistic applications for amplification technologies (including CIs and HAT). Discussion of rehabilitative models with individual and group therapies. Prepares students for collaborative outcomes with other practitioners and families. Prerequisite(s): an undergraduate aural rehabilitation course, admission into the AuD program, or instructor's consent.

CSD 847. Business for Audiologists (3).

Covers the fundamentals of audiological coding, billing and reimbursement; designing and financing a new practice; budgeting; hearing aid sales and bundling; marketing; and hiring staff in an audiology practice. Prepares students interested in managing an audiology clinic or operating their own private practice. Prerequisite(s): admission into AuD program or instructor's consent.

CSD 851. Medical Audiology (3).

Introduces medical aspects of hearing impairment and other auditory disorders, emphasizing pathological changes of the auditory system and diagnosis of prevalent diseases related to the auditory system. Links up audiological findings with ontologically diagnosed disorders. Introduces general information on embryologic development of various portions of the auditory system. Addresses fundamental knowledge on human genetics such as DNA structure and function, genes, modes of genetic transmission, hereditary deafness. Discusses application of genetic testing and prenatal diagnosis of genetic disorders. Prerequisite(s): CSD 806, or instructor's consent.

CSD 854. Hearing Conservation (3).

Discussion and labs concerning prevention of hearing loss in the workplace, military, community and recreation. Students focus on risk factors of major preventable hearing impairments including noise, chemical ototoxicity, measurement, calculation and reporting of noise levels; application of forensic audiology and government regulations; and implementing prevention programs through noise control, hearing testing, hearing protection devices, and worker and public education.

CSD 855. Pediatric and Educational Audiology (3).

Discussion and labs concerning identification, evaluation and intervention with infants, children and adolescents with hearing losses, other auditory problems, or developmental disabilities. Students focus on newborn hearing screening programs, auditory and global development of children and their importance in behavioral, functional and electrophysiological evaluation of hearing and listening; administering school hearing conservation and aural rehabilitation programs, classroom acoustics and amplification, interdisciplinary teamwork and collaboration with families and educators, and legal protections of hearing-impaired students, including individual education plans.

CSD 860. Amplification I (3).

Introduces the area of amplification. Students learn basic knowledge and skills in topics such as types of hearing aids, hearing aid components, hearing aid systems, electroacoustic performance and measurement, hearing aid plumbing, basic compression systems, probe microphone verification, hearing aid candidacy, problem solving, assessing outcomes and hearing aid orientation/counseling. Prerequisite(s): CSD 804.

CSD 861. Amplification II (3).

Students investigate topics such as advanced probe microphone measures, advanced signal processing, advanced hearing aid design, remote microphone options in amplification, and special amplification options, such as cochlear implants and bone-anchored hearing aids. Students have the opportunity to interact with professionals representing various aspects of the industry. Prerequisite(s): CSD 860.

CSD 863. Professional Issues and Counseling in Audiology (3).

Explores two topics important to audiologists: professional issues and counseling practices. Covers principles, scope of practice, professional conduct/ethics, interpretation of research, and other professional issues that can impact the profession. Additionally, provides information on the structure and conduct of case histories, basic counseling strategies, and consideration of the “helping” role as practiced by audiologists. Focuses on information supportive of developing proficiency in counseling roles and considers multicultural concerns. Prerequisite(s): admission into the AuD program or instructor's consent.

CSD 866. Principles of Auditory Evoked Potentials and Otoacoustic Emissions (4).

Introduces information on the anatomic and physiologic basis of auditory evoked potentials generated from the peripheral and central auditory systems and otoacoustic emissions generated from the cochlea. It presents techniques for the administration and interpretation of auditory-evoked potentials, including electrocochleography (ECoChG), auditory brainstem responses (ABR), auditory middle-latency responses (AMLR), and auditory steady state responses (ASSR), and two types of otoacoustic emissions (TEOAEs and DPOAEs). Lab components provide opportunities for hands-on learning and independently performing various tests. Prerequisite(s): CSD 804, CSD 806, and admission into the AuD program or instructor's consent.

CSD 868. Diagnosis and Management of Persons with Balance Disorders (3).

Discussion and labs concerning an audiologist's role in diagnosing and managing persons with vestibular and balance disorders. Students focus on anatomy, physiology, development and disorders of vestibular and ocular-motor systems; subjective evaluations using interviewing and scaling; objective evaluations using ENG/VNG, rotational testing, posturography and vestibular evoked potentials; balance rehabilitation, and interdisciplinary collaboration and communication. Prerequisite(s): CSD 806 or instructor's consent.

CSD 870. Implantable Auditory Devices (3).

Provides an overview of the necessary knowledge and skills to work with cochlear implants and other implantable auditory devices in clinical practice. Information on the history of cochlear implants and other implantable devices, technology, candidacy requirements, patient outcomes, (re)habilitation, and issues unique to special populations are presented. Prerequisite(s): CSD 860, CSD 861, and admission to the AuD program or instructor's consent.

CSD 871. Diagnosis and Treatment of Tinnitus and Hyperacusis (2).

Advanced audiology course covering the latest evidence-based research in evaluation and intervention with persons who have special auditory problems that are increasingly influential for audiologists now and in the future (tinnitus and hyperacusis). Prerequisite(s): admission to the AuD program or instructor's consent.

CSD 886. Clinical Practicum in Audiology (1-2).

Supervised clinical practicum at the WSU Evelyn Hendren Cassat Speech-Language-Hearing Clinic and/or an off-campus clinical rotation site. Clinical expectations and responsibilities vary with the student's level of experience and the requirements of the placement site. Practicum assignments are determined by each student's competency

needs, ASHA requirements and availability of rotation sites. Repeatable for a total of 8 credit hours. Prerequisite(s): departmental approval.

CSD 890. Independent Study in Speech and Language Pathology or Audiology (1-4).

Arranged individual, directed study in specialized content areas in speech and language pathology or audiology. Repeatable for a total of 4 credit hours. Prerequisite(s): instructor's consent prior to enrollment.

CSD 891. Nonthesis Research (1-5).

Benchmark for the applied research experience in the Master of Arts (MA-CSD) education program and Doctor of Audiology (AuD) education program in communication sciences and disorders. A directed research project may include literature searches, data collection, interpretation of data, or preparation of an oral presentation and/or a written manuscript. Repeatable for up to 5 credit hours. Prerequisite(s): departmental consent.

CSD 892. Presentation of Research (1).

Benchmark for the applied research experience in the Doctor of Audiology program in communication sciences and disorders. A directed research project which may include literature searches, data collection and interpretation of data. Culminates in the oral presentation of capstone project, which may also be prepared for publication. Repeatable for credit. Prerequisite(s): research methods course, departmental consent.

CSD 895. Thesis Research (1-2).

Student-driven research experience to address a specific research question. Potential topics should be formulated by the student and discussed with their advisor. Repeatable for credit. Prerequisite(s): instructor's consent.

CSD 899. Thesis (1-2).

Applied research experience in the Master of Arts program in communication sciences and disorders. Independent projects must involve extensive data collection, analysis and preparation of a written manuscript. Repeatable for credit. Prerequisite(s): research methods course, departmental consent.

CSD 935. Advanced Practicum in Communication Sciences and Disorders (3).

An umbrella course created to explore a variety of subtopics differentiated by letter (e.g., 935A, 935B). Not all subtopics are offered each semester – see the course schedule for availability. Students enroll in the lettered courses with specific topics in the titles rather than in this root course.

CSD 935A. Advanced Practicum in Communication Sciences and Disorders: Academic Teaching (1-3).

Academic teaching is an evidence-based, reflective practice that attempts to maximize student learning. This course provides students with the background to understand academic teaching and explore ways in which it can be developed and improved. Emphasis is placed on the role of academic teaching in the discipline of communication sciences and disorders.

CSD 935C. Advanced Practicum in Communication Sciences and Disorders: Clinical Supervision (1-3).

Clinical supervision refers to the training and education of student clinicians, recognizing that supervision is part of the training and education process. This course provides students with the background to understand clinical supervision and explore ways in which it can be developed and improved. Emphasis is placed on the role of mentoring, advising and modeling professional behavior in clinical supervision.

CSD 935E. Advanced Practicum in Communication Sciences and Disorders: Program Administration (1-3).

Program administration refers to all aspects of running an organization. This course provides students with the background to understand program administration and explore ways in which it can be developed and improved. Emphasis is placed on the role of program administration in CSD graduate education programs and its relationship to program accreditation.

CSD 935G. Advanced Practicum in Communication Sciences and Disorders: Grant Writing (1-3).

Developing effective grant writing skills is essential to acquire competitive funding from government agencies and private foundations. Writing a successful grant proposal is a blend of art and science. It requires basic know how, content knowledge, writing proficiency, strong research skills, creativity, organizational ability and patience. This course provides students with the background necessary to develop a competitive funding proposal.

CSD 935J. Advanced Practicum in Communication Sciences and Disorders: Clinical Management (1-3).

Clinical management refers to a scientific, systems-based approach to improving health care for both patients and practitioners. This course provides students with the background to understand clinical management and explores ways in which it can be developed and improved. Emphasis is placed on the role of interdisciplinary and interprofessional practice in clinical management. Repeatable for a total of 6 credit hours.

CSD 935K. Advanced Practicum in Communication Sciences and Disorders: Research (1-3).

Research refers to a scientific, systems-based approach to increasing knowledge and exploring questions. This course provides students with the background to understand research and explore ways in which it can be developed and improved. Emphasis is placed on the role of research in communication sciences and disorders, as well as interprofessional and interdisciplinary collaborations.

CSD 940. Advanced Selected Topics in Communication Sciences and Disorders (1-4).

An umbrella course created to explore a variety of subtopics differentiated by letter (e.g., 940A, 940B). Not all subtopics are offered each semester – see the course schedule for availability. Students enroll in the lettered courses with specific topics in the titles rather than in this root course.

CSD 940B. Advanced Selected Topics in CSD: Autism Spectrum Disorder (1-3).

Advanced individual or group study in the specialized area of Autism Spectrum Disorder with an emphasis on communication sciences and disorders. Repeatable up to 6 credit hours. *Course includes diversity content.*

CSD 940G. Scholarly Integrity (1).

Course meets two basic goals. First, it meets the Office of Research Integrity's (ORI) recommendations that all federally-funded researchers have formal ethics education in responsible conduct of research. Covers the nine recommended core areas plus additional topics. Second, the course acts as a forum and resource to discuss issues in research ethics. Participants are encouraged to think critically about what it means to be an ethical researcher and consider various sources of conflicts, such as ethical and compliance issues in areas of their careers related to research and education. Also identifies sources of information or guidance useful in making ethical decisions.

CSD 940L. Advanced Selected Topics in CSD: Language and Literacy in ASD (1-3).

Advanced individual or group study in the specialized areas of language and literacy for school-age and adolescent students with Autism Spectrum Disorder (ASD). Repeatable up to 6 credit hours. *Course includes diversity content.*

CSD 940P. Cognitive Communication in Children (1-4).

Covers selected topics relevant to the field on domains of cognitive communication in children and design of a novel research project. Discussions include executive functioning, attention, memory, and problem-solving skills while focusing on domains that predict later achievement (e.g., working memory). Intended for doctoral students.

CSD 940Q. Cultural Diversity in CSD (1-4).

Covers selected topics relevant to cultural diversity in communication sciences and disorders, and design of a novel research project. Intended for doctoral students.

CSD 990. Advanced Independent Study in Speech and Language Pathology, Audiology or Speech Science (1-3).

Arranged individual, directed study in specialized content areas in speech and language pathology, audiology or speech sciences. Repeatable for credit. Prerequisite(s): advanced standing and instructor's consent.

CSD 992. Advanced Presentation of Research (1-3).

Directed research project for doctoral students culminating in a manuscript appropriate for publication. Repeatable for credit.

CSD 995. Research Proseminar (1).

Weekly seminar of informal discussion and formal presentation of ongoing or planned research by the CSD faculty and doctoral graduate students. Goal is to provide CSD doctoral students with new and valuable knowledge and insights regarding how real-world research is performed. Repeatable for credit. Prerequisite(s): doctoral student standing.

CSD 996. University Teaching (1-3).

Seminar on university teaching. The pedagogy, theories and research of teaching are discussed through presentations, readings, case studies, observation of teaching and teaching experiences. The goal is to provide doctoral students with information and experience in university teaching. Prerequisite(s): doctoral student standing. Repeatable for credit.

CSD 997. Audiology Residency (1-7).

Full-time supervised clinical experience at an approved clinical facility. Repeatable for credit. Prerequisite(s): advancement to candidacy in the AuD program.

CSD 999. Doctoral Dissertation (1-18).

Successful completion of this course assures that the student has participated in an independent research activity that includes aspects of literature review, data collection and analysis, and scholarly writing. The expectation is that one or more manuscripts may be prepared for submission to scholarly journals based on this research experience. Course serves as the benchmark for the applied research experience in the Doctor of Philosophy program in CSD. Repeatable for credit. Prerequisite(s): instructor's consent.