# COMMUNICATION SCIENCES AND DISORDERS (CSD)

CSD 500: Research Methods in Communication Sciences and Disorders

3 Credits

Methodology necessary for understanding and conducting research in communication disorders.

Prerequisite: 15 credits in communication sciences and disorders

CSD 520: Physiologic and Acoustic Issues in Speech Science

3 Credits

Seminar in the physiologic and acoustic aspect of normal and disordered speech production. CSD 520CSD 520 Physiologic and Acoustic Issues in Speech Science (3) CSD 520, Physiologic and Acoustic Issues in Speech Science (PHSIO-ACS SPCH SCI), is a 3-credit course offered every Fall semester. The course is required of all CSD graduate students working towards a masters degree in Communication Sciences and Disorders. The educational objectives of the course are to provide information on acoustical and some physiological aspects of normal speech production, along with some applications to disordered speech production, particularly neurogenic speech disorders, stuttering, and voice disorders. The goal of the course is to provide the graduate student with experience using the most common methods of speech analysis in the research laboratory and the clinic. Because of the frequent use of audio recording equipment in the field, the emphasis is on acoustical analyses for measurement of vowel and consonant properties. Considerable emphasis is placed on coarticulation. Assessment is based on student projects including vocal fundamental frequency analysis, electroglottographic analysis, acoustic analysis of articulation, analysis of vowels of typical speakers as well as vowels of speakers who stutter, and acoustical analysis of consonants.

Prerequisite: 12 credits in communication sciences and disorders

CSD 540: Phonological Disabilities

## 3 Credits

Speech-sound production disorders in children and adults; methods of examination, diagnosis, and treatment. CSD 540CSD 540 Phonological Disabilities (3) CSD 540, Phonological Disability (PHONOL DISABLITY), is a 3-credit graduate course typically offered every spring semester. The course is required of all graduate students pursuing a masters degree in Communication Sciences and Disorders. The course has two prerequisites, CDS 442, Introduction to Disorders of Articulation and Phonology and CSD 495A, special topics in phonetics. The objectives of the course are to develop an attitude of critical thinking in the areas of phonological disorders. Class discussions, tests, and projects promote synthesis of ideas. In addition, the course integrates research and practice and a portion of class meetings is spent relating research findings to clinical practice in the treatment of phonological disorders. Original articles focusing on treatment of phonological disorders are required reading. Class sessions and independent and group projects emphasize the assessment and analysis of speech produced by children with disordered phonological systems and assist students to utilize clinically efficient speech sample collection and transcription procedures that optimize the reliability, validity, and potential informativeness of

obtained data. Activities involving treatment planning are utilized to assist graduate clinicians in designing efficacious treatment, predicting outcomes, and determining effectiveness of intervention. Student performance is evaluated through tests, take-home projects, critique writing, and inclass projects and quizzes.

Prerequisite: CSD 442

CSD 541: The Voice and Its Disorders

3 Credits

Physical, physiological, and psychological bases of voice production; causes, nature, and symptoms of its disorders; current clinical methods in voice improvement. CSD 541CSD 541 The Voice and Its Disorders (3) This course presents information on vocal function for speech and the disorders that are common to the human vocal folds. During the first section of the course, the physical, physiological, and psychological bases of voice production are discussed along with the causes, nature, and symptoms of voice disorders. Voice disorders are difficult to understand without adequate demonstrations; therefore, the class uses videotapes and voice samples to help foster understanding of the course material. The first portion of the course also includes a review of the anatomy and physiology of the voice and vocal acoustics and extensive coverage of various laryngeal pathologies. Second, voice evaluation and diagnosis are examined including VisiPitch training, electroglottography, endoscopy and stroboscopy. Third, specific clinical management techniques are examined including treatment for vocal abuse and laryngeal muscle tension reduction. Alaryngeal voice disorders are examined including pre- and post-operative counseling and tracheosophageal speech and voice prosthetics. Finally, neurological disorders of the voice and resonance disorders are examined.

Prerequisite: CSD 444

CSD 542: Fluency Disorders

2 Credits

The purpose of this course is to analyze modern theories of causes of disorders of rhythm in speech; methods of examination, diagnosis, and treatment in fluency disorders; and, the supporting evidence-based practice research. Topics covered include facts about stuttering and its core behaviors, the etiology of stuttering, the development of stuttering. Furthermore, students learn to evaluate stuttering behaviors and to work as part of an interdisciplinary team. Students will learn to evaluate and treat preschool children, school-age children and adults who stutter. In addition, other types of fluency disorders are covered.

Prerequisite: CSD 442, CSD 495A

CSD 543: Craniofacial Anomalies: Cleft Lip and Cleft Palate

1 Credits

This course enhances graduate students' understanding of the following topics: 1) velopharyngeal mechanism and function for speech production in individuals with and without cleft palate and craniofacial anomalies; 2) basic embryological development related to the lip and palate fusion process; 3) common genetic syndromes that involve cleft palate; 4) indepth understanding of resonance disorders; and 5) assessment and treatment of resonance disorders.

# CSD 545: Neuromotor Disorders of Speech

#### 3 Credits

Etiology and symptomatology of dysarthric and apraxic speech: diagnosis, treatment, and the team rehabilitative program approach to these disorders. CSD 545CSD 545 Neuromotor Disorders of Speech (3) In this course, students gain basic knowledge of neurological bases for speech-motor control. Students learn to identify and describe diseases/ conditions that result in acquired and developmental motor speech disorders. Students learn to identify and describe the dysarthrias in clinical populations across the age span. Emphasis is placed on the development and implementation of appropriate intervention plans to remediate and/or compensate for motor speech disorders. Students complete three examinations during class and write a paper that synthesizes current research on a topic in motor speech disorders.

Prerequisite: CSD 444

CSD 546: Language Disorders in Adults

## 3 Credits

Nature, etiology, diagnosis, and management of language disorders in adults. CSD 546CSD 546 Language Disorders in Adults (3) This course provides information about the disorders of language that result from impairments to the central nervous system. Basic neurology, the aging process, and the nature and cause of aphasia-producing conditions are covered along with issues related to the assessment and management of adults with aphasia. Stroke-related aphasia in adults is the emphasis of this course, but it also briefly covers other common language and cognitive neuropathologies of traumatic brain injury, Alzheimer's Disease, and right-hemisphere brain damage.

**Prerequisite:** 9 credits in communication sciences and disorders or related fields such as psychology, linguistics, or human development.

CSD 547: Language Disorders in Children

# 3 Credits

This course provides students with a strong foundation in the nature of language disorders, the current issues in and theories of language disorders, assessment and intervention, and key language assessment and intervention approaches. Major topics include assessments and interventions with infants, toddlers, preschoolers, school-age children, adolescents, children from diverse cultures, and children with communication disorders as the result of autism spectrum disorder, cerebral palsy, and intellectual disability. As a result of the foundation laid in this course, students will be able to critically evaluate and apply the current literature and forthcoming research to their clinical practice.

Prerequisite: CSD 300

CSD 548: Dysphagia

## 3 Credits

Understanding the process of the swallowing mechanism and the management and treatment of swallowing disorders. CSD 548 Dysphagia (3) This course is designed to provide graduate students with basic knowledge of the swallowing process/mechanism. A brief overview of normal swallowing from birth to the aging adult will be presented. The course will focus on assessment, management, and treatment of individuals who present with a swallowing disorder. Students will become familiar with both non-instrumental assessments of swallowing, and

will interpret videofluoroscopic swallowing studies (VFSS). Students will also develop treatment plans for case study patients with dysphagia, Multicultural issues related to swallowing will be discussed.

Prerequisite: CSD 444 or equivalent

CSD 549: Speech-Language Pathologists in the Schools

#### 3 Credits

Topics concerning service delivery in the school setting; legislation related to service delivery, special education enrollment, collaboration, caseload management, special populations. CSD 549 CSD 549 Speech-Language Pathologists in the Schools (3) This course covers multiple aspects related to becoming a competent speech-language pathologist in the public school system. Topics include: legislation related to school-based service delivery; the hierarchy of special education enrollment; considerations for special populations; caseload management and logistical aspects of work in the public school system., Case examples, class discussion, and group activities will be used to illustrate various aspects of this work setting.

CSD 550: Seminar in Communication Sciences and Disorders

#### 1-6 Credits/Maximum of 6

Advanced study of special problems and new developments in communication sciences and disorders. CSD 550CSD 550 Seminar in Communication Disorders (1-6) This seminar is designed to address special topics of interest to doctoral students in the Communication Sciences and Disorders. Topics covered vary from semester to semester and include the art and science of grant writing; various research approaches such as qualitative research methods or single-subject experimental research methods, etc.; issues related to teaching at the university level, speech perception, neuroscience, cognitive science, and cochlear implants.

CSD 551: Assessment and Intervention in Augmentative and Alternative Communication

#### 3 Credits

Research results in augmentative and alternative communication (AAC); implications for assessment, prescription of AAC systems, and intervention planning in AAC. CSD 551CSD 551 Assessment and Intervention in Augmentative and Alternative Communication (3) In this course students examine current applications of augmentative and alternative communication (AAC) including unaided and aided AAC systems. Students critically evaluate the strengths and limitations of these systems, identify the skills required to use these systems, and describe individuals who may benefit from AAC. Many topics of importance to AAC are studied including key legislation related to people with disabilities, consumer-responsive services and strategies to effectively implement services that are consumer-responsive. Clinical management is emphasized and students determine appropriate AAC assessment goals, procedures, and tools to identify the communication needs of individuals who require AAC, assess their skills and determine opportunity barriers. Students customize AAC systems to meet the needs of individuals who require AAC, determine partner strategies to enhance communicative interaction with individuals who use AAC and use empirically-validated instructional procedures to teach these strategies to partners. Students evaluate the efficacy of AAC interventions and determine consumer satisfaction. To accomplish these goals, students complete laboratory assignments and written case assignments in

AAC assessment, vocabulary selection, and intervention planning and implementation.

CSD 595E: Audiology Practicum

1-5 Credits/Maximum of 5

CSD 595ECSD 595E Audiology Practicum (1-5) This course provides speech-language pathology graduate students with a detailed and pragmatic understanding of hearing testing, normal and abnormal auditory systems, and common practices used to evaluate hearing ability. Students will gain experience in pure-tone audiometry, tympanometry, speech audiometry, central auditory processing disorders, and otoacoustic emissions. Students participate in hearing aid fittings, programming and repairs. Students learn to interpret the results of audiological evaluations and make appropriate recommendations based on results of audiological evaluations.

CSD 595G: Speech Diagnostics Practicum

1-3 Credits/Maximum of 3

CSD 595GCSD 595G Speech Diagnostics Practicum (1-3) In this practicum course, advanced speech-language pathology graduate students gain experience in interviewing clients, parents and spouses. They learn to counsel clients and their families regarding communication disorders. With supervision, students complete diagnostic evaluations for a broad range of communication disorders and synthesize data. Report writing is also emphasized.

CSD 595J: Audiology Third Site

1-2 Credits/Maximum of 2

Internship course.

CSD 596: Individual Studies

1-9 Credits/Maximum of 9

Creative projects, including nonthesis research, which are supervised on an individual basis and which fall outside the scope of formal courses.

CSD 597: Special Topics

1-9 Credits/Maximum of 9

Formal courses given on a topical or special interest subject which may be offered infrequently.

CSD 600: Thesis Research

1-15 Credits/Maximum of 999

No description.

CSD 601: Ph.D. Dissertation Full-Time

0 Credits/Maximum of 999

No description.

CSD 602: Supervised Experience in College Teaching

1-3 Credits/Maximum of 6

No description.

Prerequisite: 40 graduate credits in CMDIS

CSD 603: Foreign Academic Experience

1-12 Credits/Maximum of 12

For students who are enrolled in a foreign university, or foreign study and/ or research and constituting progress towards the degree.

CSD 850: Endoscopy Lab

1 Credits

This lab-based course will provide students the unique experience of manipulating rigid and flexible endoscopes for assessment of the velopharynx, larynx and swallow anatomy and physiology. There will be hands on practice in a small group setting with direct instruction from experts in the field of laryngology. Students will have opportunity to learn and refine skills for interpretation of stroboscopy and flexible endoscopic evaluation of swallowing (FEES).

CSD 851: Head and Neck Cancer Management

2 Credits

This course covers the unique challenges of evaluating and treating speech, voice, and swallowing disorders resulting from treatment for head and neck cancer. A basic understanding of the causes of and surgical/chemoradiation treatments for various types of head and neck cancers will be obtained. Emphasis will be placed on communication and swallowing evaluations and rehabilitation following cancer treatments. A team approach to patient care will be stressed.

CSD 852: Lab in Augmentative and Alternative Communication Technology

3 Credits

This course provides in-depth, applied consideration of Augmentative and Alternative Communication and Assistive Technology. It builds knowledge and skills in the areas of system design and the interplay between person and technology; maximizing participation through understanding of barriers and supports at multiple levels; and training and supporting all stakeholders. Students will engage in (a) hands on learning of assistive and AAC technologies that support communication and participation across all environments; (b) discussions of research related to use of assistive and AAC technology to enhance communication and curriculum outcomes for individuals with disabilities; and (c) problem-based learning through case studies in order to apply their knowledge and skills

CSD 853: Professional Development for Speech-Language Pathologists and Audiologists

1 Credits

Medical terminology is a course for students preparing for the Communication Sciences and Disorders profession with the target of giving exposure to medical terminology, documentation, types of insurance consistent with this field, and interactions with other medical disciplines. A variety of medical settings will be discussed. The code of ethics and scope of practice within a medical setting as determined by the American Speech and Hearing Association (ASHA) will be included.

#### 1 Credits

This lab-based course covers the unique challenges of evaluating and treating speech, voice, and swallowing impairments demonstrated by patients requiring tracheostomy tube placement with and without mechanical ventilation. Hands-on education will include task training with various tracheostomy tubes, oneway speaking valves, and ventilators/ventilator settings; as well as interprofessional case studies using high-fidelity mannequins and simulated patient modalities/technologies.

CSD 895A: Speech/Language Clinical Practicum

## 1-3 Credits/Maximum of 15

This course covers clinical diagnostics and intervention practices across the lifespan with individuals with a variety of communication disabilities. Students will have the opportunity to develop their clinical knowledge and skills by accruing practicum hours. The number of clinical hours assigned each semester depends on the number of credits being taken as well as the number and types of hours that need to be accrued to meet certification requirements. The graduate student will attend one weekly meeting with each supervisor with whom a client is assigned. Additionally, this course includes a weekly class lecture, providing instruction in and application of diagnostic and therapy procedures. Topics covered include interviewing clients, parents, and spouses, counseling clients and their families, clinical teaching, and activities to enhance teaching and learning. Students also learn appropriate methods of report writing, data collection, writing clinical objectives, and intervention plans.

CSD 895C: Speech/Language Therapy Externship

## 7-15 Credits/Maximum of 15

This course is a full-time externship experience in the assessment and treatment of communication disorders and is completed at an off-campus site. Graduate students in Communication Sciences and Disorders participate in an active learning clinical practicum with working professionals to enhance their academic and clinical competencies and skills. Students will accrue required clinical practice hours in an off-campus clinical and/or educational setting including hospitals, rehabilitation centers, nursing homes, early intervention programs, and public schools including pre-school programs.

**Prerequisite:** 45 credits in communication sciences and disorders and accrual of >200 clinical hours

CSD 895G: Speech Diagnostics Practicum

# 1-3 Credits/Maximum of 3

CSD 595GCSD 595G Speech Diagnostics Practicum (1-3) In this practicum course, advanced speech-language pathology graduate students gain experience in interviewing clients, parents and spouses. They learn to counsel clients and their families regarding communication disorders. With supervision, students complete diagnostic evaluations for a broad range of communication disorders and synthesize data. Report writing is also emphasized.

CSD 8951: Speech Pathology Mini-Placement

#### 1-9 Credits/Maximum of 9

Graduate students in Communication Sciences and Disorders participate in an active learning clinical practicum with working professionals to enhance their academic and clinical competencies and skills. Students will accrue these required clinical practice hours by completing this miniplacement in an off-campus clinical and/or educational setting including hospitals, rehabilitation centers, nursing homes, early intervention programs, and public schools including pre-school programs.