

COMMUNICATION SCI & DISORDERS (CSD)

CSD 500 Selected Topics (1-6 Credits)

Arts & Sciences

Exploration of a topic (to be determined) not covered by the standard curriculum but of interest to faculty and students in a particular semester. Repeatable

CSD 600 Selected Topics (1-6 Credits)

Arts & Sciences

Exploration of a topic (to be determined) not covered by the standard curriculum but of interest to faculty and students in a particular semester. Repeatable

CSD 609 Cognitive Neuroscience of Speech and Language (3 Credits)

Arts & Sciences

Double-numbered with CSD 409, NEU 409

Neuroanatomical and neurophysiological aspects of speech and language. Role of central and peripheral nervous system in normal speech and language activities. Additional work required of graduate students.

Shared Competencies: Critical and Creative Thinking (<https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/>)

CSD 611 Motor Speech Disorders (3 Credits)

Arts & Sciences

Neuroanatomy, neurophysiology of brain motor systems. Characteristics, assessment and treatment of the dysarthrias and apraxia of speech in children and adults due to congenital or acquired etiologies, including degenerative diseases. Application of basic principles of motor learning in treatment.

Advisory recommendation Prereq: CSD 315 or 615 and CSD 409 or 609

CSD 612 Cleft Palate and Craniofacial Disorders (1 Credit)

Arts & Sciences

Embryology, anatomy, physiology and genetic bases of cleft palate, craniofacial disorders, and other syndrome disorders. Communicative and swallowing disorders related to cleft palate and other craniofacial disorders. Characteristics, diagnosis, treatment of cleft palate and craniofacial disorders.

Advisory recommendation Prereq: CSD 315

CSD 615 Anatomy and Physiology of the Speech and Hearing Mechanisms (3 Credits)

Arts & Sciences

Double-numbered with CSD 315

Structure and function of the skeletal, neurological, and muscular systems involved in breathing, phonation, resonance, articulation, and hearing. Additional work is required of graduate students.

Shared Competencies: Critical and Creative Thinking (<https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/>); Scientific Inquiry and Research Skills (<https://coursecatalog.syracuse.edu/shared-competencies/scientific-inquiry-and-research-skills/>)

CSD 616 Introduction to Applied Phonetics (3 Credits)

Arts & Sciences

Double-numbered with CSD 316

Anatomical structures and processes involved in speech production. Phonetic transcription of speech of adults, normally developing children, and children with speech disorders. Acoustic phonetics, phonology, and dialects. Additional work required of graduate students.

Shared Competencies: Communication Skills (<https://coursecatalog.syracuse.edu/shared-competencies/communication-skills/>)

CSD 618 Dysphagia (3 Credits)

Arts & Sciences

Anatomy and physiology of normal and disordered swallowing.

Description of swallowing disorders associated with numerous medical conditions. Assessment and treatment of swallowing disorders in adults and children..

Advisory recommendation Prereq: CSD 615

CSD 622 Development of Speech and Language (3 Credits)

Arts & Sciences

Double-numbered with CSD 422

Theories and research on children's acquisition of communication, syntax, semantics, pragmatics, morphology, and phonology. Relationships between oral and written language skills in comprehension and production processing; individual differences; cognitive, social, biological, familial, and cultural influences. Additional work required of graduate students.

Shared Competencies: Communication Skills (<https://coursecatalog.syracuse.edu/shared-competencies/communication-skills/>)

CSD 623 Language Disorders of Early Childhood (3 Credits)

Arts & Sciences

Assessment and intervention strategies for birth to 5 years in home, clinic, and school. Presymbolic communication, precursors to written language, individual/ cultural differences, social, cognitive, familial, community factors; specific language impairment, pervasive developmental disorders, cognitive impairments.

CSD 624 Clinical Techniques - Language Disabilities of Early Childhood (1 Credit)

Arts & Sciences

Application of techniques used in the assessment and treatment of young children with language disabilities. Practice of computerized analysis of language samples, standardized and informal assessment, and interventions for young children and their families.

Prereq: CSD 650

CSD 625 Stuttering (3 Credits)

Arts & Sciences

Theories of onset, development, and maintenance of disfluent speech; differentiation of normal vs. stuttered disfluencies; approaches to assessment and intervention across age range, settings, and severity levels; familial considerations, counseling, and environmental modifications; individualizing intervention. Additional work required of graduate students.

Advisory recommendation Prereq: CSD 616 and CSD 622.

CSD 626 Sociocultural Bases for Communication (3 Credits)*Arts & Sciences*

Double-numbered with CSD 426

This course will develop cultural competency for professionals working with linguistically diverse populations and will also consider issues related to mental health, cultural values, gender identity, and sexual orientation. Additional work required for graduate students.

University Requirement Course: IDEA Requirement Eligible

Shared Competencies: Civic and Global Responsibility (<https://coursecatalog.syracuse.edu/shared-competencies/civic-and-global-responsibility/>); Communication Skills (<https://coursecatalog.syracuse.edu/shared-competencies/communication-skills/>); Ethics and Integrity (<https://coursecatalog.syracuse.edu/shared-competencies/ethics-and-integrity/>)

CSD 627 Speech and Language Disorders in Children (3 Credits)*Arts & Sciences*

Double-numbered with CSD 427

Overview of normal articulation and development. Characteristics, incidence, etiology of childhood speech sound disorders and language impairment. Differences versus disorders. Principles of assessment and diagnostic. Elements of therapy, approaches to remediation. Additional work required of graduate students.

Advisory recommendation Prereq: CSD 616

Shared Competencies: Scientific Inquiry and Research Skills (<https://coursecatalog.syracuse.edu/shared-competencies/scientific-inquiry-and-research-skills/>)

CSD 629 Basic Clinical Audiology (3 Credits)*Arts & Sciences*

Double-numbered with CSD 429

Introduction to clinical audiology; overview of hearing disorders, anatomy, and physiology of the auditory mechanism, evaluation and treatment; basic pure-tone and speech audiometry. Additional work required of graduate students.

Shared Competencies: Scientific Inquiry and Research Skills (<https://coursecatalog.syracuse.edu/shared-competencies/scientific-inquiry-and-research-skills/>)

CSD 635 Aural Rehabilitation (3 Credits)*Arts & Sciences*

Double-numbered with CSD 435

Study of the management of children and adults with hearing impairments, with emphasis on the development and maintenance of functional communication through amplification, auditory training, speechreading, manual communication, and speech and language intervention. Additional work required of graduate students.

Shared Competencies: Communication Skills (<https://coursecatalog.syracuse.edu/shared-competencies/communication-skills/>)

CSD 637 Instrumentation for Speech and Hearing (3 Credits)*Arts & Sciences*

Basic function and use of instrumentation, including calibration standards and methods of calibration for equipment used in clinical evaluation and treatment. Includes physical characteristics and measurement of acoustic and non-acoustic stimuli, basic principles of electric circuits, and bioelectric safety.

CSD 638 Speech Sound Disorders (3 Credits)*Arts & Sciences*

Principles and concepts of articulation, phonology, and apraxia; applications of various theories of speech sound disorders. Focus on both assessment and treatment of speech sound disorders. Practice with various analysis procedures of speech sound production.

Advisory recommendation Prereq: CSD 616 and 627

CSD 644 Counseling Persons with Communication Disorders & their Families (3 Credits)*Arts & Sciences*

This three-credit course will introduce Speech Language Pathology and Audiology graduate students to theoretical counseling approaches as they relate to individuals with speech, language, and hearing disorders. Counseling techniques will be discussed and practiced. Students will also examine different models for support groups and how family members respond to communication disorders.

CSD 645 Speech Science (3 Credits)*Arts & Sciences*

Double-numbered with CSD 345

Scientific principles involved in normal speech production across all speech subsystems. Properties of the acoustic waveform, including acoustic phonetics for vowels and consonants. Basic speech instrumentation used to measure respiratory, phonatory, velopharyngeal/nasal, and pharyngeal/oral components. Theories of speech perception. Additional work required of graduate students.

Shared Competencies: Critical and Creative Thinking (<https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/>)

CSD 646 Augmentative and Alternative Communication Systems (2 Credits)*Arts & Sciences*

Philosophical, theoretical, and practical issues in enhancing communication for individuals with severe disabilities. Assistive technologies, identification and evaluation of systems to meet needs of children and adults. Teaching system use in family, school, community settings.

CSD 647 Autism and Behavioral Interventions (1 Credit)*Arts & Sciences*

This course presents communicative characteristics of people with autism, incl clinical diagnosis, identification, assessment, and research-based interventions for speech, language, and behavior. It will present evidence-based techniques for SLPs to identify behaviors, functions of behaviors, & strategies.

CSD 650 Clinical Classroom Practicum (0-4 Credits)*Arts & Sciences*

Supervised practicum in clinic, hospital, early intervention, or school setting. Includes planning, staffing, implementation, modification, and outcomes assessment of evaluation and intervention procedures with clients and their families; professional issues addressed in regular seminar meetings.

Repeatable

Advisory recommendation Coreq: CSD 622 and CSD 651.

CSD 651 Clinical Methods in Speech-Language Pathology (3 Credits)*Arts & Sciences*

Double-numbered with CSD 451

Introduces beginning clinicians to the therapeutic process ; professional expectations, the diagnosis process, general therapy considerations, therapy intervention techniques, evidence-based practice, and evaluation of the intervention process. Additional work required of graduate students.

Shared Competencies: Communication Skills (<https://coursecatalog.syracuse.edu/shared-competencies/communication-skills/>)

CSD 657 Voice Disorders (3 Credits)*Arts & Sciences*

Characteristics, assessment and treatment of voice disorders in adults and children. Anatomy and physiology of the vocal mechanism, functional, organic and neurological dysphonias, resonance disorders and laryngectomy.

Advisory recommendation Prereq: CSD 615, 645

CSD 658 Auditory Anatomy and Physiology (3 Credits)*Arts & Sciences*

Anatomy and physiology of outer, middle, and inner ear; central auditory mechanisms in normal systems. Underlying systems and signals theory will be used to explain response measurement techniques and auditory response analysis.

CSD 659 Fundamentals of Evidence-based Practice in the Professions of Audiology & Speech Language Pathology (1 Credit)*Arts & Sciences*

Fundamentals of evidence-based practice (EBP) in the professions of Audiology and Speech Language Pathology. Implementing the EBP process in clinical practice.

CSD 661 Advanced Clinical Audiology I (3 Credits)*Arts & Sciences*

Rationale and development of clinical tests of auditory function. Pure tone and speech audiometry, masking, acoustic impedance and special auditory tests.

CSD 662 Pediatric Audiology (3 Credits)*Arts & Sciences*

Developmental anatomy and physiology of the auditory mechanism. Causes and characteristics of childhood auditory disorders. Behavioral and nonbehavioral techniques for auditory assessment. Rehabilitation and counseling of hearing-impaired children.

CSD 663 Auditory Evoked Potentials (3 Credits)*Arts & Sciences*

Foundational knowledge for objective physiological measurement of the auditory system using auditory evoked potentials. Emphasis on understanding principles underlying the recording, analyzing and interpreting electrophysiological responses from the peripheral and central auditory system.

Advisory recommendation Prereq: CSD 661. Coreq: CSD 658

CSD 665 Medical Audiology (3 Credits)*Arts & Sciences*

Anatomical and physiological defects that characterize disorders of the middle ear, inner ear, auditory nerve, and central auditory nervous system. Psychoacoustic manifestations of auditory lesions. Familiarization with medical and surgical treatment of otologic disorders.

Advisory recommendation Prereq: CSD 429/629

CSD 666 Speech Perception & Acoustics (3 Credits)*Arts & Sciences*

Auditory perception and the psychological correlates of the physical aspects of sound, acoustic phonetics, speech perception in normal-hearing and hearing-impaired individuals.

Advisory recommendation Prereq: CSD 325

CSD 667 Rehabilitative Audiology (3 Credits)*Arts & Sciences*

Demographics of hearing impairment; speech perception of hearing-impaired people; principles of amplification and other sensory prostheses; manual communication; speech reading; hearing handicap scales; psychosocial aspects of hearing impairment; special needs of the geriatric client.

CSD 668 Cerumen Management (1 Credit)*Arts & Sciences*

Ear canal examination, cerumen and the canal secretory system, cerumen management, audiometric and immittance data, contraindications.

CSD 670 Experience Credit (1-6 Credits)*Arts & Sciences*

Participation in a discipline or subject related experience. Student must be evaluated by written or oral reports or an examination. Permission in advance with the consent of the department chairperson, instructor, and dean. Limited to those in good academic standing.

Repeatable

CSD 671 Advanced Clinical Audiology II (3 Credits)*Arts & Sciences*

Concepts and practice in screening and diagnostic audiology, including clinical decision analysis, otoacoustic emissions, wideband acoustic immittance, and clinical applications of auditory evoked potentials.

CSD 673 Hearing Aids I (3 Credits)*Arts & Sciences*

Historical development of hearing aids, electroacoustic measurements of hearing aids, compression technology and ear mold acoustics.

CSD 674 Hearing Aids II (3 Credits)*Arts & Sciences*

Strategies used to select and fit amplification for hearing impaired children and adults, subjective measure, monaural and binaural effects, and troubleshooting.

Advisory recommendation Prereq: CSD 673

CSD 675 Auditory Processing Disorders (3 Credits)*Arts & Sciences*

Focus on the identification and diagnosis of Central Auditory Processing Disorders through the use of case history/questionnaires, speech audiometric tests, non-verbal tests and electrophysiological measures.

Advisory recommendation Prereq: CSD 661.

CSD 677 Speech-Language Pathology in School Settings (3 Credits)*Arts & Sciences*

Double-numbered with CSD 477

Historical, legislative, administrative aspects of speech-language pathology school programming. Services delivery models; classroom management; collaborative assessment; and teaching, adapting, and implementing IEPs; social, cultural, linguistic, family, and community factors; rights and responsibilities in programming. Additional work required of graduate students.

Advisory recommendation Prereq: CSD 422/622

Shared Competencies: Critical and Creative Thinking (<https://coursecatalog.syracuse.edu/shared-competencies/critical-and-creative-thinking/>)

CSD 690 Independent Study (1-6 Credits)*Arts & Sciences*

Exploration of a problem, or problems, in depth. Individual independent study upon a plan submitted by the student. Admission by consent of supervising instructor(s) and the department.

Repeatable

CSD 723 Assessment of Children's Language (3 Credits)*Arts & Sciences*

Formal and informal assessment procedures for syntactic, semantic, and pragmatic aspects of oral and written language; computerized analysis of language samples; cognitive, social, familial, educational, psychometric, and multicultural factors in test interpretation and treatment efficacy.

Advisory recommendation Prereq: CSD 422/622

CSD 725 Neuropathologies of Language (3 Credits)*Arts & Sciences*

Characteristics, diagnosis, and treatment of aphasia. Other communicative disorders: confused language, language of generalized intellectual impairment, dysarthria, and apraxia. Neuroanatomy, neurophysiology, historical trends, nature of aphasia, diagnosis and treatment.

Advisory recommendation Prereq: CSD 315 or 615

CSD 726 Neurogenic Communication Disorders I (3 Credits)*Arts & Sciences*

Neuroanatomy, neurophysiology of motor and language systems. Characteristics and differential diagnosis of aphasia, apraxia, and dysarthria. Strategies to assess language and cognition in adults with acquired neurological disorders.

Prereq: CSD 315 or 615

CSD 727 Neurogenic Communication Disorders II (3 Credits)*Arts & Sciences*

Assessment of motor speech disorders and treatment of neurogenic communication disorders including aphasia, apraxia, and dysarthria. Application of basic principles of motor learning in treatment of motor speech disorders.

Prereq: CSD 726

CSD 731 Language Disorders in School-Age Children (3 Credits)*Arts & Sciences*

Theory and research in oral and written language processing interventions. Curriculum-based assessment; intervention strategies for children and adolescents with language/learning disabilities. Compensatory strategies, environmental adaptations, cultural considerations, behavioral and pharmacological management, motivation, social skills instruction. Background in normal language acquisition and assessment procedures required.

CSD 732 Clinical Techniques - Language Disabilities of School Age Children (1 Credit)*Arts & Sciences*

Application of techniques used in the assessment and treatment of school age children with language disabilities. Computerized analysis of language samples, standardized and informal assessment, and interventions for oral and written language.

Prereq: CSD 650

CSD 750 Seminars in Speech-Language Pathology (3 Credits)*Arts & Sciences*

Special topics in speech and language development and disorders, such as pragmatic development in children, stuttering, organic disorders, and recent advances in assessment and management of speech and language disorders.

Repeatable

CSD 753 Readings in Neuroscience (0-3 Credits)*Arts & Sciences*

Cross-listed with NEU 613, BIO 624, PSY 778, BEN 613

A literature-based team-taught course focusing on in depth discussions of classical or recent papers of exceptional import to neuroscience. Students will complete weekly readings assigned by faculty and participate in a 3-hr/wk group facilitated discussion

CSD 754 Interdisciplinary Methods of Neuroscience (0-3 Credits)*Arts & Sciences*

Cross-listed with NEU 614, BIO 625, PSY 779, BEN 614

A practical interdisciplinary survey course whereby neuroscience faculty introduce students to a wide array of methodologies, including molecular, cellular, developmental, systems, behavioral, and cognitive neuroscientific approaches to investigate basic, pre-clinical, translational, and clinical questions to unravel the relationship between brain and behavior.

CSD 760 Directed Research (1 Credit)*Arts & Sciences*

Supervised laboratory experience in conducting research in the speech and hearing sciences. Permission of instructor.

Repeatable 2 times for 2 credits maximum

CSD 780 Seminar in Audiology (3-9 Credits)*Arts & Sciences*

Special topics, such as special auditory tests, evaluation of special populations, new clinical procedures, and professional issues.

Repeatable

CSD 781 Hearing Conservation and Environmental Audiology (2 Credits)*Arts & Sciences*

Physiological, medical, and legal aspects of industrial audiology. Concomitant psychological and social ramifications. Current preventive and rehabilitative techniques.

CSD 783 Cochlear Implants (3 Credits)*Arts & Sciences*

Physiology underlying electrical stimulation of the auditory system and perceptual attributes, signal processing of various implant devices, principles of mapping implants, and rehabilitation of cochlear implant recipients.

CSD 785 Professional Issues in Audiology (2 Credits)*Arts & Sciences*

Ethics, licensure, credentialing, multicultural, and other current issues in audiology.

CSD 787 Vestibular Assessment and Management (3 Credits)*Arts & Sciences*

Anatomy and physiology of peripheral and central vestibular system; assessment of normal and impaired individuals with focus on electronystagmography; vestibular and balance disorders; rehabilitation techniques.

Advisory recommendation Prereq: CSD 663

CSD 788 Pharmacology in Audiology (2 Credits)*Arts & Sciences*

Pharmacology as it relates to the practice of Audiology. Basic concepts, biochemical basis for hearing, ototoxic and vestibulotoxic agents, patient management, FDA policies, and hair cell regeneration will be covered.

CSD 790 Independent Study (1-6 Credits)*Arts & Sciences*

Exploration of a problem, or problems, in depth. Individual independent study upon a plan submitted by the student. Admission by consent of supervising instructor(s) and the department.

Repeatable

CSD 797 Applied Research in Communication Sciences and Disorders (3 Credits)*Arts & Sciences*

CSD 797 is an applied research course designed primarily for Doctor of Audiology (AuD) students to gain hands-on experience with evidence-based practice (EBP) and research methodology in the field of communication sciences and disorders (CSD). Building on the foundations of Research Design and Methods in CSD, this course provides students the opportunity to apply the scientific foundations of the profession through a small-scale research or EBP project.

CSD 798 Research Methods and Design in Communication Sciences and Disorders (3 Credits)*Arts & Sciences*

This course is designed to teach the underlying principles of scientific reasoning that is the basis of research methods and design. Students will learn about quantitative and qualitative research designs and the types of statistical analysis appropriate for the different kinds of data acquired through careful experimentation and observation. Primary emphases will be on clinical research and evidence-based practice.

CSD 799 Independent Research in Speech Pathology or Audiology (0-9 Credits)*Arts & Sciences*

Specific problems in normal or disordered processes in speech, language, or auditory systems.

Repeatable 5 times for 9 credits maximum

CSD 990 Independent Study (1-6 Credits)*Arts & Sciences*

Exploration of a problem, or problems, in depth. Individual independent study upon a plan submitted by the student. Admission by consent of supervising instructor(s) and the department.

Repeatable

CSD 996 Internship in Audiology (0-8 Credits)*Arts & Sciences*

Supervised internship in a clinic, hospital and rehabilitation center, or school setting with an accredited audiologist. Variable length experience, earn V-grade until complete, leading to a letter grade. Must be in good standing in the audiology program and with permission of audiology clinic director.

CSD 997 Masters Thesis (0-12 Credits)*Arts & Sciences***CSD 999 Dissertation (0-15 Credits)***Arts & Sciences*

Repeatable