

COMMUNICATION SCI & DISORDERS (CSND)

CSND 100 - Fields of Communication Sciences and Disorders 3 Credits

An orientation to: practices in the field, philosophies of rehabilitation, areas of scientific inquiry and the relationship with other disciplines and specialties. 3 hours lecture.

CSND 101 - Fundamentals of Speech: Communication Requirement 3 Credits

Understanding the process of oral communication and improving personal skills in speaking and listening. Developing clear, effective comprehension and expression of the spoken American-English language. 3 hours lecture.

CSND 103 - Fundamentals of Voice and Speech Production 3 Credits

Theory and practice of efficient voice production and accurate articulation. Students receive guidance in the improvement of their own speech skills. 3 hours lecture.

CSND 200 - Techniques in Clinical Observation and Reporting 3 Credits

Observing, describing and reporting the behavior of clients with speech, hearing and language problems; the intake interview and parent conferences. 3 hours lecture.

CSND 201 - Perspectives on Communication 3 Credits

An overview of a variety of symbol systems used in communication through the perspectives of several related disciplines. Emphasis is given to the significance of the thought-language relationship, to the concerns of semantics and pragmatics, and to cross-cultural issues. 3 hours lecture.

CSND 207 - Hearing Science 3 Credits

Prerequisite(s): CSND 100. This course is designed to provide students with a foundation in the acoustic concepts central to the professions of speech-language pathology and audiology. Specifically, information needed to understand the perception and production of speech and other sounds will be presented. 3 hours lecture.

CSND 309 - Voice and Articulation Disorders 3 Credits

Prerequisite(s): CSND 103. Voice and articulation problems of pre-school and school-age children. Strategies, techniques and materials for evaluation and remediation. 3 hours lecture.

CSND 383 - Introduction to Language Development 3 Credits

Prerequisite(s): CSND 207 or LNGN 210. An overview of speech and language development from infancy through early school age. The course will familiarize students with the typical sequence of acquisition for phonology, semantics, syntax, morphology, and pragmatics and with theories and processes underlying language development. Issues related to dialects and non-mainstream speech will be considered. Interacting with a preschool child to obtain a language sample is required. 3 hours lecture.

CSND 386 - Communication Disorders: A Special Education Perspective 3 Credits

Prerequisite(s): CSND major or CSND 383 or permission of the instructor. An examination of the influences on special education practices. Historical, legal, developmental, and instructional forces are explored. Career options as well as issues and trends are addressed. 3 hours lecture.

CSND 408 - Phonetic Study of Speech Sounds 3 Credits

Prerequisite(s): CSND 383 and departmental approval. This course will examine the articulation and features of American English speech sounds, the influence of context on sound production, and suprasegmental aspects of speech (intonation and stress). Dialectal variants and variation secondary to disorder will be considered. The course introduces students to the International Phonetic Alphabet (IPA) and provides opportunities to practice transcription. 3 hours lecture.

CSND 409 - Anatomy and Physiology of Speech and Hearing Systems 3 Credits

Prerequisite(s): CSND 383. The anatomical and physiological bases of respiration, phonation, articulation and resonance. The anatomy and physiology of the auditory mechanism. 3 hours lecture.

CSND 410 - Neurophysiological Bases of Communication 3 Credits

Prerequisite(s): CSND 409 and departmental approval. Study of the anatomy and physiology of the nervous system as it relates to the development of hearing, vision, thought, memory and emotions, as well as the perception, processing and production of speech and language. 3 hours lecture.

CSND 412 - Clinical Process and Procedures in Speech-Language Pathology 3 Credits

Prerequisite(s): CSND 200 and 309. An orientation to clinical practice. A model of the clinical process is presented which interfaces the interpersonal relationship with professional/technical competencies. Consideration is given to planning treatment programs, traditional and augmentative clinical approaches, therapeutic activities/materials, and clinical reporting. 3 hours lecture.

CSND 461 - Introductory Practicum in Communication Disorders 3 Credits

Prerequisite(s): Major in Communication Sciences and Disorders, Speech-Language Pathology concentration. Supervised clinical practice with children and adults presenting a variety of communication disorders.

CSND 462 - Intermediate Practicum in Communication Disorders 3 Credits

Prerequisite(s): Major in Communication Sciences and Disorders, Speech-Language Pathology concentration. To provide students with initial experiences in offering clinical services to communicatively handicapped clients in the on-campus communication disorders center. 1 hour lecture, 2 hours other.

CSND 465 - Seminar in Black Language 3 Credits

Prerequisite(s): Course in phonetics and psycholinguistics. Survey of black language patterns and their relation to standard English in the black speech community. Application to the goals of the speech therapist in predominantly black schools. (Senior-Graduate). 3 hours seminar.

CSND 468 - Clinical Procedures in Audiology 3 Credits

Prerequisite(s): CSND 409. The measurement of hearing including pure tone tests, screening tests, interpretation of test results, problems of calibration, and medical and educational referral. Demonstrations and supervised practice testing. 3 hours lecture.

CSND 472 - Speech Science and Instrumentation 3 Credits

Prerequisite(s): CSND 408, 409. Basic acoustics respiration and voice production acoustic theory of vowel production; consonant acoustics and speech perception. 3 hours lecture.

CSND 474 - Seminar in Speech Language and Hearing 1 Credit

Prerequisite(s): Majors only. Corequisite(s): SASE 453. Part of professional semester. It provides an opportunity to discuss and share technical and interpersonal issues related to the delivery of speech, language and hearing services. It also provides an opportunity to develop strategies for seeking solutions to problems encountered. The course will be concurrent with student teaching. 1 hour seminar.

CSND 484 - Seminar in Problems and Issues in Communication Sciences and Disorders 2 Credits

Prerequisite(s): Majors only, departmental approval. Independent study and research in selected areas of communication sciences and disorders. Enrollment limited. 2 hours seminar.

CSND 500 - Language Assessment 3 Credits

Prerequisite(s): CSND 383 or APLN 500 or equivalent. This course introduced students to language sample analyses that are used for identifying individuals with language impairments or for selecting goals for intervention. Students will learn how to elicit language samples from individuals with language impairments. Students will learn the transcription and coding conventions of a computer language analysis software program and how the program can assist in analyzing language samples from individuals with language impairments. Prerequisite: CSND 383 or APLN 500 or equivalent. 3 hours lecture.

CSND 501 - Language Development in Primary Grades 3 Credits

Language activities in the elementary school curriculum analyzed with emphasis on the development of techniques for enhancing oral language proficiency in the school age child. 3 hours lecture.

CSND 502 - Psychology of Oral Communication 3 Credits

Speech and language in the individual; problems of communication that lead to confusion of meaning and misunderstanding. Psychology of persons who are handicapped in speech, hearing and/or reading, including those with hysterical or psychogenic impairments. Contributions of learning theory and of psycholinguistics. 3 hours lecture.

CSND 503 - Language and Communication 3 Credits

Examines the influence of psychology, linguistics, and biology on the study of how adults use language and how children learn language. Topics include current theory and experimental research in psycholinguistics, the relation between language and thought, language disorders, development of communication abilities and dialect differences. 3 hours lecture.

CSND 504 - Speech-Language Pathology for Audiologists 3 Credits

Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Complete overview of speech and language problems encountered by audiologists in clinical practice in order to make informed decisions regarding patient referral and follow-up. 3 hours lecture.

CSND 511 - Language Disorders of Adults I 3 Credits

Prerequisite(s): Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration; and CSND 410 or equivalent; and CSND 500 or equivalent. This course is devoted to an advanced study of adult aphasia and other communication disorders associated with neuropathologies of adulthood. 3 hours lecture.

CSND 512 - Diagnosis in Speech-Language Pathology 3 Credits

Prerequisite(s): Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration; and CSND 408 or equivalent; and CSND 521. Diagnostic procedures for children and adults with communication disorders. Opportunities provided for interviewing clients and family members, administering tests and other assessment procedures, implementing data analyses, and report writing. 3 hours lecture.

CSND 513 - Parent Counseling in Communication Disorders 3 Credits

Prerequisite(s): Major in Communication Sciences and Disorders, Speech-Language Pathology concentration. Parent-child-clinician triad analyzed with emphasis on parent counseling regarding home management of the child, interpretation of diagnostic and therapy findings and referral. 3 hours lecture.

CSND 514 - Communication Disorders of Aged 2 Credits

Prerequisite(s): Major in Communication Science and Disorders, Speech-Language Pathology concentration. Communication disorders associated with pathologies that tend to occur in later life, e.g., aphasia, multiple sclerosis, Parkinsonism and cerebral arteriosclerosis. 2 hours lecture.

CSND 515 - Voice Disorders 3 Credits

Prerequisite(s): Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration; CSND 408 or equivalent; and CSND 409 or equivalent; and CSND 534. Selected disorders of voice production. Consideration given to etiology, pathology, and treatment of voice disorders in children and adults. 3 hours lecture.

CSND 516 - High Risk Infants - Early Intervention Practices 3 Credits

The rationale and methods for early intervention with high risk infants and their families are studied (birth to three). Examination of current research and study and observation of practices for early intervention in home, hospital, and community agency settings will be the major focus of the course. 3 hours lecture.

CSND 517 - Phonological and Articulation Disorders 3 Credits

Prerequisite(s): Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration; and CSND 408 or equivalent. This course examines the nature of articulation and phonological disorders in children, emphasizing evaluation and treatment and including childhood apraxia of speech. 3 hours lecture.

CSND 518 - Language Disorders of Adults II 3 Credits

Prerequisite(s): CSND 511. In-depth study of assessment and treatment of aphasia and other acquired neurogenic communication disorders of adults. 3 hours lecture.

CSND 519 - Evaluation and Planning for Children with Speech and Language Disorders 3 Credits

Prerequisite(s): SPED 579. This course presents an overview of typical speech and language acquisition and of the speech, language and communication characteristics of children with primary and secondary speech and language disorders. A major focus will be on selecting, modifying, administering, and interpreting educational testing for these children. The course will also consider consultation and collaboration with speech-language pathologist, accommodations, and special issues in educational planning. 3 hours lecture.

- CSND 520 - Audiology for Speech-Language Pathology** 3 Credits
Prerequisite(s): CSND 468 or departmental approval. This course is designed to provide students with an overview of issues related to audiologic (re)habilitation and management across the lifespan. Information concerning amplification and other assistive listening devices, the impact of hearing loss, management of children with hearing loss in the schools and issues and approaches to rehabilitation in adults with hearing loss will be discussed. 3 hours lecture.
- CSND 521 - Clinical Process and Procedures in Speech-Language Pathology** 3 Credits
Prerequisite(s): Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration. Corequisite(s): CSND 500 and CSND 517. The course provides an orientation to clinical practice in speech-language pathology. The clinical process is presented as a construct which interfaces interpersonal dynamics with preferred professional practices. A decision-making continuum is applied to the interpretation of client needs as a basis for developing goals, planning treatment procedures, documenting treatment and planning for referral and/or discharge. 3 hours lecture.
- CSND 522 - Advanced Phonetics** 3 Credits
Prerequisite(s): Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration. Skill in use of phonetics in recognizing and distinguishing acceptable English speech sounds, deviant speech sounds, regional variations in standards of American English and sounds in foreign languages. Stress, phrasing and intonation patterns used in speaking English, with some analysis of these elements in other languages. 3 hours lecture.
- CSND 523 - Educational Audiology** 3 Credits
Prerequisite(s): Graduate major in Communication Sciences and Disorders; and CSND 468 or CSND 544 or equivalent. This course provides a basis for understanding how hearing and hearing losses have an impact on language, academic, and psychosocial development. Audiometric screening/testing, tympanometry and central auditory processing evaluation will be presented in the context of educational planning. 3 hours lecture.
- CSND 524 - Evaluation and Treatment of Swallowing Disorders** 3 Credits
Prerequisite(s): Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration; and CSND 409 or equivalent; and CSND 410 or equivalent. This course is designed to provide students with the information and skills necessary to evaluate and treat swallowing disorders in pediatric and adult populations within the scope of practice for speech-language pathologists. An interdisciplinary approach to clinical management is stressed. Students are given the opportunity to learn through classroom and laboratory experiences. Off-campus observations are required. 3 hours lecture.
- CSND 525 - Motor Speech Disorders** 3 Credits
Prerequisite(s): Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration; and CSND 410 or equivalent; and CSND 534 or equivalent. Neurological disorders of speech. Consideration given to etiology and differential diagnosis of the dysarthrias in adults and children, acquired apraxia of speech, and other motor speech disorders. Principles and techniques for treating motor speech disorders. 3 hours lecture.
- CSND 530 - Clinical Observation/Clinical Preparation** 3 Credits
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Observation and preparation for clinical practice in audiology.
- CSND 531 - Clinical Audiology** 3 Credits
Prerequisite(s): Graduate major in Communication Sciences and Disorders, Speech Language Pathology concentration. Increases skills in administering tests for pure-tone and speech reception thresholds; evaluation and interpretation of test results and analysis of client histories. Hearing aid evaluation, measurement of recruitment and tests for psychogenic deafness and malingering; pre- and post- surgical audiometry and special problems of differential diagnosis in testing children. 3 hours lecture.
- CSND 532 - Clinical Practicum I** 3 Credits
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Supervised clinical practicum.
- CSND 533 - Supervision of Speech and Hearing Programs** 3 Credits
Develops skill in supervision of beginning clinicians by experienced therapists; criteria for evaluation, writing critiques and understanding interpersonal relationships that enhance teaching through criticism. 3 hours lecture.
- CSND 534 - Speech and Hearing Science** 3 Credits
Prerequisite(s): Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration; and CSND 409 or equivalent. Study of basic acoustics, memory, and perception. Advanced study of anatomy and physiology of the speech and hearing mechanisms. Commonly used instrumentation will be discussed. 3 hours lecture.
- CSND 535 - Beginning Practicum in Communication Disorders** 3 Credits
Prerequisite(s): CSND 521 or equivalent. This laboratory course provides observation hours and involves students in an initial experience under supervision in providing services to individuals with communication disorders at the MSU Communication Disorders Center. The course may be repeated once for a maximum of 6 credits. 4.5 hours lab.
- CSND 536 - Seminar in Audiology** 6 Credits
Prerequisite(s): Departmental approval. Significant issues in audiology and opportunities for observation and participation in advanced clinical procedures. Minimum of 150 clock hours of practicum experience on- and off- campus required. 6 hours seminar.
- CSND 537 - Hearing Aids and Hearing Aid Selection** 3 Credits
Prerequisite(s): Departmental approval. Principles and procedures involved in fitting hearing aids and differential selection based on audiometric findings. Characteristics of hearing aids and ear molds. 3 hours lecture.
- CSND 538 - Differential Audiometry** 3 Credits
Prerequisite(s): Departmental approval. Sophisticated and advanced audiometric tests used in differential diagnosis of hearing problems. Demonstration and analysis of functional hearing loss tests, evoked response audiometry, difference limen tests, G.S.R. audiometry and tests for central auditory problems. 3 hours lecture.
- CSND 539 - Environmental Noise Hazards and Controls** 3 Credits
The essential aspects of the acoustic properties of sound and of the anatomy and physiology of the human auditory system will be presented. The specific properties of noise and noise generators will also be presented. The effects of noise on physiology and on various aspects of behavior will be discussed. Stress will be placed on current methods of noise control and hearing conservation. 3 hours lecture.
- CSND 540 - Practicum in Audiology** 1-3 Credits
Prerequisite(s): Departmental approval. Directed and supervised experience in advanced audiometric tests for differential diagnosis of hearing impairment.

- CSND 541 - Advanced Practicum in Audiology** **3 Credits**
Prerequisite(s): Departmental approval. Directed and supervised experience in advanced audiometric tests for differential diagnosis of hearing impairment. 3 hours lecture.
- CSND 542 - Identification Audiometry and Conservation Programs** **3 Credits**
Approaches to identification of hearing problems in school children and hearing conservation programs. Industrial audiology: noise pollution, damage risk criteria and employment-connected hearing disability. 3 hours lecture.
- CSND 544 - Diagnostic Procedures in Audiology I** **3 Credits**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Corequisite(s): CSND 547. Principles and procedures for the basic audiological evaluation including pure-tone air and bone conduction and speech audiometry, clinical masking and acoustic immittance. 3 hours lecture.
- CSND 545 - Diagnostic Procedures in Audiology II** **3 Credits**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Corequisite(s): CSND 548. Principles and procedures for advanced audiologic assessment focusing on the auditory brainstem response. The middle latency potentials, late potentials and electrocochleography are also covered. 3 hours lecture.
- CSND 546 - Diagnostic Procedures in Audiology III** **3 Credits**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Corequisite(s): CSND 549. Principles and procedures for vestibular assessment focusing on electronystagmography and videonystagmography. Course also covers vestibular anatomy and rehabilitation techniques. 3 hours lecture.
- CSND 547 - Clinical Laboratory for Diagnostic I** **1 Credit**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Corequisite(s): CSND 544. Applied clinical laboratory for Diagnostic I. 1 hour lab.
- CSND 548 - Clinical Laboratory for Diagnostic II** **1 Credit**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Corequisite(s): CSND 545. Applied clinical laboratory for Diagnostic II. 1 hour lab.
- CSND 549 - Clinical Laboratory for Diagnostic III** **1 Credit**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Corequisite(s): CSND 546. Applied clinical laboratory for Diagnostic III. 1 hour lab.
- CSND 550 - Basic Hearing Aid Technology and Fitting** **3 Credits**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Corequisite(s): CSND 551. Basic understanding of the parts of a hearing aid and the role of those parts in the function of amplification systems. Topics include history and care of hearing aids as well as hearing aide selection procedures. 3 hours lecture.
- CSND 551 - Clinical Laboratory Basic Hearing Aid Technology and Fitting** **1 Credit**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Corequisite(s): CSND 550. Applied clinical laboratory for Basic Hearing Aid Technology and Fitting. 1 hour lab.
- CSND 552 - Clinical Internship I** **3 Credits**
Prerequisite(s): Permission of Graduate Advisor required. Supervised clinical practicum. 3 hours lab.
- CSND 553 - Clinical Internship II** **3 Credits**
Prerequisite(s): Permission of Graduate Advisor required. Supervised clinical practicum. 3 hours lab.
- CSND 554 - Clinical Internship III** **3 Credits**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Supervised clinical practicum. 3 hours lab.
- CSND 556 - Augmentative and Alternative Communication (AAC) Across the Lifespan** **2 Credits**
Prerequisite(s): CSND 521. This course will cover communication strategies, techniques, and low-and high-technology systems for people with severe developmental and acquired communication disorders who are unable to meet their daily communication needs through speech. Assessment, intervention, caregiver involvement, and working as part of a multidisciplinary team will be addressed. 2 hours lecture.
- CSND 557 - Evaluation and Treatment of Autism** **2 Credits**
Prerequisite(s): CSND 583. This course is designed to prepare students to assess and provide evidence-based intervention to individuals with autism spectrum disorder (ASD) from early intervention through adolescence. The course will also cover etiology, characteristics of children with autism, and family involvement. 2 hours lecture.
- CSND 559 - Pediatric Feeding** **2 Credits**
Prerequisite(s): CSND 521 or CSND 410 or equivalent. The study of pediatric feeding and swallowing disorders (neonates through late childhood). Assessment, diagnosis, intervention, caregiver involvement, and working as part of a multidisciplinary team will be addressed. 2 hours lecture.
- CSND 560 - Childhood Apraxia of Speech** **2 Credits**
Prerequisite(s): CSND 517. This course covers current research topics in the assessment and treatment of childhood apraxia of speech. The course includes application of diagnostic procedures, defining characteristics unique to childhood apraxia of speech, and evidence based intervention principles for treatment. 2 hours lecture.
- CSND 561 - Clinical Practicum in Teaching the Deaf** **3 Credits**
Observing and teaching in a school or program for the deaf. Required of students who have little or no previous experience. Total of 125 hours must be completed with no more than 35 hours credited for previous experience elsewhere. 3 hours lecture. 3 hours lab.
- CSND 562 - Intermediate Practicum in Communication Disorders** **3 Credits**
Prerequisite(s): CSND 535 with a grade of "B-" or better. In this laboratory course, students provide services under supervision to individuals with communication disorders at the MSU Communication Disorders Center. The course may be repeated once for a maximum of 6.0 credits. 4.5 hours lab.
- CSND 563 - Clinical Practicum II** **3 Credits**
Prerequisite(s): Permission of Graduate Advisor required. Supervised clinical practicum. 4.5 hours lab.

- CSND 564 - Parent Implemented Language Therapy** 2 Credits
Prerequisite(s): CSND 583. This course is designed to prepare students to provide evidence-based parent training to facilitate child language. 2 hours lecture.
- CSND 569 - Teaching Total Communication to the Deaf Part I** 3 Credits
This course is the first part of a 6 s.h. sequence. It is designed to provide students with a general orientation to all aspects of communication as it relates to deafness. The role of total communication within the educational setting will be explored in depth and students will develop basic skill in manual communication. 3 hours lecture. 4.5 hours lab.
- CSND 570 - Teaching Total Communication to Hard of Hearing and Deaf II** 3 Credits
Prerequisite(s): CSND 569. Methods and materials of teaching speech to children with severe hearing impairment. Techniques involving auditory training with amplification and group hearing aids included. 3 hours lecture.
- CSND 571 - Methods of Teaching the Deaf and Hearing Impaired** 3 Credits
Pre-school to the adult level with emphasis on language development and compensatory learning. 3 hours lecture.
- CSND 572 - Speech Science and Instrumentation** 3 Credits
Prerequisite(s): Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration. Analysis of speech production and reception through use of equipment designed to measure selected features of the communication process. 3 hours lecture.
- CSND 573 - Organization and Administration of Speech and Language Programs in Schools** 2 Credits
Prerequisite(s): Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration; and CSND 587. This course is designed to provide students with an overview of clinical programs in the public schools. Testing, scheduling, grouping, service delivery models, intervention and record keeping will be discussed within the perspective of clinical application. The role of the speech language pathologist in relation to administrators, teacher specialists in related areas, parents and paraprofessionals will be reviewed. Hands-on experience will also be part of the course. 2 hours lecture.
- CSND 574 - Psychology of Deafness** 3 Credits
Effects of deafness and hearing loss on the intellectual, social and emotional development of the child; congenital and acquired hearing loss and the behavior of hearing members of the client's world. 3 hours lecture. 3 hours lecture.
- CSND 575 - Language Development for the Deaf** 3 Credits
Communication problems of the deaf with emphasis on application of psycholinguistic theory to development of language skills. 3 hours lecture. 3 hours lecture.
- CSND 576 - Aural Rehabilitation Across the Lifespan** 3 Credits
Prerequisite(s): Graduate major in Communication Sciences and Disorders; CSND 468, CSND 544 or equivalent. Study of theory and techniques for developing speech reading and auditory training programs for individuals with hearing loss. Also considered will be basics of American Sign Language and social and vocational concerns. 3 hours lecture.
- CSND 577 - Scientific and Professional Writing** 3 Credits
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Provides an in-depth analysis of the organization and composition of articles, analyses and reviews according to formats prescribed by the academic, legal and other professions. Approaches to the writing of technical, research and clinical reports which contribute to and document the evolution and expansion of the scientific and professional body of knowledge in the health sciences are highlighted. 3 hours lecture.
- CSND 578 - Seminar in Research in the Hard of Hearing and Deaf** 3 Credits
Significant problems in the field of deafness and hearing impairment; evaluation of published research projects; critical analysis and experimental design. 3 hours seminar.
- CSND 580 - Aural Rehabilitation for Adults** 3 Credits
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Advanced study of the effects of hearing loss on communication, assessment and intervention strategies, assistive devices and counseling for adults. 3 hours lecture.
- CSND 581 - Pediatric Aural (Re)Habilitation** 3 Credits
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Advanced study of the effects of hearing loss on communication, educational development, assessment and intervention strategies, and counseling for children with hearing loss and their families. 3 hours lecture.
- CSND 583 - Language Disorders of Children** 3 Credits
Prerequisite(s): Graduate major in Communication Sciences and Disorders or departmental approval; and CSND 500. This course takes a predominately descriptive and non-categorical perspective to assessment and treatment of language disorders in children in the pre-linguistic through developing language stages. Syndromes and causal factors associated with language disorder will also be considered. 3 hours lecture.
- CSND 584 - Cleft Palate and Craniofacial Disorders** 2-3 Credits
Prerequisite(s): Graduate major in communication Sciences and Disorders, Speech-Language Pathology concentration; and CSND 409 or equivalent; and CSND 517; and CSND 583. Etiology, characteristics, and management of individuals with cleft lip, cleft palate and other craniofacial disorders. Unit on myofunctional therapy included. 2 hours lecture.
- CSND 585 - Fluency Disorders** 2-3 Credits
Prerequisite(s): Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration; CSND 534 or equivalent. Principles and methods of treatment for children and adults with fluency disorders. Methods of evaluation, specific techniques of treatment, and principles coordinating treatment with home and school life. Demonstrations with children and adults with fluency disorders serve as the basis for study and discussion. 2 hours lecture.
- CSND 587 - Language Disorders in School Age Children** 3 Credits
Prerequisite(s): CSND 583 may be taken as prerequisite or corequisite. The class considers the acquisition of language and its impairments in school aged children and the impact of language impairment on literacy, academic performance, and social interaction. Assessment and treatment approaches are discussed within an evidence-based practice perspective. 3 hours lecture.

CSND 592 - Research in Speech-Language Pathology 3 Credits

Prerequisite(s): Graduate major in Communication Sciences and Disorders, Speech-Language Pathology concentration. Significant problems in the field are investigated and published research projects evaluated. Critical analysis and experimental design are emphasized. 3 hours lecture.

CSND 593 - Seminar in Research Audiology 3 Credits

Prerequisite(s): Departmental approval. Significant problems in the field of audiology, evaluation of published research projects, critical analysis, and experimental design are emphasized. 3 hours seminar.

CSND 594 - Independent Study 1-3 Credits

Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Students select an area of Communication Sciences and Disorders and, with advisement, study the literature in the field, observe related programs at special schools and centers and write reports on findings. Regular conferences with instructor for guidance and evaluation. May be repeated twice for a maximum of 3.0 credits.

CSND 595 - Applying Research to Clinical Practice in Speech-Language Pathology I 1 Credit

Prerequisite(s): CSND 592; and CSND 562 or CSND 599 may be taken as prerequisite or corequisite. Research on an approved topic in Speech-Language Pathology. In this course, students research a topic and write a paper about clinical management for a particular type of communication disorder. Students are assigned to a faculty mentor who will approve their topic and review the paper. The course may be repeated one time for a maximum of 2 credits.

CSND 596 - Applying Research to Clinical Practice in Speech-Language Pathology II 1 Credit

Prerequisite(s): CSND 595 with a grade of B- or better. Research on an approved topic in Speech-Language Pathology. For this course, students will complete the final version of a paper begun CSND 595 and participate in an oral presentation. Students who have not completed or received approval for the paper or who have not passed the oral must repeat the course. The course can be repeated one time for a maximum of 2 credits.

CSND 598 - Problems and Issues in Communication Disorders 1-3 Credits

Prerequisite(s): CSND 521; Graduate Major in Communication Sciences and Disorders, Speech Language Pathology concentration. This seminar is designed to introduce newly emerging topics in communicative disorders. 1-3 hours lecture.

CSND 599 - Advanced Practicum in Speech-Language Pathology 3 Credits

Prerequisite(s): CSND 562 with a grade of "B" or better. In this laboratory course, students provide services under supervision to individuals with communication disorders at the MSU Communication Disorders Center. The course may be repeated once for a maximum of 6.0 credits. 4.5 hours lab.

CSND 600 - Externship in Speech-Language Pathology 4.5 Credits

Prerequisite(s): A grade of "B" or better in CSND 599. This course is designed to provide the experiences and skills necessary for professional practice as a speech-language pathologist in hospitals, rehabilitation centers, nursing homes, and other clinical settings that provide services to individuals with communication disorders. This course may be repeated. 4.5 hours lab.

CSND 601 - Auditory Processing Disorders 3 Credits

Prerequisite(s): Graduate major in Communication Sciences and Disorders; CSND 468 or CSND 544 or equivalent. The study of auditory processing disorders in school-age children and adults. The course will include the impact of such disorders on receptive language, expressive language, reading, academic achievement, attending behaviors and organizational skills. 3 hours lecture.

CSND 602 - Hearing and Speech Science 3 Credits

Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Advanced study of the foundations of acoustics and mechanisms for the production and perception of speech. 3 hours lecture.

CSND 603 - School Externship in Speech-Language Pathology 4.5 Credits

Prerequisite(s): Grade of B or better in CSND 599. This course is designed to provide the experiences and skills necessary for professional practice as a speech-language pathologist within a school setting. This is a full-time externship experience under the supervision of an ASHA certified speech-language pathology supervisor who holds New Jersey certification to practice in a school setting.

CSND 620 - Pediatric Audiology 3 Credits

Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Study of assessment and intervention techniques for infants and young children with hearing loss. 3 hours lecture.

CSND 621 - Implantable Devices for the Remediation of Hearing Loss 3 Credits

Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Clinical and theoretical information regarding implantable devices for the remediation of hearing loss. 3 hours seminar.

CSND 622 - Otoacoustic Emissions 2 Credits

Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Principles and procedures for advanced auditory evaluation using otoacoustic emissions. Spontaneous, transient-evoked and distortion-product emissions will be covered. 2 hours lecture.

CSND 663 - Clinical Practicum III 3 Credits

Prerequisite(s): Permission of Graduate Advisor required. Supervised Clinical Practicum.

CSND 671 - Special Topics in Audiology 1-3 Credits

Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Contemporary topics in the field of audiology: national certification and state licensure requirements, changing healthcare practices and the provision of audiology services, presentation of faculty and student research, clinical case presentations, among others. Students may repeat this course up to four times as long as the topic of the seminar is not the same. Course may be taken three times for a maximum of 9.0 credits.

- CSND 696 - Issues in Healthcare Systems** 2 Credits
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. An analysis of selected professional and policy issues affecting the present and projected healthcare delivery system. Issues concerning healthcare personnel, patients, healthcare technology, organizational structures and facilities, finance mechanisms and the role of government are stressed in relation to how they influence healthcare services and delivery. 2 hours lecture.
- CSND 699 - Clinical Externship I** 2 Credits
Prerequisite(s): Permission of Graduate Advisor required. Supervised clinical practicum. 2 hours lab.
- CSND 700 - Clinical Externship II** 3 Credits
Prerequisite(s): Permission of Graduate Advisor required. Intensive supervised off-campus clinical practicum.
- CSND 701 - Auditory Anatomy and Physiology** 3 Credits
Prerequisite(s): CSND 410 as prerequisite or corequisite. Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Gross and fine anatomy and physiology of the mammalian peripheral and central auditory system. 3 hours lecture.
- CSND 702 - Clinical Instrumentation** 3 Credits
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Principles and use of clinical instrumentation in speech-language pathology and audiology. Laboratory exercises of a clinical emphasis are provided to illustrate course content. 2 hours lecture, 1 hour lab.
- CSND 703 - Biomedical Ethics** 2 Credits
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. A study of the application of human and professional values, judgment and choices to selected ethical dilemmas that arise in health care practice. 2 hours lecture.
- CSND 704 - Clinical Laboratory in Auditory Processing Disorders** 1 Credit
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Principles and procedures for advanced auditory evaluation of central auditory processing disorders. Underlying mechanisms, assessment and treatment will be addressed. 1 hour lab.
- CSND 705 - Community and Industrial Audiology** 2 Credits
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Measurement of noise and its impact on hearing and communication. The impact of noise in industrial, school and military settings will be addressed. 2 hours lecture.
- CSND 706 - Advanced Amplification Technology** 2 Credits
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. CSND 550 and CSND 551 or permission of instructor. Advanced study of amplification systems including programmable hearing aids, digital hearing aids. Study of personal and classroom FM systems. Tactile device technology used to manage the communication needs of individuals with profound hearing loss will also be addressed. 2 hours lecture.
- CSND 707 - Basic Medical Audiology: Genetics and Pathology** 3 Credits
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. The role of genetics and embryology on auditory function as they apply to the understanding of diseases and disorders of the ear. Attention will be paid to the Human Genome Project as it has provided a wealth of information that is critical to clinical practice. The essentials of infection control and common medical terminology as they relate to audiologic practice will also be addressed. 3 hours lecture.
- CSND 708 - Psychoacoustics I** 3 Credits
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Corequisite(s): CSND 709. Study of psychophysical methods and perception of the parameters of sound in humans and animals with normally functioning auditory mechanisms. 3 hours lecture.
- CSND 709 - Laboratory for Psychoacoustics I** 1 Credit
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Corequisite(s): CSND 708. This course serves as a corequisite for CSND 708 and will allow those students in CSND 708 to apply concepts and make basic psychoacoustic measurements. 1 hour lab.
- CSND 711 - Counseling in Audiology** 3 Credits
This courses will discuss the techniques, content, and challenges in counseling persons with hearing loss and their families.
- CSND 722 - Advanced Auditory Potentials** 3 Credits
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Overview of audiological applications of auditory event-related potentials, including the P1-N1-P2 complex, the mismatch negativity and P3. 3 hours lecture.
- CSND 731 - Clinical Externship III** 2 Credits
Prerequisite(s): Permission of Graduate Advisor required. Supervised clinical practicum. 2 hours lab.
- CSND 732 - Clinical Externship IV** 2 Credits
Prerequisite(s): Permission of Graduate Advisor required. Supervised clinical practicum. 2 hours lab.
- CSND 750 - Research Methods** 3 Credits
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Provides students with a working knowledge of the research process, including formulation of a research question, measurement and various statistical procedures of data analysis. 3 hours lecture.
- CSND 762 - Clinical Practicum IV** 3 Credits
Prerequisite(s): Permission of Graduate Advisor required. Supervised clinical practicum.
- CSND 763 - Clinical Practicum V** 3 Credits
Prerequisite(s): Permission of Graduate Advisor required. Supervised clinical practicum.
- CSND 801 - Advanced Scientific and Professional Writing** 3 Credits
Prerequisite(s): CSND 577 or permission of instructor. This course will cover scientific writing, including proposals for the dissertation and grants, manuscript reviews, and preparation of manuscripts, posters, and oral presentations. Practice and revision of individual work will be emphasized. There will be time for group feedback as well as individual mentoring. 3 hours lecture.

- CSND 807 - Advanced Medical Audiology** **3 Credits**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. CSND 707 or permission of instructor. Advanced study of the pathology of the auditory and vestibular system. 3 hours lecture.
- CSND 808 - Psychoacoustics II** **3 Credits**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. CSND 708 or permission of instructor. Advanced study of the effects of hearing loss and aging on the perception of simple and complex sounds. 3 hours lecture.
- CSND 809 - Speech Perception** **3 Credits**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. The study of perception of language from a psychological base. Emphasis will be placed on the impact of hearing loss on the perception of speech and spoken language. 3 hours lecture.
- CSND 819 - Laboratory for Psychoacoustics II** **1 Credit**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. Instrumentation for the hearing science laboratory. This course has a classroom component and a laboratory component to give students an opportunity to design and use laboratory instrumentation to explore principles of auditory research. 1 hour lab.
- CSND 834 - Seminar in University Teaching** **1 Credit**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. This seminar will prepare students for CSND 835, Practicum in University Teaching. 1 hour seminar.
- CSND 835 - Practicum in University Teaching** **2 Credits**
Prerequisite(s): Permission of Graduate Advisor required. Supervised teaching experience in audiology. May be taken twice for a total of 4.0 credits.
- CSND 836 - Practicum in Clinical Preceptorship** **2 Credits**
Prerequisite(s): Permission of Graduate Advisor required. Supervised clinical supervision/clinical teaching experience in audiology.
- CSND 837 - Seminar in Clinical Preceptorship** **1 Credit**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. This course will prepare students for CSND 836, Practicum in Clinical Preceptorship. 1 hour seminar.
- CSND 841 - Seminar in Motor Speech Disorders** **1-3 Credits**
Prerequisite(s): Matriculation in PhD program in Communication Sciences and Disorders; and Permission of instructor. Advanced study and analysis of current research and clinical issues in motor speech disorders.
- CSND 850 - Directed Research I** **1-3 Credits**
Prerequisite(s): Permission of Graduate Advisor required. Development of the research question and review of the literature. Can be taken up to three times for 9.0 credits. Research project will be graded as IP (In Progress) until requirements are completed, at which time a grade will be given.
- CSND 851 - Directed Research II** **1-3 Credits**
Prerequisite(s): Permission of Graduate Advisor required. Development of the study design, development of IRB application, and data collection. Can be taken up to three times for 9.0 credits. Research project will be graded as IP (In Progress) until requirements are completed, at which time a grade will be given.
- CSND 852 - Directed Research III** **1-3 Credits**
Prerequisite(s): Permission of Graduate Advisor required. Data collection and development of the final document. Can be taken up to three times for 9.0 credits. Research project will be graded as IP (In Progress) until requirements are completed, at which time a grade will be given.
- CSND 854 - Applied Analysis for Communication Sciences and Disorders** **3 Credits**
Prerequisite(s): CSND 750. Students will learn to analyze data while they are actively engaged in research in their program of study. Descriptive and inferential analyses of research data, including but not limited to: significance testing and p-values, t-test, chi-square, ANOVAs, regression and correlation, use of statistical software, reading statistical results in the literature, and write up of statistical results. 3 hours lecture.
- CSND 862 - Fourth Year Externship I** **4.5 Credits**
Prerequisite(s): Permission of Graduate Advisor required. Corequisite(s): CSND 864. Intensive supervised off-campus clinical residency.
- CSND 863 - Fourth Year Externship II** **4.5 Credits**
Prerequisite(s): Permission of Graduate Advisor required. Intensive supervised off-campus clinical residency.
- CSND 864 - Online Grand Rounds** **1-6 Credits**
Prerequisite(s): Permission of Graduate Advisor required. Corequisite(s): CSND 862. Fourth-year externship students discuss clinical cases with peers and faculty.
- CSND 899 - Directed Readings** **1-3 Credits**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders or permission of graduate advisor. A directed readings course is a tailored reading course negotiated between an instructor and a student to enable that student to explore in depth a particular topic or area of knowledge with the guidance of a faculty member. Directed readings courses shall not duplicate the content of regular courses. This may, of course, build on and extend exploration commenced in regular courses. May be repeated up to four times for a maximum of 12.0 credits.
- CSND 900 - Dissertation Advisement** **3-12 Credits**
Prerequisite(s): Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders; Advancement to Candidacy. Permission of Graduate Advisor required. This department requires 12 credits of CSND 900. While enrolled in CSND 900, students will work with their Dissertation Chair and their Dissertation Committee. Credits are reported as IP (In Progress) while the dissertation is being written. At the conclusion of the dissertation defense, a final grade of Pass or Fail will be recorded.
- CSND 901 - Dissertation Extension** **1 Credit**
Prerequisite(s): 12 credits of Dissertation Advisement. Matriculation in the Au.D.in Audiology or the Ph.D.in Communication Sciences and Disorders. Permission of Graduate Advisor required. Once students have acquired 12 credits of CSND 900 Dissertation Advisement, they must enroll in 1 credit of CSND 901 in every semester in which they intend to work on the dissertation, up to and including the semester of the defense. Credits are reported as IP (In Progress) while the dissertation is being written. At the conclusion of the dissertation defense, a final grade of Pass or Fail will be recorded. CSND 901 may be repeated until the time limitation for completion of the doctoral program as specified in the Doctoral Policy Manual has been reached.