CD 277 INTRODUCTION TO DISORDERS OF SPEECH AND LANGUAGE. (3)
An introduction to developmental aspects of speech and language. Definitions, symptomologies, and etiologies of articulation, language, fluency and voice disorders.

CD 285 APPLIED PHONETICS. (3)
Study of the phonetic structure of the English language with requirement of mastery of International Phonetic Alphabet. Emphasis will be placed on phonetic transcription, and application will be made for students interested in general speech, speech correction, radio, television, and theatre. (Same as COM 285.)

CD 378 ANATOMY AND PHYSIOLOGY OF SPEECH. (3)
A detailed investigation of structures and functions supporting speech production: respiration, phonation, articulation, and resonance. Neural bases of speech and language will also be introduced. Prereq: CODI major or permission of instructor.

CD 379 FUNDAMENTALS OF HEARING. (3)
Investigation of the anatomical, physiological, and neurological bases of hearing; physics of sound; and elementary psychoacoustics. Prereq: CODI major or permission of instructor.

CD 380 PATHOLOGIES OF THE AUDITORY SYSTEM. (3)
Detailed investigation of various definitions, symptomatologies, etiologies, and treatments of hearing impairment. Surveys of definitions, symptomatologies, etiologies, and treatments of central and functional hearing impairment. Prereq: CD 379 or permission of instructor.

CD 382 CLINICAL ORIENTATION IN SPEECH-LANGUAGE PATHOLOGY I. (3)
A lecture-laboratory experience designed to orient the student to the professional activities in speech-language pathology. Lecture: one hour; laboratory: four hours per week. Prereq: CD 277, CODI majors only.

CD 383 CLINICAL ORIENTATION IN SPEECH-LANGUAGE PATHOLOGY II. (3)
A lecture-laboratory experience designed to orient the student to the professional activities in speech-language pathology. Lecture: one hour; laboratory: four hours per week. Prereq: CD 382 or permission of instructor; CODI majors only.

CD 384 INTRODUCTION TO DIAGNOSTIC PROCEDURES IN SPEECH-LANGUAGE PATHOLOGY. (3)
Introduction to the principles, techniques, and tools used to develop and implement a diagnostic protocol. Prereq: CD 588 or permission of instructor; CODI majors only.

CD 511 SPEECH-LANGUAGE DEVELOPMENT AND DISORDERS FOR THE SEVERELY HANDICAPPED. (3)
An introduction to communication development and intervention for language disordered individuals whose language age is at or below four years, including cognitive, social, auditory, visual, and motor components. Topics include prerequisites for language, normal communication development, evaluation of language functioning, and approaches to altering communication behavior. Prereq: CD 277 or EDS 375 or consent of instructor. (Same as EDS 511).

CD 512 SPEECH-LANGUAGE DEVELOPMENT AND DISORDERS FOR THE MILDLY HANDICAPPED. (3)
An introduction to the characteristics of receptive and expressive language disorders in language-disordered children whose language age is four years or higher, including auditory, visual, cognitive, and motor components. Topics include language development, language disorders, language evaluation, and techniques for receptive and expressive language stimulation. Prereq: CD 277 or EDS 375 or permission of instructor. (Same as EDS 512).

CD 514 LANGUAGE DEVELOPMENT THROUGH THE LIFESPAN. (3)
An introduction to the normal development of language in individuals from birth to advanced age. Topics include theories of language acquisition; prelinguistic development; development in each of the language domains (phonology, semantics, morphology and syntax, and pragmatics); the relationships between oral language, written language, and academic progress; and cultural differences. Prereq: CD 277 or permission of instructor.
CD Communication Disorders

CD 515 LANGUAGE ASSESSMENT AND REMEDIATION. (3)
An introduction to the assessment and remediation of language disorders in individuals from birth to adulthood. Topics include characteristics of language disorders, assessment of prelinguistic and linguistic skills, methods of language remediation, and techniques for stimulating the development of prelinguistic and linguistic skills. Prereq: CD 514 or permission of instructor.

CD 521 NONSPEECH COMMUNICATION. (3)
Addresses the use of nonspeech communication systems with moderately to severely handicapped individuals. This course encompasses two basic components: 1) a lecture/discussion component which examines the full range of nonspeech communication systems, including evaluation and training considerations, and 2) a manual sign component which provides students with a basic functional receptive and expressive manual sign vocabulary. Prereq: EDS 375 or equivalent or permission of instructor.

CD 555 PROBLEMS IN COMMUNICATION DISORDERS (Subtitle required).

CD 585 SPEECH SCIENCE. (3)
To provide basic information concerning the physics of sound and the scientific bases of speech production and perception. Emphasis is placed on the acoustic nature of speech and the perception of spoken information. Instrumentation in speech science will be demonstrated. Prereq: CODI major or permission of instructor.

CD 587 AUDIOMETRY. (3)
Introduction to basic clinical techniques for assessing hearing acuity. Topics include principles and techniques of: school age identification audiometry and hearing conservation programs, pure tone air and bone conduction threshold testing, speech audiometry, masking, and audiometric calibration. Prereq: CD 380 or permission of instructor.

CD 588 DISORDERS OF ARTICULATION. (3)
Analysis, identification and management of articulation disorders. Application of physiological phonetics to remediation is included. Prereq: CD 285 and CD 277, or permission of instructor.

CD 591 AURAL REHABILITATION. (3)
Introduction to management strategies, exclusive of language, for the hearing impaired. Topics include: variables affecting hearing handicap; hearing aid characteristics, selection, and orientation; acoustic and visual aspects of speech; auditory and visual perception and training; speech conservation. Prereq: CD 587.

CD 610 ETHICS IN CLINICAL SCIENCES RESEARCH. (1)
Students will examine ethical issues in biomedical research using a case-study approach. Representative issues addressed may include data selection and retention, plagiarism, scientific review of grants and manuscripts, scientific misconduct, and informed consent. Prereq: Graduate student status. (Same as CLS/CNU/PT/RAS 610.)

CD 647 ADVANCED LANGUAGE DISORDERS. (3)
Developmental and structured approaches to language evaluation and remediation. Assessment of language levels, knowledge of the language system and variables influencing language functioning in children in relation to devising intervention strategies. Presentation of remediation techniques for children aged 0 to 21. Prereq: CD 514 and CD 515, or permission of instructor.

CD 655 ADVANCED DIAGNOSTIC PROCEDURES IN SPEECH-LANGUAGE PATHOLOGY. (3)
Study of the principles of assessment and a critical review of existing standardized and non-standardized assessment tools in the field of speech-language pathology. Emphasis on selection of assessment tools for clients from diverse ethnic backgrounds with a variety of communication disorders, administration of selected tools, and organization of diagnostic information. Prereq: CD 384 or permission of instructor; CODI majors only.

CD 656 CLINICAL PRACTICUM IN DIAGNOSTIC PROCEDURES FOR SPEECH-LANGUAGE PATHOLOGY. (1)
Experience in the assessment of speech and language skills in children and adults. Emphasis on organization of all behavioral and test data and on report writing. Laboratory, two hours per week. May be repeated to a maximum of two credits. Prereq: CD 384 or equivalent; permission of instructor.
CD 657 CLINICAL PRACTICUM IN SPEECH-LANGUAGE PATHOLOGY. (3)
Experience with children and adults in the management of speech and language disorders. May be repeated to a maximum of twelve credits. Prereq: CD 382 and CD 383 or equivalent; permission of instructor.

CD 658 CLINICAL PRACTICUM IN AUDIOLOGY. (1)
Experience in management and/or basic evaluation of hearing impairment. Primary emphasis on planning and executing management techniques. May be repeated to a maximum of three credits. Prereq: CODI majors only. CD 587, CD 591, and CD 515, or equivalent; permission of instructor.

CD 659 CLINICAL ROTATION IN SPEECH-LANGUAGE PATHOLOGY. (1-12)
Supervised clinical experience in the evaluation and management of communication disorders of children and adults who are served by agencies other than the University Speech-Language-Hearing Clinic. Up to forty laboratory hours per week (at site all day). May be repeated up to 36 hours. Prereq: CODI Majors only. Must successfully complete nine hours of clinical practicum (graduate level) and consent of instructor.

CD 670 DISORDERS OF PHonation. (3)
Analysis, identification, and management of disorders of phonation and resonance, including the specific communication problems of the laryngectomized adult. Prereq: Permission of instructor.

CD 671 APPLIED PHONOLOGY: DEVELOPMENT AND DISORDERS. (3)
Critical review and discussion of clinical and developmental phonology research and phonological theories. Study of the bases for normal and disordered phonological development from birth through age twelve. Study of procedures for assessment and treatment of children with phonological disorders including the development of individualized remediation plans for expediting intelligibility gains. Course will include information regarding second language acquisition and oral and written language as these relate to phonological systems. Prereq: Admission to the Communication Disorders graduate program or the Rehabilitation Sciences Ph.D. program or consent of the instructor.

CD 672 APHASIA AND RELATED NEUROGENIC DISORDERS OF LANGUAGE. (3)
Analysis, identification, and management of neurogenic disorders of language and cognition. Primary emphasis is given to the acquired disorders of aphasia, traumatic brain injury, dementia, and right hemisphere dysfunction. Prereq: CD 378, CD 514, CD 515, or permission of instructor.

CD 673 NEUROGENIC DISORDERS OF SPEECH. (3)
Analysis, identification and management of neurogenic disorders of speech and related disorders. Primary emphasis is given to dysarthria, apraxia of speech, and dysphagia. Prereq: CD 378, CD 588 or permission of instructor.

CD 674 DISORDERS OF FLUENCY. (3)
Analysis, identification and management of fluency disorders. Prereq: Permission of instructor.

CD 701 RESEARCH METHODOLOGY IN COMMUNICATION DISORDERS. (3)
Principles and methods for designing research in communication sciences and disorders. Topics include: introduction to the scientific method, research designs, measurement techniques, formulating research questions, writing and evaluating research reports, and ethics of research. Prereq: Graduate standing in Communication Disorders.

CD 706 ADVANCED AUDIOLOGICAL ISSUES IN PEDIATRICS. (3)
Overview of the medical pathologies of childhood hearing loss and effects of hearing loss. Emphasis on the actual practice of pediatric audiology including: identification and assessment of hearing loss in children; methods used to enhance reception of auditory signals; psychological impact of childhood hearing loss and counseling for those affected; and remediation of children with impaired hearing. Prereq: Admission to the Communication Disorders graduate program or the Rehabilitation Sciences Ph.D. program or consent of the instructor.
CD 708 ADVANCED AUDIOLOGICAL ISSUES IN GERIATRICS. (3)
Overview of the medical pathologies and effects of hearing loss in older adults. Emphasis is on actual practice of geriatric audiology, including: identification and assessment of hearing loss in older adults; methods used to enhance reception of auditory signals; psychological impact of acquired hearing loss in older adults and counseling for those affected; and management/intervention strategies. Prereq: Admission to the Communication Disorders graduate program or the Rehabilitation Sciences Ph.D. program or consent of the instructor.

CD 747 SEMINAR IN LANGUAGE DEVELOPMENT IN CHILDREN. (3)
A contemporary overview of processes governing language acquisition and their role in atypical language development. Topics include: theories of language acquisition; roles of perception, cognition, social interaction, and genetics on language acquisition; and influence of atypical situations on language. Prereq: Admission to the Communication Disorders graduate program or the Rehabilitation Sciences Ph.D. program or consent of the instructor.

CD 771 DYSPHAGIA. (3)
This course includes a review of the anatomy and physiology of normal deglutition; the nature and characteristics of swallowing disorders; methods of evaluation and management of dysphagia in adults and children; and consideration of medical conditions such as aspiration pneumonia, tracheostomy, and other complicating factors associated with dysphagia. Also included is a brief review of professional issues relating to efficacy of treatment; third party reimbursement; and roles and responsibilities of other health care professionals in feeding and swallowing. Prereq: Admission to the Communication Disorders graduate program or the Rehabilitation Sciences Ph.D. program or consent of the instructor.

CD 772 ADVANCED SEMINAR IN APHASIA. (3)
Critical review of the literature in disturbances in symbolic behavior in adults resulting from a variety of etiologies. The course includes aphasia, as well as adult communication disorders associated with dementia, agnosia, right hemisphere injury, traumatic brain injury, and schizophrenia. Prereq: Admission to the Communication Disorders graduate program or the Rehabilitation Sciences Ph.D. program or consent of the instructor.

CD 773 SEMINAR IN MOTOR SPEECH DISORDERS. (3)
Study of neuromotor systems subserving speech production and the nature of neuromotor systems pathologies; diagnostic definitions and taxonomies; applications of instrumental methods to clinical description of motor speech disorders; differential diagnosis, assessment, and interdisciplinary management of individuals with neuromotor disturbances affecting speech. Assessment and management of speech deficits attributable to developmental neuromuscular disorders. Prereq: Admission to the Communication Disorders graduate program or the Rehabilitation Sciences Ph.D. program or consent of the instructor.

CD 774 SEMINAR IN ADULT SPEECH AND LANGUAGE. (3)
A critical review of the research and its implications concerning speech and language characteristics and changes in adults. Topics include: 1) typical speech and language characteristics, change, acquisition in adulthood; 2) speech and language characteristics of adults with specific speech and language impairments; 3) changes in speech and language associated with normal aging; and 4) ethnic and cultural considerations in adult speech and language. Prereq: Admission to the Communication Disorders graduate program or the Rehabilitation Sciences Ph.D. program or consent of the instructor.

CD 775 SEMINAR IN LITERATE LANGUAGE. (3)
A review and discussion of the literature concerning literate language. Topics include: 1) characteristics of literate language; 2) differences between literate and oral language; 3) emergent literacy; 4) theories of the reading and writing processes; 5) components, development, strategies, and factors involved in typical reading and writing; 6) literate language and speaking; and 7) issues pertaining to atypical readers and writers. Prereq: Admission to the Communication Disorders graduate program or the Rehabilitation Sciences Ph.D. program or consent of the instructor.

CD 789 INDEPENDENT STUDY IN COMMUNICATION DISORDERS. (1-6)
Independent study for graduate students with an interest in a specific problem in communication disorders. May be repeated to a maximum of 12 credits. Lecture, 1-6 hours; laboratory, 2-12 hours per week. Prereq: Graduate status and consent of instructor.