Hearing and Speech Sciences
Courses leading to the degrees of Doctor of Audiology, Doctor of Philosophy, Master of Education of the Deaf, and Master of Science in Speech-Language Pathology

**Audiology**


5217. Hearing Disorders and Assessment. An introduction to the major pathologies of the peripheral and central auditory system as well as the medical/surgical treatment of those pathologies, followed by an introduction to the equipment and procedures used to assess auditory function in patients of all ages. [3] Hornsby (Not currently offered)


5233. Neuroscience. A comprehensive introduction to the field of neuroscience from important molecules to cell function to neural systems to cognition. Topics include the physiology of nerve cells, the sensory systems of vision, audition and touch, the motor system, sleep, consciousness, speech, and sexual behavior. Coverage of clinical topics includes the chemical basis of the psychoses, diseases of the brain, and repair mechanisms after brain injury. Spring [3] Smith (Also listed as NSC 201)

5302. Hearing Science. A discussion of basic acoustics as it applies to hearing science. Anatomy and physiology of the peripheral and central hearing mechanism and vestibular system. [3] Hackett (Not currently offered)


5310. Measurement of Hearing. The theory and practice of hearing measurement, with emphasis on routine clinical and screening audimetric techniques, testing environment, audiometric standards and calibration, applied impedance measurements, and interpretation of audiometric tests. Fall [3] Dickinson/Bradham (Also listed as HRSP 310)


5325. Pediatric Audiology. A survey of methods and procedures used in the evaluation of the auditory function and management of neonates, infants, and young children. Includes identification and intervention procedures. There will be review of special populations of children with hearing loss Fall [3] Tharpe (Also listed as HRSP 325)

5327. Hearing Loss and Speech Understanding. This course examines various factors that may affect the speech understanding of persons with hearing loss. The contribution to the unaided and aided speech understanding of persons with hearing loss of 1) subject factors, such as degree of hearing loss, and deficits in frequency and temporal resolution, and 2) environmental factors, such as, the level and type of background noise, reverberation and talker characteristics, will be examined. Methods for predicting speech understanding will also be discussed. Spring [3] Hornsby (Also listed as HRSP 327)


5330. Advanced Audiologic Evaluation I. Diagnostic audiometry principles and procedures, including acoustic reflex measures, speech audiometry, auditory brainstem response (ABR), and electrocochleography (ECochG). Also, newborn
auditory screening with ABR. Practicum required. [3] Jacobson (Not currently offered)

5332. **Pathology of the Auditory System.** A study of pathologies involving the peripheral auditory system arising from genetic factors, disease, and trauma, with emphasis applied to presenting signs/symptoms, and medical/audiological management. Fall [3] Hood.

5333. **Microbiology and Pharmacology for Audiology.** An examination of the microbial etiology and pathogenesis of acute otitis media and those microbial/host/environmental risk factors associated with infection, the primary mechanisms of antimicrobial resistance commonly encountered in middle ear infections and how this process impacts upon the therapeutic selection of an antimicrobial agent. The course will identify the potential role of biofilm formation in the middle ear as a potent virulence factor for recurrent disease. Spring [3] Edmiston.

5337. **Auditory Clinical Electrophysiology.** This course will cover basic concepts in electrophysiological and electromagnetic recordings (e.g. electrode types/uses, far and near field recordings, volume conduction, dipole sources). Recording of both near and far-field electrical responses emitted by peripheral and central nervous system will be studied. Recording techniques and interpretation of conventional clinical evoked potentials (e.g. electrocochleography, auditory brainstem response, sonomotor responses, electroneurography) will be covered. Special topics will include: audiometric applications of these evoked potentials (e.g. for infant hearing screening and special needs populations, and intraoperative neurophysiological monitoring). There will be extensive laboratory practica conducted within and outside the classroom. Spring [3] Jacobson/McCaslin.

5340. **Amplification I.** Background and development of the design of hearing aids, ear mold acoustics, electroacoustic, characteristics, performance standards and measurement techniques, clinical selection and evaluation procedures. Fall [1], Spring [2] Dickinson (Also listed as HRSP 340)

5343. **Hearing Conservation.** A discussion of noise levels, OSHA guidelines, noise-induced hearing loss, and hearing protection in work and leisure activities. Industrial audiology including testing, training, and intervention protocols. Summer [2] Staff (Also listed as HRSP 343)

5345. **Amplification II.** Advanced topics in amplification including advanced probe microphone techniques, single and multi-channel compression systems, analog and digital signal processing, and current and emerging prescriptive and fitting verification methods. Fall [3] Ricketts (Also listed as HRSP 345)

5346. **Assessment of Vestibular Disorders.** This course offers an in-depth approach to the assessment of the dizzy patient. Subject matter will include: anatomy and physiology of the peripheral and central vestibular, ocular motor and postural control systems; introduction to both electrical and video techniques for recording the vestibuloculare reflex; case history and bedside assessment of the dizzy patient, technique and interpretation of electronystagmography, rotational testing, computerized dynamic posturography and sonomotor responses; assessment of self-report dizziness handicap. Students will be expected to conduct practica outside the classroom. Fall [3] Jacobson/McCaslin (Also listed as HRSP 346)

5347. **Management of Vestibular Disorders.** This course will focus on interpretation and analysis of balance laboratory results in dizzy patients as well as treatment and therapy provided by other professionals. Subject matter will include: advanced concepts in central vestibular system physiology, peripheral and central disorders of the vestibular system and their clinical findings, introduction to imaging dizzy patients, disequilibrium of aging and risk of falls assessment, drug treatment of vertigo, surgical treatment of vertigo, and vestibular rehabilitation. Summer [3] Jacobson/McCaslin.

5349. **Laboratory: Audiology in Education.** Demonstration and hands-on experience with personal and classroom amplification systems. Operation and troubleshooting of amplification systems commonly used in a classroom setting. Specifically, hearing aids, FM systems, assistive listening devices, vibrotactile devices, and cochlear implants will be demonstrated. Co- or prerequisite: SPED 2600 or HRSP 2600. Spring [1] Fino-Szumski.

5353. **Amplification III.** Design and evaluation of auditory prostheses for listeners with hearing loss. Theoretical and clinical considerations of cochlear and auditory brainstem implants as well as hearing aids from a prostheses perspective. Spring [3] Ricketts (Also listed as HRSP 353)

5355. **Clinical Externship.** Fall, Spring, Summer [0-3] Hale.

5359. **Audiometric Instrumentation & Calibration.** An introduction to fundamental concepts in electronics and computer science and to instrumentation used in the hearing clinic or research laboratory for producing, measuring, and analyzing audio signals. Standards and procedures for calibration measurements, with practical hands-on experience. Fall [3] Grantham/Ricketts (Also listed as HRSP 359)

5361. **Family-Centered Counseling and Interviewing.** Examines the helping relationship in the clinical process, counseling theory relative to audiology and speech-language pathology practices, and principles and methods of effective clinical interviewing and counseling. Summer [2] Hale (Also listed as SLP 5361).

5363. **Hearing and Aging.** A survey of major concepts in gerontology, including demographics, psychosocial aspects of aging, biology of aging, and clinical conditions of the older adult. Physiological changes within the aging auditory system, and clinical issues in audiological assessment and intervention with older hearing impaired patients. Fall [3] Rosenfeld (Also listed as HRSP 363)

5365. **Business and Financial Management.** An overview of accounting practices, marketing, and operations management as they relate to management of an Audiology practice. Topics discussed include financial reporting, budgeting, pricing, billing & coding, regulatory issues and human resource management. Students are required to design an Audiology practice and develop a business plan as part of this course. Spring [3] Fino-Szumski.

5367. **Professional Issues & Ethics for Audiologists.** Examines professional issues in Audiology including malpractice, quality improvement, marketing, credentialing, diversity, and legislation. Emphasis will be given to issues of ethics and clinical integrity in the practice of the profession of Audiology. Fall [2] Bess.


5371. **Research Design and Statistics.** Covers topics in research design and statistics for students preparing for research careers in hearing science, speech science, and communication disorders. Reviews mathematical bases for probability theory and statistical inference. Covers fundamental parametric and nonparametric statistical tests, with extensive discussion of research design in the context of analysis of variance. Presents statistical properties of psychophysical methods and signal detection theory. Fall, Spring [3] Ashmead (Also listed as HRSP 371a and HRSP 371b)

5385. **Instrumentation for Hearing and Speech Sciences: Stimulus Generation, Measurement, and Calibration.** A hands-on introduction to the principles and techniques of setting up equipment for hearing and speech perception experiments. Students are exposed to analog generators (noise generators, function generators, oscillators, computer-controlled digital-to-analog converters) processing devices (attenuators, filters, mixers, amplifiers), terminating devices (earphones, loudspeakers, analog-to-digital converters), and measurement devices (oscilloscope, voltmeter, spectrum analyzer). Students will learn to design and implement circuits involving these various devices, and to measure and calibrate various kinds of acoustic stimuli. Fall of odd numbered years. [3] Grantham (Also listed as HRSP 385)

5386. **Instrumentation for Hearing and Speech Sciences: MATLAB Programming with Real-Time Applications.** An introduction to the standard MATLAB computing language in a Windows environment. Basic programming concepts including data types and storage, data input and output, conditional execution, iterative programming, and the use of functions. The goal is for the student to become sufficiently comfortable with MATLAB (and with the concept of programming languages in general) to develop programs to solve specific computational problems too tedious to solve by calculator. The last third of the course will be devoted to the application of MATLAB programming to real-time laboratory problems. Spring of even-numbered years. [3] Grantham (Also listed as HRSP 386)

5389. **Independent Study and Readings in Audiology.** Fall, Spring, Summer [1-3]

5581. Capstone I. Capstone projects may take several forms including research-based investigations, evidence-based position papers, business plans, critical literature reviews with applications to clinical problem solving, grant proposals, development of clinical protocols based on published research findings, etc. In Capstone I, students will identify an appropriate capstone committee and define their capstone projects and submit and defend a Capstone Proposal. Fall, Spring, Summer [3] Staff.

5582. Capstone II. In Capstone II, students will complete their Capstone Project. The Capstone project culminates in an oral defense of a formal manuscript which has been submitted to the students Capstone Committee. Fall, Spring [3] Staff.

5583. Practicum and Clinical Case Conference. This course includes attendance at weekly case conferences where clinical case studies will be presented. The grade for this class will include clinical performance and attendance. Fall, Spring [3] Hale


Education of the Deaf

5308. Language and Literacy in Children with Hearing Loss. This course presents an overview of normal language acquisition and the challenges imposed by a hearing loss. A variety of methods and materials to develop oral and written language and reading will be included. Practical methods of assessment, supportive strategy development and curricular adaptations for children with hearing loss will be explored. Summer [3] Hayes (Also listed as HRSP 308)

5312. Psychology and Culture of the Deaf. Presentation and discussion of significant historical and current issues relating to the Deaf population. Primary focus will be on psychological development, educational/methodological models, and Deaf culture. Although the principle focus is on the psycho/social and cognitive/intellectual development of deaf individuals through the lifespan, a general survey of other areas of exceptionality is made with emphasis on the implications for the deaf child with additional disabilities and/or special needs. Spring [2] Hayes.


5329. Education and Psychology of Exceptional Learners. Presents an overview of people who are labeled “exceptional” and the implications for education related to them. Examines the disabilities that people have and services, systems, and concepts associated with them. Includes legal, sociological, educational, political, general system theory perspectives and psychological perspectives. State and Federal law relating to education from infancy to adulthood will be related to intervention, ethics, and issues. Discuss trends and issues related to the areas of exceptionality and relate these to previous trends, issues, and attitudes. Fall, Spring [3] Staff (also listed as SPED 3000).

5339. Advanced Issues in Family Intervention. Provides information on issues and practices related to families with children who have special needs. Emphasis on taking a family systems perspective and a family centered approach to intervention. Provides strategies for effective communication for the purpose of information sharing and collaborative planning with families. Topics include definition and history of the family, family and professional relationships, professional ethics, models of working with families, service coordination, family assessment and the IFSP, promoting family participation in the IEP, and Public Laws 94–142 and 99–457. Fall, [3] (also listed as SPED 3030),
5350. Management Procedures for Academic and Social Behavior. Application of behavioral principles in educational settings. Presents definition and measurement of behavior, reinforcement strategies, systematic program development, basic formats for classroom instruction, and techniques for monitoring student progress. Emphasizes procedures for increasing academic and socially appropriate behavior through simulations and practice exercises. Review of research methodologies and the critical analysis of research literature in the area of applied behavior analysis are required. Students apply their skills in classroom settings. Fall, [3] (also listed as SPED 3210)

5356. Internship/Externship in MDE/Specialty Track. A three-week intensive, full-time clinical or classroom placement during the month of May in an auditory-oral environment designed specifically to meet the student's individual interests and needs. Spring[2] Kan.

5358. Student Teaching and Field Experience in Deaf Education. Students will develop appropriate skills for providing services to children with hearing loss in group settings; will collaborate with professionals in audiology and speech/language pathology; will plan sessions for family-centered intervention emphasizing communication development or plan lessons; will prepare or review individual family service plans (IFSPs) or individual education plans (IEPs); will assess speech, language, listening, cognitive, motor and social development of children; and will evaluate effectiveness of services. Fall, Spring, Summer [1] Kan.

5360. Research Methods in Special Education. Students will learn the purposes, procedures, and processes of conducting research on educational and psychological issues of exceptional children and educational programs. Includes the study of terminology and research methods (both quantitative and qualitative) and "hands on" application of methods in small-scale pilot studies within the classroom. Some study of statistical procedures is included, but the practical methods and simple computer analyses are emphasized over formulas and mathematical calculations. Spring [3] (Also listed as SPED 3230).

5362. Foundations of Early Childhood Special Education. Provides the historical, legal, and theoretical foundations of early intervention/early childhood special education for infants, toddlers, and preschoolers with disabilities. Includes recommended practices related to assessment and instruction for early childhood classes. Discusses typical and atypical development, assessment to identify goals and outcomes, and strategies for promoting development. Fall [3] (Also listed as SPED 3400)

5364. Recommended Practices in Early Elementary Grades for Children with Disabilities. Provides information on typical and atypical development of early elementary children with disabilities. Includes discussions of the general education curriculum (literacy, mathematics, social studies, and science) and recommended practices in adapting that curriculum for children with disabilities. Fall. [3] (Also listed as SPED 3420)

5366. Speech and Language for Exceptional Learners. An overview of normal language development, psycholinguistic theory, and research. Emphasis is on specific intervention procedures useful for teachers of children and youth with severe/profound or mild/moderate disabling conditions. Spring. [3] (Also listed as SPED 3600)

5370. Special Problems in Deaf Education. Areas and problems not included in other courses in deaf education, chosen to fit the students' interests and the needs of their programs. May be repeated to a total of 12 hours. Fall, Spring, Summer [1-4] Staff.

5372. Seminar in Deaf Education. Supports student development of organizational skills that will facilitate the completion of requirements for the master's degree in education of the deaf and the transition from graduate school to a profession in deaf education. Emphasis is placed on the development of a professional portfolio, a review of certification requirements, skill development in job searching including resume writing and interviewing skills. Spring[3] Hayes.

5374. Advanced Issues and Procedures in the Assessment of Students with Mild/Moderate Disabilities. This course focuses on the diagnosis and evaluation of students with mild/moderate disabilities using a variety of developmentally appropriate curriculum based assessments, criterion-referenced, and norm-referenced tests in the academic and vocational subject areas. Emphasis is on the interpretation of information from assessments into Individualized Education Program annual goals and objectives and instructional programming strategies. Specific consideration is given to the reporting of assessment information to parents, teachers and other support personnel to determine appropriate placement levels within the continuum of services. Practical application is required. Spring. [3] (Also listed as SPED 3820).
5390. **Curriculum and Methods for Deaf Children.** Presentation and discussion of current issues, methods and materials involved in providing successful educational programming for children with hearing loss both in special programs and in inclusionary settings. This includes the adaptation of regular curriculum and instructional procedures for students with hearing impairments. Focus is on assessment of academic skills and individualizing instruction. Students gain practical experience in planning, carrying out and evaluating lessons and are exposed to a variety of educational materials and methods. Spring [3] Staff.

5392. **Teaching Children with Hearing Loss to Listen & Speak.** Theories of and methods for developing auditory perception and spoken language skills in deaf and hard-of-hearing children. The purpose of this course is to increase students’ skills in assessing and developing speech, auditory functioning, and phonologic awareness in deaf and hard-of-hearing children. In the fall, the focus will be early childhood development. The spring semester will focus on assessment in early childhood and the summer semester will focus on intervention. Fall [2] Spring [2], Summer [1] Hayes.

5585. **Independent Study and Readings in Deaf Education.** F, S, U [1-3] Hayes

**Graduate School (Ph.D courses)**

304. **Child Language Acquisition.** The components and processes of normal language development. Relations between language acquisition and social and cognitive aspects of child development as well as literacy development. Survey of developmental psycholinguistic research. This is course is appropriate for graduate students with or without previous coursework in language development. Also listed as SLP 5304. Enrollment in HRSP 304 is limited to doctoral students. All others should take SLP 5304. Fall [3] Schuele

334. **Seminar in Neurogenic Communication Disorders.** Research literature on the relationship between brain and speech-language performance, emphasizing current methodology for studying neurological speech and language disorders. Prerequisite: 300 or 331 or consent of instructor. Fall [2] Staff. (Not currently offered)

341 **Seminar in Audiology.** Significant literature in the field of audiology. Directed study in assigned subject areas. Fall, Summer [2] staff

342. **Seminar in the Neurobiology of Hearing and Multisensory Processes** Study at the doctoral level of the neural processes underlying auditory and multisensory perception. The course will focus on critical readings of recently published findings that emphasize the connection between plasticity, neural systems and behavior. May be repeated for credit. Prerequisite: consent of instructor. FALL, SPRING [Variable credit: 1-2] Wallace.

344. **Administrative Issues in Communicative Disorders.** A discussion of some of the important issues affecting the administration of programs in communication disorders. Emphasis on business management, marketing, financial management, third-party payors, grants and contracts, state and federal agencies, and fund raising. Summer of even-numbered years [2-3] Camarata

351. **Special Problems in Speech Pathology.** Areas and problems not included in other courses in speech pathology, chosen to fit the students’ interests and the needs of their programs. May be repeated to a total of 12 hours. Fall, Spring, Summer [Variable credit: 1–6] staff

352. **Special Problems in Audiology.** Areas and problems not included in other courses in audiology, chosen to fit the students’ interests and the needs of their programs. May be repeated to a total of 12 hours. Fall, Spring, Summer [1–4] Staff.

373. **Signals and Systems for Hearing and Speech Sciences.** A hands-on laboratory course that concentrates on applications for communications science. The course covers: (1) the fundamentals of analog signals, including the Fourier transform and representation of signals in the time and frequency domains; (2) the fundamentals of analog systems (filters), including representation in the time and frequency domains and the analysis of signals that pass through systems; (3) an introduction to digital signals and digital systems, including digital filter design; and (4) an introduction to MATLAB, a powerful tool for understanding and implementing signals and systems. Summer (of odd-numbered years) [3] Grantham.
375. Seminar in Medical Audiology. Advanced study at the doctoral level of the medical aspects of audiology and the relationship of audiology to otology and neuro-otology. May be repeated for credit. Prerequisite: consent of instructor. [Variable credit: 1–3] (Not currently offered)


380. Advanced Seminar in Speech Language Pathology. A doctoral-level course focusing on special topics of interest to faculty and students and based on recent research developments in speech pathology. May be repeated for credit. Prerequisite: consent of instructor. Fall, Spring, Summer [1-3] staff

381. Advanced Seminar in Language. A doctoral-level course focusing on special topics of interest to faculty and students and based on recent research developments in language. May be repeated for credit. Prerequisite: consent of instructor. Fall, Spring, Summer [3] staff

382a–382b. Seminar: Research in Audiology. An advanced study of research for the second-year doctoral student. Directed individual research culminating in oral presentation and a manuscript. Prerequisite: consent of instructor. [2–2] (Offered on demand)

383. Practicum Case Conference. This course includes attendance at weekly case conferences where clinical case studies will be presented. The grade for this class will include clinical performance and attendance. Fall, Spring, Summer [1] Staff.

384. Advanced Seminar in Audiology. A doctoral-level course focusing on special topics of interest to faculty and students based on recent research developments in audiology. May be repeated for credit (formerly HRSP 379). Prerequisite: consent of instructor. Fall, Spring, Summer [1-3] staff

385. Instrumentation for Hearing and Speech Sciences: Stimulus Generation, Measurement, and Calibration. A hands-on introduction to the principles and techniques of setting up equipment for hearing and speech perception experiments. Students are exposed to analog generators (noise generators, function generators, oscillators, computer-controlled digital-to-analog converters) processing devices (attenuators, filters, mixers, amplifiers), terminating devices (earphones, loudspeakers, analog-to-digital converters), and measurement devices (oscilloscope, voltmeter, spectrum analyzer). Students will learn to design and implement circuits involving these various devices, and to measure and calibrate various kinds of acoustic stimuli. Fall of odd numbered years. [3] Grantham (Also listed as AUD 5385)

386. Instrumentation for Hearing and Speech Sciences: MATLAB Programming with Real-Time Applications. An introduction to the standard MATLAB computing language in a Windows environment. Basic programming concepts including data types and storage, data input and output, conditional execution, iterative programming, and the use of functions. The goal is for the student to become sufficiently comfortable with MATLAB (and with the concept of programming languages in general) to develop programs to solve specific computational problems too tedious to solve by calculator. The last third of the course will be devoted to the application of MATLAB programming to real-time laboratory problems... Spring of even-numbered years. [3] Grantham (Also listed as AUD 5386).

387. Spatial Hearing. An advanced treatment of the perception by humans of auditory objects in space, including laboratory demonstrations. Topics include (1) binaural processing (lateralization, binaural detection); (2) localization and spatial resolution in the free-field; (3) auditory distance perception; (4) the precedence effect: localization in reverberant spaces; and (5) the central auditory nervous system: binaural pathways. Fall of even-numbered years. [3]. Grantham. (Not currently offered)

388. Independent Study and Readings in Speech Pathology. Fall, Spring, Summer [1-3]

389. Independent Study and Readings in Audiology. Fall, Spring, Summer [1-3]

398 Preliminary Doctoral Research [0]

399 Ph.D. Dissertation Research [0]

3995 Half time Ph.D. Dissertation Research [0]
Speech Language Pathology

5206. Anatomy and Physiology of Speech and Hearing Mechanisms. The basic processes of speech production, acoustics, and perception. Neuroanatomy, anatomy, physiology, acoustics, and acoustic correlates of sound features. Intended for undergraduates and graduate students outside the Department of Hearing and Speech Sciences. Spring [3] Ohde (Also listed as HRSP 206)

5300. Neurology of Speech and Language. The structure and function of the nervous system, with emphasis on the neural mechanisms of speech and language. Neurologic conditions producing speech and language disorders are surveyed. Fall [3] Webb (Also listed as HRSP 300)

5301. Acoustics and Perception of Speech and Speech Disorders. An examination of the processes of speech production, acoustics, and perception. Emphasis on relevant literature and research techniques in speech science. Fall [3] Ohde (Also listed as HRSP 301)

5304 (SLP). Child Language Acquisition. The components and processes of normal language development. Relations between language acquisition and social and cognitive aspects of child development as well as literacy development. Survey of developmental psycholinguistic research. This course is course is appropriate for graduate students with or without previous coursework in language development. Also listed as HRSP 304. Fall [3] Schuele


5306. Child Language Disorders. The language development of children of variant populations. Focus on description of populations, assessment techniques, and intervention strategies. Clinical applications of research in normal language acquisition. Fall [3] Schuele (Also listed as HRSP 306)

5307. Seminar: Topics in Childhood Language Disorders. Current issues in normal language acquisition and clinical applications to variant populations. Content of seminar rotated. Fall [2] Staff. (Also listed as HRSP 307)

5311. Stuttering. Significant research in the field of stuttering, with emphasis on etiology and therapy. The management of fluency disturbances. Spring [3] Conture (Also listed as HRSP 311)

5313. Management of Communication Disorders in the Schools. This course provides an overview of management principles and practices for children with communication disorders during the school-age years. Curriculum-based communication assessment and methodologies for implementation of communication programs in school settings will be addressed. Spring [3] Hausman.


5317. Traumatic Brain Injury. Pathophysiology of traumatic brain injury in children and adults; unique and common sequelae, the evaluation and treatment of cognitive/communicative deficits and special problems of the population. Prerequisite 5300 or 5331 or consent of instructor. Summer [3] de Riesthal.

5319. Dysphagia. The study of the normal and disordered swallow in pediatric and adult populations. Anatomy and physiology, videofluoroscopic and other assessment procedures, as well as various treatment alternatives and techniques are included. Fall [3] Ashford (Also listed as HRSP 319)

5323. Communication in Autism Spectrum Disorders. The course addresses basic theories and principles associated with communication assessment of and intervention for children with Autism Spectrum Disorders. Auditory characteristics, causative factors, classroom structure, behavior management, communication strategies, social and peer interaction, and family-focused practices are also reviewed. This class also will provide an overview of typical social, play, and linguistic development compared to the features and behavioral characteristics of autism spectrum disorders (ASD). Fall [2-3] Wallace (Also listed as HRSP 323)

5324. Feeding and Swallowing Disorders in Children. This course focuses on the assessment, diagnosis, and management of dysphagia in children; including, the role of the speech-language pathologist and multidisciplinary and family centered, family supported management. Prerequisite SLP 5319. Spring [2] Ashford, Golper.


5335. Seminar in Augmentative Communication. The application of augmentative communication devices to patients with physical and/or cognitive disabilities. The various types of devices available, the techniques for selecting and applying these systems to individual patients, and specific information on how to achieve effective conversational use of such systems. Fall [2] Gutmann (Also listed as HRSP 335)

5336. Voice Disorders. Theories of voice production, with emphasis upon underlying mechanisms that cause vocal defects. Procedures for group and individual management. Summer [3] B. Jacobson (Also listed as HRSP 336.)

5338. Research Methods in Communicative Disorders. Research techniques and procedures. Analysis of research examples from the literature. Study of design of experiment, data collection, statistical analysis, and presentation of research findings. Fall [1] Camarata (Also listed as HRSP 338)


5351. Special Problems in Speech Pathology. Areas and problems not included in other courses in speech pathology, chosen to fit the students' interests and the needs of their programs. May be repeated to a total of 12 hours. Fall, Spring, Summer [Variable credit: 1–6] Staff.

5355. Clinical Internship/Externship. Sequence of clinical practicum placements over five semesters for speech-language pathology majors in clinical track. Designed to meet supervised-practicum requirements for eventual certification by American Speech-Language-Hearing Association. Sequence of initial part-time internship placements in campus and other local facilities, followed by a full-time externship placement at one of many selected sites throughout the country or abroad. Spring, Summer [1-7] Hale.

5357. Professional Issues in Communication Disorders. Examines various professional issues within the fields of speech-language pathology and audiology. For example, ethics, malpractice, quality improvement, marketing, reimbursement, multicultural sensitivity, and federal legislation. Spring [1] Hale.

5361. Family-Centered Counseling and Interviewing. Examines the helping relationship in the clinical process, counseling theory relative to audiology and speech-language pathology practices, and principles and methods of effective clinical interviewing and counseling. Spring [2] Hale (Also listed as AUD 5361)

5369. Master's Thesis Research. Fall, Spring, Summer [0] Staff.

5377. Seminar in Speech Perception. The study of the processes and models underlying the perception of speech features. Relevant acoustic correlates for speech perception will be evaluated, and these properties will be emphasized through the generation of synthetic speech. The course will cover the contributions of speech perception research to our understanding of speech development, and language and hearing disorders. Not currently offered.[3] Ohde (Also listed
5388. **Independent Study/Readings in Speech Pathology.** Fall, Spring, Summer [1-3] Staff.

5583. **Practicum and Clinical Case Conference.** This course includes attendance at weekly case conferences where clinical case studies will be presented. The grade for this class will include clinical performance and attendance. Fall, Spring, Summer [1] Hale.

5584. **Independent Practicum.** Fall, Spring, Summer [0] Conture.