# Audiology

**AUD 6113** Grand Rounds (1 semester hour) Case staffing, presentations and discussion of patient audiological diagnostic and rehabilitation and selected topics in a group session attended by students and faculty. (May be repeated for credit.) (1-0) Y

**AUD 6120** Laboratory Procedures in Audiology and Hearing Science (1-9 semester hours) Application in structured laboratories of principles taught in diagnostic audiology, rehabilitation audiology, hearing science, amplification, cochlear implant and electrophysiology courses. To be taken with AUD 6303, AUD 6310, AUD 6311, AUD 6316, AUD 7321, AUD 7326, AUD 7327 and AUD 7353. (May be repeated for credit.) (0-[1-9]) Y

**AUD 6303** Hearing Science (3 semester hours) Basic acoustics and psychoacoustics. (3-0) Y

**AUD 6305** Anatomy and Physiology of Audition (3 semester hours) Structure and function of the auditory system including external, middle, and inner ear, and central auditory mechanisms. (3-0) Y

**AUD 6306** Speech Science (3 semester hours) The physical properties of speech and the perceptual, cognitive and neural processes that intervene between the production and perception of speech in everyday speech communication. (3-0) Y

**AUD 6310** Advanced Clinical Audiology (3 semester hours) Instrumentation and calibration standards for audiology practice. The development, application and interpretation of standard and advanced diagnostic audiological procedures. (3-0) Y

**AUD 6311** Diagnostic Audiology (3 semester hours) Diagnostic procedures for audiological diagnosis including behavioral and functional measures (ABR and OAE). Emphasis on administration and interpretation of diagnostic audiological tests. (3-0) Y

**AUD 6314** Instrumentation (3 semester hours) This course focuses on the use, care, and maintenance of instrumentation used in clinical audiology, including the basic principles of electrical systems, signal processing and analysis, calibration, and laboratory safety. (3-0) Y

**AUD 6316** Audiologic Rehabilitation for Adults (3 semester hours) Evaluation and remediation of impairment, limitations and restrictions associated with hearing loss. Emphasis on hearing aid orientation and benefit, counseling, assistive technology, coping skills, communication strategies, speech reading, advocacy for adults with hearing loss, and partnering with community mentors. (3-0) Y

**AUD 6318** Pediatric Audiology (3 semester hours) Etiological, medical and genetic considerations relevant to the pediatric population. Emphasis on current diagnostic options with infants and young children, including those having developmental delays from cognitive deficits or physical disabilities. (3-0) Y

**AUD 6352** Medical Audiology (3 semester hours) Etiology and pathology of auditory/vestibular disorders and diagnostic and treatment procedures. (3-0) Y

**AUD 6v20** Laboratory Procedures in Audiology and Hearing Science (1-9 semester hours) Application in structured laboratories of principles taught in diagnostic audiology, rehabilitation audiology, hearing science, amplification, cochlear implant and electrophysiology courses. (May be repeated for credit.) (0-[1-9]) Y
science, amplification, cochlear implant and electrophysiology courses. To be taken with AUD 6303, AUD 6310, AUD 6311, AUD 6316, AUD 7321, AUD 7326, AUD 7327 and AUD 7353. (May be repeated for credit) (0-1-9) Y

**AUD 7182** Issues in Mentoring and Counseling (1 semester hour) This course focuses on topics in patient counseling and professional mentoring. Counselors and mentors across various disciplines will discuss the importance of effective communication as it relates to key issues in clinician-patient interaction, family dynamics, and workplace dynamics. (1-0) Y

**AUD 7210** Professional Issues in Audiology (2 semester hours) Ethics and professional issues in various practice settings, including multicultural considerations, licensure, certification, outcome measures, liability, malpractice, and practice management. (2-0) Y

**AUD 7228** Hearing Loss Prevention (2 semester hours) Identification and prevention of hearing loss in children and adults. Focuses on industrial and military hearing conservation programs. Includes hearing loss prevention in children, noise measurement techniques, and hearing protection. (2-0) Y

**AUD 7240** Auditory Processing Disorders (2 semester hours) Auditory processing disorders with respect to underlying etiologies and behavioral and electrophysiologic procedures for diagnosis and therapeutic management. (2-0) Y

**AUD 7280** Doctoral Practicum in Audiology (2 semester hours) Supervised doctoral level experience in assessment and habilitation/rehabilitation of hearing impairment. (May be repeated for credit) ([1-9]-0) S

**AUD 7321** Theories of Amplification (3 semester hours) The affect of sensory hearing loss on speech perception. Compression and hearing aid signal processing. Verification of hearing aid performance including electroacoustic and probe microphone measurement. Assessing candidacy, prescribing hearing aid performance and assessing hearing aid outcomes. (3-0) Y

**AUD 7324** (COMD 7324, ACN 7324) Seminar in Cochlear Implants and Technology for Persons with Hearing Impairments (3 semester hours) Overview of prosthetic alternatives to conventional amplification for individuals with severe-to-profound hearing loss. Topics include candidacy determination, technology, programming/fitting of devices, aural (re)habilitation, and awareness of controversial areas related to cochlear implantation. (3-0) Y

**AUD 7325** Intensive Auditory Rehabilitation for Adult Hearing Loss (3 semester hours) Intensive experience with comprehensive rehabilitation of adults and/or teens with a focus on research and clinical techniques to facilitate communication in employment, social, and home situations through the use of communication strategies and advanced assistive technology. (3-0) Y

**AUD 7326** Aural Habilitation of Children with Hearing Impairments (3 semester hours) Issues in selection and fitting of amplification and FM systems for children, rationale and methods of auditory training, optimizing the auditory environment, communication options, and family-centered intervention. (3-0) Y

**AUD 7327** Evaluation and Fitting of Amplification Systems (3 semester hours) Advanced study of digital technology in amplification systems including compression, noise reduction, signal-to-noise ratio enhancement, feedback suppression, frequency lowering technology and speech enhancement strategies. Verification of advanced features in hearing aid delivery. Examination of new developments in hearing aid
Research in Audiology (3 semester hours) Review of statistical principles including the relationship between working hypotheses and methodology and outcomes to prepare individuals to become a critical consumer of research. Scientific writing process including journal publication, scientific posters, and writing style. (3-0) Y

AUD 7339 (COMD 7339) Evidence-Based Practice in Communication Disorders (3 semester hours) Evidence-based practice as a paradigm for identifying, appraising, and using high-quality evidence to plan research studies and to make decisions about clinical practice. (3-0) Y

AUD 7351 Physiologic Assessment of Vestibular System (3 semester hours) Anatomy, physiology and pathophysiology of the vestibular, oculomotor and related systems used for maintaining equilibrium and balance. Disorders affecting balance. Procedures used for diagnostic assessment of the vestibular system including ENG/VNG, rotational chair and platform posturography and vestibular evoked myogenic potentials. Medical and non-medical treatments for balance disorders. (3-0) Y

AUD 7353 Clinical Electrophysiology (3 semester hours) Evoked and event-related potentials including recording techniques, neurophysiological mechanisms, and applications to clinical populations. (3-0) Y

AUD 7371 Doctoral Seminar in Audiology (3 semester hours) Selected topics and current research in audiology and hearing science. (May be repeated for credit.) (3-0) Y

AUD 7v82 Special Topics in Hearing Science and Audiology (1-9 semester hours) Selected topics and current research in hearing science and audiology. Topics will vary from semester to semester. (May be repeated for credit.) ([1-9]-0) R

AUD 8v80 Individual Research in Audiology (1-9 semester hours) Independent research project to fulfill the Doctor of Audiology research requirement. (May be repeated for credit.) ([1-9]-0) S

AUD 8v97 Doctoral Internship in Audiology (1-9 semester hours) Intensive, full-time, clinical audiology practicum in a work setting that provides exposure to a diverse clinical population and a wide breadth of audiologic services. Completed during the fourth year of the AuD Program. (May be repeated for credit.) ([1-9]-0) S