



DOCTOR OF AUDIOLOGY PROGRAM COURSE DESCRIPTIONS

Fall (Year 1)

AuD 501: Acoustics and Instrumentation

Fundamentals of the physics of sound and techniques for measuring and analyzing sound and sound environments related to audiological practice. 3 units. Prerequisites: none.

AuD 502: Anatomy and Physiology

Anatomy and physiology of the auditory and vestibular systems, including outer ear, middle ear, and inner ear; embryologic origins and development of structures related to body systems. 3 units.

Prerequisites: none.

AuD 503: Psychoacoustics

Psychoacoustic theory and methods; auditory perception in normal hearing and hearing-impaired listeners. Includes lab demonstrations and projects. 3 units. Prerequisites: none.

AuD 504: Audiological Assessment

Evaluation of hearing using the standard audiological test battery (pure tone audiometrics, speech audiometry, acoustic immittance, and OAEs); differential diagnosis of hearing loss. 3 units. Prerequisites: none.

AuD 505a: Professional Issues I

Topics related to the professional practice of audiology, including: the role of professional associations; scope of practice; code of ethics; HIPPA regulations; introduction to interprofessional practice; introduction to evidence-based practice. Clinical observations and experiences that underscore concepts will be included. 3 units. Prerequisites: none.

Spring (Year 1)

AuD 506: Anatomy and Physiology of the Central Auditory Nervous System (CANS)

The organization and function of the central auditory nervous system, including the effects of hearing loss on brain organization. The relationship between visual/proprrioceptive systems and hearing and balance also will be examined. 3 units. Prerequisites: AuD 502 and 503.

AuD 507: Hearing Aids I

Electroacoustical characteristics of hearing aids and group amplification systems. Topics include signal processing strategies and software used by audiologists to provide audible, intelligible, and comfortable amplification. Devices used in specialized hearing aid fittings also will be examined. 3 units.

Prerequisites: none.

AuD 508: Audiological Assessment II

Advanced concepts in tympanometry and otoacoustic emissions, and their role in the evaluation and differential diagnosis of hearing loss. 3 units. Prerequisites: AuD 504.

AuD 509: Practicum in Audiology

Placement in SJSU on-campus audiology clinic for supervised training in providing audiological services to the local community. May be repeated for credit. 3 units. Prerequisites: AuD 504 and AuD 505.

AuD 511: Pediatric Audiology

Topics related to hearing loss in children, including common etiologies and syndromes; newborn hearing screening procedures; and behavioral and electrophysiological diagnostic tests. 3 units.

Prerequisites: AuD 504 and AuD 508.

Summer (Year 1)

AuD 505b: Professional Issues II

Topics related to the professional practice of audiology, including patient and family counseling; report writing; role of audiologist in the IEF/IFSP process. 3 units. Prerequisites: AuD 505.

AuD 510a: Clinical Rotation in Audiology I

Supervised clinical practice in audiology at an off-site location. Doctoral students are expected to become increasingly independent and knowledgeable about patient care with each subsequent placement. 3 units. Prerequisite: successful completion of Fall and Spring year 1.

AuD 521: Medical Audiology

Pathologies of the ear and medical diagnosis and treatment; interprofessional practice in the audiological and medical community. 3 units. Prerequisite: second year standing.

Fall (Year 2)

AuD 510b: Clinical Rotation in Audiology II

Supervised clinical practice in audiology at an off-site location. Doctoral students are expected to become increasingly independent and knowledgeable about patient care with each subsequent placement. 3 units. Prerequisite: second year standing.

AuD 513: Research Methods

Design and analysis of research experiments, including the role of evidence-based practice in patient care. 3 units. Prerequisite: second year standing.

AuD 514: Audiological Assessment III

Theoretical and applied aspects of electrophysiological testing, including: brainstem responses; middle-latency responses; and cognitive potentials. 3 units. Prerequisite: second year standing.

AuD 515: Hearing Aids II

Selection, fitting, and verification methods for optimizing hearing aid use, satisfaction, and benefits. 3 units. Prerequisite: second year standing.

AuD 516: Adult Auditory Rehabilitation

Topics related to the management of adults with hearing loss, including the impact of hearing loss on adults of all ages; diagnosis of handicap; communicative strategies; speechreading; individual and group therapy techniques. 3 units. Prerequisite: second year standing.

Spring (Year 2)

AuD 518: Hearing Conservation

The effects of noise on hearing. Topics include definitions and measurement of occupational and recreational noise; changes in auditory physiology as a result of noise exposure; psychological effects of noise on function and productivity; federal and state regulations regarding workplace safety; and elements of hearing conservation programs (measurement; counseling; provision of ear protection). 3 units. Prerequisite: second year standing.

AuD 519: Hearing Aids III

Advanced concepts in selecting, fitting, and verification of specialized hearing devices, including cochlear implants; middle-ear implants; assistive communication technologies for individuals with hearing loss. 3 units. Prerequisite: second year standing.

AuD 598: Research Project

Readings and discussion of topics in preparation for doctoral student research. A research question and its justification, as well as an outline of the intended experimental process, will be finalized. 2 units.

AuD 510c: Clinical Rotation in Audiology III

Supervised clinical practice in audiology at an off-site location. Doctoral students are expected to become increasingly independent and knowledgeable about patient care with each subsequent placement. 3 units. Prerequisite: second year standing.

AuD 512: Pediatric Auditory Habilitation

Topics related to the management of children diagnosed with hearing loss, including: interprofessional practices; early intervention; communication modalities; hearing aid selection, provision, orientation, and follow up; FM systems; introduction to cochlear implants; Deaf community. 3 units. Prerequisites: AuD 505 and 507.

Summer (Year 2)

AuD 517: Audiological Assessment IV

Theoretical and applied aspects of vestibular assessment, including the administration and interpretation of electronystagmography (ENG), rotation, and posturography. 3 units. Prerequisite: second year standing.

AuD 522: Tinnitus

Etiology, diagnosis, and evidence-based treatments for patients with tinnitus. 2 units. Prerequisite: second year standing.

AuD 523: Pharmacology

Principles and applications of pharmacology for audiologists. 1 unit. Prerequisite: second year standing.

AuD 598: Research Project

Methodology for student research projects will be finalized and IRP approval obtained, if needed. 2 units.

AuD 510d: Clinical Rotation in Audiology IV

Supervised clinical practice in audiology at an off-site location. Doctoral students are expected to become increasingly independent and knowledgeable about patient care with each subsequent placement. 3 units. Prerequisite: second year standing.

Fall (Year 3)

AuD 510e: Clinical Rotation in Audiology V

Supervised clinical practice in audiology at an off-site location. Doctoral students are expected to become increasingly independent and knowledgeable about patient care with each subsequent placement. 3 units. Prerequisite: third year standing.

AuD 524: Speech Perception and Language Development

Topics include normal speech and language development; effects of hearing loss on speech and language development; specialized tests of speech recognition in quiet and noise; and central auditory processing evaluation and treatment. 3 units. Prerequisite: third year standing.

AuD 505c: Professional Issues III

Interprofessional identification, diagnosis, and treatment of adults and children with hearing loss and other disabilities including seminar discussion and clinical practicum experience. 3 units. Prerequisite: third year standing.

AuD 598: Research Project

Data collection and analysis for doctoral student research projects. 2 units.

Spring (Year 3)

AuD 505d: Professional Issues IV

Business practices in audiology, including billing and coding; practice management; interview strategies and processes for obtaining fourth year externships. 2 units. Prerequisite: third year standing.

AuD 525: Genetics

Applications of genetics for audiologists, including syndromes involving the auditory and vestibular systems. 1 unit. Prerequisite: third year standing.

AuD 598 Research Project

Completion of student research projects; oral presentations. 2 units.

AuD 510f: Clinical Rotation in Audiology VI

Supervised clinical practice in audiology at an off-site location. Doctoral students are expected to become increasingly independent and knowledgeable about patient care with each subsequent placement. 3 units. Prerequisite: third year standing.

Summer (Year 3)

AuD 505e: Professional Issues V

Cultural competency, multicultural issues. 3 units.

AuD 526a: Clinical Externship in Audiology I

Full time clinical placement in an off-site facility. 3 units.

Fall (Year 4)

AuD 526b: Clinical Externship in Audiology II

Full time clinical placement in an off-site facility. 3 units.

Spring (Year 4)

AuD 526c: Clinical Externship in Audiology III

Full time clinical placement in an off-site facility. 3 units.