| **Required Course Numbers** |
| --- |
| **Test Content Categories** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **I. Foundations (10%)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **A. Acoustics/psychoacoustics** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Basic parameters of sound |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Principles of acoustics as related to speech sounds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Sound measurement |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Psychoacoustic principles, methods, and applications |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **B. Anatomy, physiology, and behavior over the life span** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. the auditory system |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. the balance system |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. neuroanatomy and neurophysiology |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. embryology and development of hearing and balance mechanisms |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. normal processes of auditory behavior over the life span |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. language and speech characteristics and their development over the life span |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. effects of hearing loss on language and speech, and on educational, vocational, social, and psychological functioning |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **C. Etiology**  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. genetics and associated syndromes related to hearing and balance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. pathologies related to hearing and balance and their medical diagnosis and treatment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Pharmacology, ototoxicity, and vestibulotoxicity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **D. Psychometrics and Instrumentation** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Test construction principles |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Test reliability and validity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Calibration of audiometric equipment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **E. Principles of counseling** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **F. Cultural and linguistic diversity, including Deaf Culture** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **II. Prevention and Identification (10%)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **A. Education and Prevention (Conservation)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Informing clients about |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. causes and effects of hearing loss (congenital and acquired) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. causes and effects of vestibular disorders |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| c. protection from hearing loss and vestibular disorders |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Universal precautions, including infection control and bioelectrical hazards |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Selecting and fitting hearing protection devices (HPDs) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **B. Screening and Risk Assessment** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  1. Selecting and administering procedures to identify individuals who require: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. further audiologic evaluation and/or treatment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. referral for speech and/or language assessment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| c. referral for other professional services |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Identifying individuals at risk for balance problems and falls who require further vestibular evaluation and/or treatment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Newborn hearing screening programs (early hearing detection and intervention [EHDI]) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Selecting, administering, and interpreting self-report measures of hearing problems |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **III. Assessment (40%)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **A. Assessment Planning** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Gathering and evaluating client information (case histories and information from referral sources) to facilitate assessment planning and identify potential etiologic factors |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Verifying proper functioning of assessment equipment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Selecting and modifying procedures based on client factors; e.g., age, developmental level, functional status, behavior, cultural and linguistic diversity, physical, sensory, and cognitive abilities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **B. Audiologic Evaluation – Behavioral** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Administering and interpreting |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Pure-tone air and bone conduction testing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Speech audiometry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Tests for functional hearing loss |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Tests for children above 6 months developmental age; e.g., visual reinforcement audiometry and conditioned-play audiometry |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **C. Audiologic Evaluation – Physiologic**  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Administering and interpreting  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Immittance testing tympanometry  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Immittance: acoustic reflex testing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Immittance: otoacoustic emission testing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Immittance: other |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. AEP: auditory brainstem response (ABR) threshold testing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. AEP: ABR for neurodiagnostic evaluation |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. AEP: auditory steady state |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8. AEP: other |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **D. Other Assessments and Evaluations**  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Administering and interpreting |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Otoscopy: performing otoscopy and ensuring appropriate follow-up, including diagnostic evaluations, intervention, and referrals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  2. Self-report measures of hearing problems and their impact on daily living |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Balance system assessment; e.g.,  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. videonystagmography (VNG) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. electronystagmography (ENG)  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| c. rotational tests |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Assessment of communication function; e.g.,  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. speech in noise testing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. spatial testing |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| c. self-report measures |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. Assessment of tinnitus; e.g.,  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. pitch matching  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. loudness matching  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| c. self-report measures  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. Evaluating (central) auditory processes; e.g., |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. gap detection |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. dichotic digits |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| c. filtered speech |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **E. Integrating Assessment Results** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Integrating assessments (behavioral, physiologic, neurodiagnostic, and other evaluations)  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. to establish type and severity of hearing loss  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. to support recommendations for further evaluation and/or referral |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Integrating balance function tests (e.g., VNG) with other results to evaluate balance function |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **F. Documentation and Communication** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Documenting the procedures and results of evaluations |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Generating recommendations based on evaluations, including referrals, as appropriate, to other audiologists and related professionals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Communicating results and recommendations to relevant individuals (e.g., clients, caregivers, physicians, agencies) to coordinate a plan of action |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Interacting effectively with clients, families, other appropriate individuals, and professionals including working with interpreters (ASL and other languages, sign systems) to effectively communicate with clients |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **IV. Intervention (30%)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Evaluating client information to facilitate treatment planning:  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. information from referral sources  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. case histories |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Selecting and modifying treatment procedures based on client factors; e.g., age, developmental level, functional status, behavior, cultural and linguistic diversity, physical, sensory, and cognitive abilities  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Integrating results of assessments and other evaluations to support recommendations for treatment and/or referral |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **B. Device Selection** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Evaluating client’s perceived hearing handicap and expectations related to hearing devices |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Determining candidacy for and selecting:  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. hearing aids  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. other assistive listening and alerting devices  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| c. cochlear implant(s)  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| d. other implantable devices (e.g., bone-anchored hearing aids) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Determining candidacy for and selecting: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. hearing assistive technology system (HATS) for adults; e.g., personal and group amplification systems, assistive listening, and alerting devices |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. hearing assistive technology system (HATS) for children |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **C. Hearing Aids** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Evaluating, for the purpose of hearing aid selection,  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. speech recognition in noise  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. loudness discomfort |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Programming hearing aids |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Hearing aid coupling; e.g., ear mold modifications, sound bore length, materials  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Selecting features and processing strategies based on client communication needs; e.g.,  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  5. type of amplitude processing  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. feedback suppression  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7. direct audio input |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **D. Cochlear Implants** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Programming cochlear implants |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Evaluating implant effectiveness and making appropriate modifications |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Selecting processing and programming strategies based on client communication needs |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **E. Device Verification and Validation** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Verifying proper functioning of hearing aids and other assistive devices |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Conducting quality control measures (e.g., electroacoustic measures, feature-specific probe microphone measures) on hearing technology |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Probe microphone verification for children; e.g., real ear to coupler difference (RECD) aided thresholds |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Probe microphone verification for adults; e.g.,  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. real ear insertion gain (REIG) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. real ear aided response (REAR)  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| c. real ear saturation response (RESR) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5. Evaluating hearing technology effectiveness; e.g., outcome measures, aided speech recognition |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6. Repairing and modifying hearing technology devices, when appropriate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **F. Audiologic (Re)habilitation/lntervention** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Evaluating and modifying audiologic (re)habilitation, including therapy schedule, discharge criteria, frequency, duration, and type of service |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Teaching communication strategies to clients and their significant others; e.g.,  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. speech reading  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. conversational repair strategies |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Facilitating communication development and/or auditory learning (listening, speech, expressive, and receptive language) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Providing support for school-age children; e.g.,  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. counseling  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. addressing the acoustic environment  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| c. consulting with educational personnel  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| d. providing direct therapy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **G. Tinnitus Management** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Counseling and sound management intervention (e.g., environmental sound sources, ear level sound generators) and follow-up |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **H. Vestibular Rehabilitation** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Treatment for benign paroxysmal positional vertigo (BPPV) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **I. Counseling** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Counseling related to device use and safety |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Counseling children’s caregivers about hearing loss, communication development, and modes of communication |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Providing individual, family, and group counseling related to hearing loss and subsequent communication and areas of psychosocial, behavioral, vocational, and educational adjustment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Making referrals, as appropriate, to other audiologists and related professionals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **J. Documentation and Communication** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Documentation of intervention processes and results |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Generating recommendations resulting from intervention processes |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Communication of recommendations to relevant individuals (e.g., clients, caregivers, physicians, agencies) to coordinate a plan of action |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Interacting effectively with clients, families, other appropriate individuals, and professionals including working with interpreters (ASL and other languages, sign systems) to effectively communicate with clients about treatment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **V. Professional Issues (10%)**  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **A. Professional Practice** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Different service delivery models in health care and school-based settings |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Management and business practices; e.g.,  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. coding and reimbursement  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. case management |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Effective and appropriate communication of results, recommendations, and intervention status  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. selecting the means of communication; e.g., formal reports, notes, emails, phone calls  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. using language appropriate for the recipient  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| c. maintaining client/patient privacy |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Equipment calibration and maintenance to standards and manufacturer’s specifications |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **B. Legal and Ethical Practice and Advocacy** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Standards for professional conduct |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Protection of clients’/patients’ rights |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3. Legislative and regulatory mandates |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4. Advocacy for appropriate services  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| a. underserved populations  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| b. inclusion of services in individualized education programs (IEPs)  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| c. insurance appeals |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **C. Evidence-Based Practice** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1. Application of research findings to maintain currency in care |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2. Research principles and practices; e.g., experimental design, statistical methods, and application to clinical populations |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |