Course Description

Master of Science in Audiology

Shahid Beheshti University of Medical Sciences

Evaluation, Prescription & Fitting of Hearing Aids (Advanced)

Evaluation, verification procedures with emphasis on advanced technologies and strategies. Familiarity with principle and methods of impression and various soft and hard ear mold and hard ear shell (with otoplastic and

acrylic material). Hands-on work with components, fabrication of shells and ear molds, assembly of ITE hearing aids; repair of different types and models. Familiarity with advanced REM (Real Ear Measurement)

Biostatistics

Behavioral statistics will be introduced and applied to data sets using commercially available statistical analysis software. Basic parametric and non-parametric tests will be reviewed.

Research Methodology

Application of the scientific method to audiological research: evaluation of research design; statistical analysis. Prerequisites: Undergraduate course in behavioral statistics.

Neuroscience with special emphasis on auditory

Neurocognitive deficits of language in dementia, traumatic brain injury, and right hemisphere damage.

Psycholinguistics

Producing and comprehending language. The goal of this course is to introduce students to major research questions and findings in psycholinguistics, including speech perception, the mental lexicon, syntactic processing, pragmatics and conversation.

Auditory Electrophysiological tests

Advanced concepts in electrophysiological measurement and interpretation with special emphasis on recording and interpreting the ABR, MLR, LLR, P300, VEPM.

Speech Processing and Perception

Understanding speech processing and perception in hearing-impaired and/or aged listeners. Auditory and cognitive hypotheses to explain speech-recognition deficits; and clinical and theoretical intervention strategies to alleviate perceptual deficits in these populations.

Vestibular System evaluation methods and rehabilitation

Assessment and treatment of balance and related auditory disorders. Evaluation of vestibular function, using techniques such as caloric and rotational electronystagmography and posturography. The interpretation of clinical findings and implications for rehabilitative strategies will be covered.

Clinical Practicum I (Auditory electrophysiology tests)

☎: +98-77561721-4 (248-249)
💻: audiologydeptsbmu@gmail.com

Understanding clinical auditory elctrophysiological measures, including auditory-evoked and event related potentials, otoacoustic emissions, and common clinical protocols applied to auditory disorders.

Clinical Practicum I (Vestibular System evaluation and Rehabilitation)

Clinical evaluation of vestibular function, using techniques such as caloric and rotational electronystagmography and posturography. The interpretation of clinical findings and implications for rehabilitative strategies will be covered.

Clinical Practicum II (Aural Rehabilitation in Specific Patients)

Central auditory processing assessment and management for pediatrics and adults. Focus on behavioral tests assessing dichotic listening, temporal processes, pattern recognition, and performance with competing and degraded signals

Aural Rehabilitation in Specific Patients

Central auditory processing assessment and management for pediatrics and adults. Focus on behavioral tests assessing dichotic listening, temporal processes, pattern recognition, and performance with competing and degraded signals. Prerequisites: course restricted to AuD students.

Thesis

The thesis is supervised by a major adviser and a thesis committee. Following acceptance of the thesis by the committee, an external examiner is appointed by the graduate committee. 4 credits

☎: +98-77561721-4 (248-249)

: audiologydeptsbmu@gmail.com