AUDIOLOGY AND SPEECH SCIENCES

Department of Audiology and Speech Sciences
College of Communication Arts and Sciences

113. Oral Communication Principles and Skills
Fall, Spring, Summer. 3(2-2)
Study, development and enhancement of oral communication skills including speech, voice, language and listening.

203. Introduction to Communication Sciences and Disorders
Fall, Spring. 3(3-0) Not open to students with credit in ASC 403.
Survey of research and practice regarding speech, hearing and language disorders in children and adults.

214. Anatomy and Physiology of the Speech and Hearing Mechanism
Fall. 4(3-2) P: (ASC 203 or concurrently)
Structural and functional analyses of the central and peripheral auditory mechanisms, and of the respiratory, phonatory, and articulatory mechanisms for speech.

232. Descriptive Phonetics
Fall. 3(1-3)
Principles of speech production. Transcription of speech using the International Phonetic Alphabet.

255. Speech and Hearing Sciences
Spring. 5(4-2) P: (ASC 214 and ASC 232 or concurrently)
One ISP course and completion of the University Mathematics requirement.
Application of the scientific method to the studies of audition, speech perception and speech production.

335. Oral Language Development
Fall, Spring. 3(3-0) P: (PSY 101) and (LIN 401 or ENG 302) R: Not open to freshmen.
Development of receptive and expressive aspects of child language.

344. Evaluation Procedures in Audiology
Fall. 4(3-2) P: (ASC 253) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Audiology and Speech Sciences.
Classification of hearing disorders. Behavioral and electrophysiological measurement of hearing, including subjective and objective testing procedures.

364. Evaluation Procedures in Speech-Language Pathology
Fall. 4(3-2) P: (ASC 253 and ASC 323) and completion of Tier I writing requirement. R: Open only to juniors or seniors in the Department of Audiology and Speech Sciences.
Evaluation procedures in speech-language pathology, test procedures, evaluation of results, and report writing.

394. Guidelines for Clinical Practice
Fall, Spring, Summer. 2(2-0) P: (ASC 344 and ASC 364) R: Open only to juniors or seniors in the Department of Audiology and Speech Sciences.

403. Communication Sciences and Disorders
Fall. 3(3-0) R: Not open to freshmen or sophomores. Not open to students in the Department of Audiology and Speech Sciences. Not open to students with credit in ASC 203.
Research and practice regarding communication disorders and the professions of speech-language pathology and audiology.

433. Language Dialect Differences in Applied Contexts
Spring. 3(3-0) P: (PSY 101) and (LIN 200 or LIN 401 or ENG 302) R: Not open to freshmen or sophomores.
Regional, ethnic, and cultural characteristics of American English. Comparison of speech-language differences and disorders.

443. Aural Rehabilitation
Spring. 3(2-0) P: (ASC 344) ASC 344. R: Open only to juniors or seniors in the Department of Audiology and Speech Sciences.
Fundamental aspects of auditory rehabilitation, including individual and group amplification systems, auditory training, speechreading, and counseling with children and adults.

463. Intervention Procedures in Speech-Language Pathology
Spring, 3(3-0) P: (ASC 344) ASC 344. R: Open only to juniors or seniors in the Department of Audiology and Speech Sciences.
Intervention procedures for individuals with developmental and acquired communication disorders.

483. School-Based Communication Disorders Programs
Spring. 3(3-0) P: (ASC 463 or concurrently) and (ASC 394 or concurrently) R: Open only to juniors or seniors in the Department of Audiology and Speech Sciences.
Administrative and regulatory aspects of school-based programs for persons with communication disorders.

490. Independent Study
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Approval of department.
Individualized student activities in human communication sciences and disorders.

494. Clinical Practicum in Communication Disorders
Fall, Spring, Summer. 2 credits. A student may earn a maximum of 4 credits in all enrollments for this course. P: (ASC 394 and ASC 463) A minimum of 25 hours of approved clinical observation. R: Open only to juniors or seniors in the Department of Audiology and Speech Sciences.
Approval of department. Supervised clinical experiences, working with individuals who have speech, language and/or hearing disorders.

803. Research Methods in Communication Sciences and Disorders
Fall. 3(3-0) R: Open only to graduate students in Audiology and Speech Sciences.
Hypothesis generation, experimental design, data collection, data analysis and presentation.

813. Neuroanatomy and Neurophysiology of Speech, Language, and Hearing
Fall. 3(3-0) R: Open only to graduate students in Audiology and Speech Sciences.
Structural and functional descriptions of the nervous system as it relates to communication sciences and disorders.

823A. Acquired Language Disorders
Spring. 3(3-0) P: ASC 813 or concurrently. R: Open only to graduate students in Audiology and Speech Sciences.
Neuropathology, symptomatology, and speech-language rehabilitation of individuals with aphasia and related disorders.

823B. Motor Speech Disorders
Fall. 3(3-0) P: ASC 813 or concurrently. R: Open only to graduate students in Audiology and Speech Sciences.
Neuropathology, symptomatology, and speech-language habilitation and rehabilitation of individuals with motor speech disorders.

823C. Voice Disorders
Summer. 3(3-0) R: Open only to graduate students in Audiology and Speech Sciences.
Etiology, symptomatology, diagnosis, and treatment of voice disorders in children and adults.

823D. Fluency Disorders
Fall. 3(3-0) R: Open only to graduate students in Audiology and Speech Sciences.

823E. Assessment of Childhood Language Disorders
Fall. 3(3-0) R: Open only to graduate students in Audiology and Speech Sciences.
Evaluation of language disorders of preschool, school-aged, and adolescent populations.

823F. Language Intervention: Early Stages
Spring. 3(3-0) P: ASC 823E or approval of department. R: Open only to graduate students in Audiology and Speech Sciences.
Principles of intervention in language disorders for children functioning at or below preschool levels, regardless of chronological age.

823G. Language Intervention: Later Stages
Summer. 3(3-0) P: ASC 823E or approval of department. R: Open only to graduate students in Audiology and Speech Sciences.
Principles of intervention in language disorders for school-age children and adolescents functioning above preschool levels.
Descriptions—Audiology and Speech Sciences

890. Independent Study
Fall, 3(3-0) R: Open only to graduate students in Audiology and Speech Sciences. History and philosophy of augmentative communication. Assessment, system selection, and intervention considerations for aided and unaided systems. Topics include synthesized voice output and micro-processor-based systems.

833. Auditory Psychophysics
Spring, 3(3-0) P: ASC 803 or concurrently. R: Open only to graduate students in Audiology and Speech Sciences. Psychophysical theory and methods as applied to the study of hearing phenomena.

843A. Hearing Assessment
Fall, 3(3-0) R: Open only to graduate students in Audiology and Speech Sciences. Clinical evaluation of hearing. Pure tone and speech audiometry. Immittance testing.

843B. Differential Diagnostic Audiology
Spring, 3(3-0) P: ASC 843A. R: Open only to graduate students in Audiology and Speech Sciences. Tests of peripheral and central auditory function for differential diagnostic of hearing impairment.

843C. Hearing Amplification and Rehabilitation
Spring, 3(3-0) P: ASC 843A. R: Open only to graduate students in Audiology and Speech Sciences. Clinical management of the hearing impaired. Amplification and other forms of aural rehabilitation.

843D. Electrophysiologic Assessment
Fall, 3(3-0) P: ASC 813 or concurrently. R: Open only to graduate students in Audiology and Speech Sciences. Theory and methods of electrophysiologic testing of the auditory and vestibular systems.

843E. Special Populations in Audiology
Summer, 3(3-0) P: ASC 843C. R: Open only to graduate students in Audiology and Speech Sciences. Audiologic considerations and evaluative procedures for infant, pediatric, mentally-impaired, multiply-handicapped, and geriatric populations.

843F. Hearing Conservation
Fall, 3(3-0) P: ASC 823, ASC 842A, or approval of department. R: Open only to graduate students in Audiology and Speech Sciences. Hearing conservation programs in occupational, educational, and community settings. The role of the audiologist.

890. Independent Study
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 8 credits in all enrollments for this course. R: Open only to graduate students in Audiology and Speech Sciences. Approval of department. Individualized study under faculty direction.

890A. Clinical Practicum in Speech-Language Pathology
Fall, Spring, Summer. 1 credit. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to graduate students in Audiology and Speech Sciences. Approval of department. Supervised clinical experience in the management of clients with speech-language disorders.

894B. Clinical Practicum in Audiology
Fall, Spring, Summer. 1 to 4 credits. A student may earn a maximum of 6 credits in all enrollments for this course. R: Open only to graduate students in Audiology and Speech Sciences. Approval of department. Supervised clinical experience in the management of clients with hearing disorders.

999. Doctoral Dissertation Research
Fall, Spring, Summer. 1 to 24 credits. A student may earn a maximum of 8 credits in all enrollments for this course. P: ASC 803 or concurrently. R: Approval of department. Individual research under faculty supervision.

100. Current Issues in Biochemistry
Spring, 1(1-0) R: Open only to freshmen or sophomores. Not open to students with credit in BCH 101. Contemporary biochemistry: its impact on environmental, medical, and social sciences.

101. Frontiers in Biochemistry
Fall, 1(1-0) R: Open only to freshmen or sophomores. Not open to students with credit in BCH 100. Description of topics in biochemistry research.

461. Biochemistry I
Fall, 3(4-0) P: (CEM 143) Not open to students with credit in BCH 401 or BCH 461. Basic structures of major classes of biologically important molecules and metabolic activities of major importance in living organisms.

462. Biochemistry II
Spring, 3(4-0) P: (BCH 461) Not open to students with credit in BCH 200 or BCH 401. Protein structure and function, enzymology, bioenergetics, and intermediary metabolism.

BIOCHEMISTRY BCH
Department of Biochemistry
College of Human Medicine
College of Natural Science
College of Osteopathic Medicine

100. Current Issues in Biochemistry
Spring, 1(1-0) R: Open only to freshmen or sophomores. Not open to students with credit in BCH 101. Contemporary biochemistry: its impact on environmental, medical, and social sciences.

101. Frontiers in Biochemistry
Fall, 1(1-0) R: Open only to freshmen or sophomores. Not open to students with credit in BCH 100. Description of topics in biochemistry research.

200. Introduction to Biochemistry
Fall, 4(4-0) P: (CEM 143) Not open to students with credit in BCH 401 or BCH 461. Basic structures of major classes of biologically important molecules and metabolic activities of major importance in living organisms.

401. Basic Biochemistry
Fall, Spring, 4(4-0) P: (CEM 252 or CEM 352) R: Not open to students in the Biochemistry/Biotechnology major. Not open to students with credit in BCH 200 or BCH 401. Structure and function of major biomolecules, metabolism, and regulation. Examples emphasize the mammalian organism.

461. Biochemistry I
Fall, 3(4-0) P: (CEM 252 or CEM 352) and (BS 110) and (MTF 124 or MTH 132 or MTH 152H or LBS 118) and (BS 111L or LBS 145 or LBS 158H or LBS 159H) Not open to students with credit in BCH 200 or BCH 401. Protein structure and function, enzymology, bioenergetics, and intermediary metabolism.

462. Biochemistry II
Spring, 3(4-0) P: (BCH 461) Not open to students with credit in BCH 401 or BCH 461. Summary of BCH 461 with emphasis on metabolic regulation and nucleic acid structure, replication and protein synthesis.

471. Biochemistry Laboratory (W)
Spring, 3(0-9) P: (BCH 401 or BCH 461) and (BS 110 and (CEM 262 and CEM 356 and CSE 101) and (MTF 124 or MTH 124 or MTH 152H or LBS 118) and (BS 111L or LBS 145 or LBS 158H or LBS 159H) and completion of Tier I writing requirement. Biochemical methods and principles used in the study of enzymes (proteins), carbohydrates, lipids, and cell organelles.

472. Biochemistry Laboratory
Fall, 3(0-9) P: (BCH 462) and (CEM 262) R: Open only to Biochemistry or Biochemistry/ Biotechnology majors or approval of department. Methods of molecular biology and the underlying principles on which these methods are based.