Audiology Curriculum
Foundation Course Linkages

**Phonetics**
(HUCD 5020)

Topics covered:
- a. Vowels
- b. Consonants
- c. Suprasegmentals
- d. Clinical transcription
- e. Dialectal variation

**Related Courses**
- HUCD 5140  Aural (Re)habilitation with Children
- HUCD 6360  Amplification I
- HUCD 6560  Amplification II
- HUCD 6640  Advanced Audiologic Rehabilitation
- HUCD 6630  Cochlear Implants
Audition I  
(HUCD 6310)

Topics covered:
- Outer ear, middle ear
- Cochlear anatomy and mechanics
- Hair cell physiology
- Cochlear potential and OATs
- Auditory nerve
- Central auditory system
- Psychoacoustics: perception and discrimination; marking; loudness and pitch

Related Courses
All profession-specific second and third year courses.
Audition II  
(HUCD 5280)

**Topics covered:**
- a. Mechanical conduction in middle and inner ear
- b. Middle ear function and neuronal control
- c. Advanced cochlear physiology
- d. The Efferent auditory system
- e. Neural activities and neural coding system
- f. Methods of central auditory system studies
- g. Signal perception/discrimination

**Related Courses**
- HUCD 5220  Diagnostic Audiology
- HUCD 6320  Pediatric Audiology
- HUCD 6380  Electrophysiological Audiometric Measures
- HUCD 6420  Advanced Diagnostic Audiology
### Speech and Language Acquisition  
(HUCD 5150)

**Topics covered:**

a. Language components (pragmatics, semantics, phonology, morphology, syntax)  
b. Language theories  
c. Language development (infant, toddler, preschool, school-age)  
d. Reading and writing development  
e. Language differences and special populations

### Related Courses

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Introduction to Neurosciences for Communication Disorders  
(HUCD 5290)

Topics covered:

a. Organization of the nervous system  
b. Structure and electrical activity of neurons  
c. Sensory systems  
d. Motor systems  
e. Clinical neuroscience techniques  
f. Etiologies of neurogenic communication disorder  
g. Higher cortical functions and cognitive/behaviour manifestations of brain damage  
h. Cerebral asymmetry  
i. Development and recovery of function

Related Courses

HUCD 6310  Audition I  
HUCD 5220  Diagnostic Audiology  
HUCD 5280  Audition II  
HUCD 6380  Electrophysiological Audiometric Measures  
HUCD 6420  Advanced Diagnostic Audiology  
HUCD 6070  Topics in Audiological Procedures  
HUCD 6630  Cochlear Implants and Other Implantable Technologies
Fundamentals of Speech Science  
(HUCD 5050)

**Acoustics and Sound Science**  
Topics covered:  
- a. Introduction and foundational physical principles  
- b. Vibrations and waves  
- c. Resonance, frequency, pitch  
- d. Sound intensity and loudness perception  
- e. Complex waves and wave analyses

**Structure and Function of Speech System**  
Topics covered:  
- a. Respiratory anatomy and physiology  
- b. Laryngeal function  
- c. Velopharyngeal function  
- d. Pharyngeal function

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All profession-specific second and third year courses.

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### Introduction to Audiology and Speech-Language Pathology (HUCD 5130)

**Topics covered:**

a. Introduction to speech-language pathology  
b. Models of communication processing; international classification of functioning, disability, and health (ICF)  
c. Communication disorders across the lifespan – speech-language pathology  
d. Socio-cultural aspects of communication  
e. Critical diversity; identifying assumptions  
f. Introduction to audiology  
g. Aging  
h. SAC code of ethics  
i. Professional practice issues in speech-language pathology  
j. Professional practice issues in audiology  
k. Living with chronic/episodic illness  
l. Advocacy and media images of communication disorders

### Related Courses

All profession-specific second and third year courses.
Research Design
(HUCD 6980)

Topics covered:

a. Scientific principles & research questions
b. Experimental design & levels of measurement
c. Inferential statistics
d. Groups designs
e. Single subject designs
f. Correlation designs
g. Evidence-based practice:
   - levels of evidence;
   - finding external evidence;
   - evaluating treatment evidence;
   - evaluating diagnostic evidence;
   - scientific evidence;
   - clinical experience; and
   - client preferences

Related Courses

All profession-specific second and third year courses.
Clinical Methods
(HUCD 5071X/Y)

Topics covered:
Clinical Skills Practice: Assessment and Management
a. Facilitating self-knowledge
b. Observation skills
c. Assessment techniques and practice
d. Patient management issues
e. Report writing
f. Behaviour management

Clinical Skills Practice: Interviewing and Counselling
a. Case History taking
b. Interviewing Practice
c. Counselling
d. Counselling Practice
e. Counselling Simulations

Related Courses
All profession-specific second and third year courses.
### Hearing Measurement
(HUCD 5120)

**Topics covered:**
- Pure-tone air and bone-conduction measures
- Audiometric masking
- Speech testing
- Pseudohypoacusis
- Hearing loss prevention
- The immittance battery
- Electrophysiologic measures
- Otoacoustic emissions
- Hearing screening and pediatric assessment
- Hearing aids and implants

### Related Courses

All profession-specific second and third year courses.
Hearing Disorders
(HUCD 5260)

Topics covered:

a. Basic medical terminology
b. Anomalies and disorders of the external ear
c. Eustachian tube and otitis media
d. Infection control in the clinical setting
e. Middle ear and tympanic membrane pathologies
f. Genetic hearing loss
g. Syndromic hearing loss
h. TORCH related hearing loss and cleft palate
i. Acquired, noise-induced and sudden hearing loss
j. Trauma
k. Ototoxicity
l. Presbyacousis
m. Adult neurological disorders
n. Brainstem lesions

Related Courses

All profession-specific second and third year courses.