



1. Course Name, No. of Credit Hours, Lectures-Contact Hours.
2. Course Description
3. Prerequisite(s) 

Course Number	Course Name
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4. Councurrent(s) 

Course Number	Course Name
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❖ **Punctuations:**

- (;) To separate within the course.
- (,) To separate within the same chapter.
- (:) To be followed by items that belong to a main title.
- (.) To end the short description.

**A1121101 Introduction to linguistics {3} [3-3]**

Basic components of language: phonological system; semantic system; syntactic system; morphological system; pragmatic subsystems; language theories and its explanations; recorded samples showing different levels of language production.

*Prerequisite:* -

**A1121102 phonetics {3} [3-3]**

Science of phonetics; clinical phonetics; anatomy and physiology of speech production systems; place of articulation, manner of articulation; airstream mechanisms; secondary articulation and coarticulation; distinctive features; clinical phonetic transcription and diagnosis; introduction of acoustic phonetics and phonation.

*Prerequisite:* -

**A1121201 Principles of Audiology and Speech pathology {3} [3-3]**

Basic principles of human communication; different communication disorders: introduction to speech and language disorders: voice disorders, stuttering, hearing disorders; orientation to the professions of speech pathology and audiology; role of speech pathology and audiology in different speech, language, and hearing disorders.

*Prerequisite:*

**A1122101 Anatomy and physiology of speech {2} [2-2]**

Anatomy and physiology of speech systems: respiratory system, phonatory system, articulatory system, resonatory systems; overall speech process; laryngeal voice production; brain parts that's responsible for movement of speech organs; innervation of speech organs.

*Prerequisite:* A111101 Anatomy and histology

**A1122102 Anatomy and physiology of audiology {2} [2-2]**

Concepts related to the auditory central and peripheral nervous systems; anatomical structures and functions of the hearing system and its organs; parts and functions of the outer ear; middle ear; inner ear: the cochlea, the vestibular system; the auditory nerve; the central auditory pathways.

*Prerequisite:* A111101 Anatomy and histology

### **A1122103 Language acquisition and development {3} [3-3]**

Normal language acquisition; changes with maturation; stages of linguistic structure development: semantics, morphology, phonology; different theories regarding language development and learning second language.

*Prerequisite:* A1121101 Introduction to linguistics

### **A1122104 Basic hearing sciences {3} [2-2]**

This course explains the physics related to sound and provides orientation to the acoustical features of sound and its propagation in the media; including the basic concepts related to acoustics; mathematical calculations related to sound quantification and characteristics; sound propagation; decibel; and room acoustics. This course also focuses on the concepts; methods; and mechanisms related to the psychological perception of sound; including the psycho-measuring methods; pitch perception and its relation to frequency; loudness perception and its relation to intensity; complex sound perception; binaural and masking mechanisms).

*Prerequisite:* A0111201 General Physics

### **A1122201 evaluation of Hearing disorders (1) {2} [2-2]**

Use of hearing evaluation instruments; evaluation techniques; procedures used in conventional hearing evaluation for adults: tuning forks, otoscopy, pure tone audiometry, tympanometry; diagnosis of different hearing disorders.

*Prerequisite:* A1122104 Basic hearing sciences.

### **A1122203 evaluation of Hearing disorders (1) Lab {1} [3-1]**

Supervised hands on training to use different audiometric equipment; hearing tests; procedures for adult audiological evaluations: tuning forks, otoscopy, pure tone audiometry, tympanometry; diagnosis of different hearing disorders.

*Prerequisite:* A1122201 evaluation of Hearing disorders

### **A1122203 Language disorders {3} [3-3]**

Nature and development of language disorders in children; medical cases accompanying language disorders in children; nature of language delay; assessment and management of these disorders; treatment methods; case studies; case history collecting methods; language and speech assessment using standardized tools.

*Prerequisite:* A1122103 Language acquisition and development

### **A1122204 Fluency disorders {3} [3-3]**

Descriptive features of fluency; differential diagnosis of stuttering; description of the stages of its development; etiology of stuttering; theories of stuttering; accuracy of theories to explain developmental levels; assessment; different treatment approaches depending on stuttering level; general consultation for parents and teachers of persons who stutter.

*Prerequisite:* A1122103 Language acquisition and development

### **A1122205 Articulation and phonological disorders {3} [3-3]**

Introduction to articulation and phonological disorders; speech system anatomy; Arabic phonetics; clinical phonetic transcription; normal phonological development; types of articulation disorders, types of phonological disorders; assessment procedures of articulation and phonological disorders; treatment methods.

*Prerequisite:* A1121102 phonetics

**A1122301 Neuroscience {2} [2-2]**

Anatomy and physiology of the nervous system; last advances in neuroscience; recent imaging methods of the nervous system; organization of the nervous system; roles of the nervous system in: motor abilities, cognitive abilities, linguistic abilities; disorders of the nervous system.

**Prerequisite:** A01111101 Anatomy and histology

**A1123201 Behavior modification {3} [3-3]**

Normal and abnormal behavior; behavioral theories; principles of behavior modification; procedures of behavior modification; techniques of behavior modification; research designs in the field of behavior modification; techniques used to shape behavior; techniques used to decrease behavior problems; techniques used to decrease behavior problem; cognitive behavior modification.

**Prerequisite:** A0141501 Introduction to special education.

**A1123202 Introduction to speech training {2} [2-2]**

Clinical practice of speech-language pathology; transition from the classroom to the clinical setting; principles of assessment; application of diagnostic information; team work skill; team leading skills.

**Prerequisite:** A1122103 Language acquisition and development

**A1123203 Speech training (observation) {1} [3-1]**

Observation of diagnostic and treatment sessions in speech clinics; introduction to standard operating procedures of a speech clinic; introduction to instruments available for speech pathologists; introduction to the speech pathologist's role and skills.

**Prerequisite:**

**Co requisite:** A1123202 Introduction to speech training

**A1124302 Otology {3} [3-3]**

Review hearing and speech physiology; different ear pathologies affecting both hearing functions; vestibular functions; speech production; impact of some pathologies on communication; overview of medical diagnosis; overview of medical treatment; hearing conservation.

**Prerequisite:** A1112103 Pathology

**A1123204 evaluation of Hearing disorders (2) {2} [2-2]**

Comprehensive study of theoretical and applied auditory measures used in audiological test battery for adults; masking; acoustic reflexes; non-organic hearing loss; special audiological tests: tone decay, ABLB, SISI, reflex decay.

**Prerequisite:** A1122201 evaluation of Hearing disorders (1)

**A1123205 Evaluation of Hearing disorders (2) Lab {1} [3-1]**

Practical training on testing the hearing of adults, conduct several audiological procedures: masking, acoustic reflexes, non-organic hearing loss; special audiological tests: tone decay, ABLB, SISI, reflex decay; identify proper diagnosis.

**Prerequisite:** A1122202 evaluation of Hearing disorders (1) lab

**Co requisite:** A1123204 evaluation of Hearing disorders (2)

### **A1124301 Neurogenic language disorders {2} [2-2]**

Neurogenic linguistics; anatomy of neurogenic linguistic system: Wirneck's area, Broca's area, subcortical linguistic areas; aphasia: expressive aphasia, receptive aphasia, global aphasia; evaluation of aphasia: functional aphasia, success of rehabilitation assessment; treatment of aphasia.

**Prerequisite:** A1122301 Neuroscience

### **A1123205 Neurogenic speech disorders {2} [2-2]**

Functional anatomy of the speech motor system; speech control model; neurogenic examination; evaluation of neurogenic speech disorders; dysarthria characteristics; dysarthria treatment; evaluation and treatment of communication effectiveness; treatment of secondary speech systems: respiratory, voice production, resonance, articulation, prosody.

**Prerequisite:** A1122301 Neuroscience

### **A1123206 Pediatrics hearing evaluation {3} [3-3]**

Scientific concepts related pediatric hearing evaluation; signs and symptoms of pediatric hearing loss; tests and procedures for evaluating the hearing of children younger than 6 years: visual reinforcement audiometry, play audiometry; neonatal high risk factors; prevention of hearing loss in children; aural rehabilitation techniques for children.

**Prerequisite:** A1123204 Evaluation of hearing disorders (2)

### **A1123207 Clinical practicum in speech (1) {2} [6-2]**

Introduce students to the procedures of evaluation and treatment of different adult and pediatric cases in speech clinic; supervised practicum; report writing: diagnostic reports, follow up and improvement reports, treatment completion reports.

**Prerequisite:** A1123202 Introduction to speech training

### **A1123208 Clinical practicum in Audiology (1) {2} [6-2]**

Supervised clinical training for the students to apply their knowledge and skills on adult patients; develop the skills and knowledge of the students in: principles of audiology practice, methods of counseling and increasing awareness, procedures of hearing evaluation, methods of hearing loss prevention, treatment of hearing loss and intervention.

**Prerequisite:** A1123205 evaluation of Hearing disorders (2) lab

### **A1123209 Hearing aids (1) {2} [2-2]**

This course covers the different types of hearing aids and their acoustical and electronic characteristics; including the hearing aid components; electroacoustic features; digital sound processing; acoustic features of earmolds; assistive listening devices; ear-impression procedures; and earmold manufacturing procedures.

**Prerequisite:** A1123204 evaluation of Hearing disorders (2)

### **A1124201 Hearing aids {2} [2-2]**

Types of hearing aids; hearing aid components; hearing aid acoustical and electronic features; methods of taking ear impressions; procedures of earmold manufacturing; hearing aid selection criteria; methods of hearing aid performance verification.

**Prerequisite:** A1123209 Hearing aids (1)

**A1124202 Hearing aids lab {1} [3-1]**

Hands on training and application of hearing aid examining methods to ensure its compliance with manufacturer's guidelines; methods of hearing aid performance verification; ear impression taking; earmold manufacturing; and routine hearing aid maintenance procedures.

**Prerequisite: A1123209 Hearing aids (1)**

**A1123210 Hearing evaluation (electrophysiology) {3} [3-3]**

Otoacoustic emissions; auditory evoked potentials: cochlear microphonics, compound action potential, auditory brainstem response, cortical potentials; practical procedures for conducting all these tests; analyse results; clinical diagnosis; report writing.

**Prerequisite: A1123204 Evaluation of Hearing disorders (2)**

**A1124302 Clinical practicum in speech (2) {2} [6-2]**

Hands on training on staturng assessment and management; language delay assessment and management; speech disorders assessment and management: cleft palate, neurogenic speech disorders, cerebral palsy, behavior disorders; professional attitude; report writing; patient follow up and modifying therapy plans accordingly.

**Prerequisite: A1123207 Clinical practicum in speech (1)**

**A1124204 Clinical practicum in Audiology (2) {2} [6-2]**

Supervised clinical training for students to apply their knowledge and skills on pediatric patients; principles of audiology practice; methods of counseling and increasing awareness; procedures of hearing evaluation; methods of hearing loss prevention; treatment of hearing loss and intervention.

**Prerequisite: A1123208 Clinical practicum in Audiology (1)**

**A1124205 Voice disorders {3} [3-3]**

Review of larynx anatomy; normal processes of voice production; abnormal processes of voice production; etiological factors of voice disorders; different types of voice disorders; assessment and treatment of voice disorders: functional, organic, neurological.

**Prerequisite: A1122101 Anatomy and physiology of speech**

**A1124206 Aural rehabilitation {2} [2-2]**

Methods of overcoming the hearing disability and expand the benefit from using hearing aids; assestive listening devices; environmental modification to help hearing impaired patients; effective communication strategies; patients candidacy for hearing aids and other solutions; hearing aids selection and fitting; patient counselling.

**Prerequisite: A1123209 Hearing aids(1)**

**A1124210 Swallowing disorders {2} [2-2]**

Normal anatomy and physiology of: oral, pharyngeal, laryngeal structures; the involvement of these structures in the swallow function; clinical evaluation; clinical tools and equipment used for dysphagia: laryngoscopy, electromyography; etiological factors of dysphagia; treatment procedures for dysphagia.

**Prerequisite: A1122301 Neuroscience**

**A1124211 Research methods {1} [1-1]**

Introduction to research methods; importance of research; old and new research methods: old methods of obtaining facts, empirical thinking; data collection procedures; brief explanation of the scientific methods used in research designs and tools; overview of main statistical measurements; scientific criticism.

*Prerequisite:*

**A1124207 Auditory verbal therapy {3} [3-3]**

Effects of hearing loss on the speech and language in children and adults; different communication and intervention methods used with individuals with hearing loss; assessment of needs and progress of different hard of hearing populations; the use and maintenance of: hearing aids, cochlear implants, and assistive listening devices.

*Prerequisite:* A1124206 Aural rehabilitation

**A1124208 Clinical practicum in Audiology (3) {2} [6-2]**

Supervised clinical practicum on different adult and pediatric hearing tests and procedures; principles of audiology practice; methods of counseling and increasing awareness; procedures of hearing evaluation; methods of hearing loss prevention; treatment of hearing loss and intervention.

*Prerequisite:* A112404 Clinical practicum in Audiology (2)

**A1124209 Clinical practicum in speech (3) {2} [6-2]**

Hands on training on doing full assessment and therapy; counseling and interviewing techniques; writing full reports; treatment plans; progress notes; deal with different language and speech disorders; case presentation and seminar.

*Prerequisite:* A1124203 Clinical practicum in speech (2)

**A0131102 Developmental Psychology {3} [3-3]**

Concepts and principles of development; theories of development; methods of research in developmental psychology; stages of development: pregnancy, infancy, childhood, adolescence; physical development; cognitive development; social development; emotional development.

*Prerequisite:*

**A0141501 Introduction to special education {3} [3-3]**

All categories of special education: mental retardation, hearing impairment, visual impairment, physical impairment, learning disabilities, emotional disturbance, autism, speech and language disorders, talent and giftedness; definition; classification; causes; diagnosis; characteristics for each category.

*Prerequisite:* -

**A1123211 Instrumentation in speech pathology {2} [2-2]**

Introduce the devices used in assessment and treatment of speech and language disorders and how to deal with such instruments; processes of using these devices in assessment and treatment of different types of speech and voice disorders; conduct laryngoscopy; train students on using these equipment; rehabilitation technology for patients with laryngectomy.

*Prerequisite:*

**A1124242 Cognitive disorders {2} [2-2]**

Definition of cognition; cognitive functions of the neural system; types of cognitive disorders; effects of cognitive disabilities on communication disability; characteristics of cognitive disabilities; rehabilitation procedures; how to manage these patients at different ages.

**Prerequisite:** A1122301 Neuroscience

**A1123212 Learning disabilities for speech language pathology {3} [3-3]**

Concepts of academic and developmental learning disabilities; signs and symptoms of learning disabilities; measurement methods, evaluation and diagnosis; causes of academic and developmental difficulties; treatment approaches for academic difficulties: dyslexia, dysgraphia, dyscalculia; treatment approaches for developmental difficulties: memory, attention, perception, thinking.

**Prerequisite:** A0141501 Introduction to special education

**A1124213 Instrumentation in Audiology {3} [3-3]**

Basic electronics of audiological equipment; electroacoustic characteristics of these equipment; techniques for measuring equipment properties and function; equipment calibration; international standards.

**Prerequisite:** A1123210 Hearing evaluation (electrophysiology)

**A1124214 Resonance and cleft palate disorders {2} [2-2]**

Introduction to communicative disorders associated with: cleft lip, cleft palate, other craniofacial anomalies; medical and re/habilitative aspects of these disorders; etiology; evaluation; diagnosis; treatment options; counseling methods.

**Prerequisite:** A1124205 Voice disorders

**A1124215 Introduction to balance assessment {2} [2-2]**

Balance anatomy and physiology review; basic principles of balance systems in human body; types of balance disorders; causes; vertigo evaluation overview; case history; investigation procedures; interpretation of findings; report writing; patient referral.

**Prerequisite:** A1123204 Evaluation of Hearing disorders (2)

**A1123213 Noise induced hearing loss {2} [2-2]**

Effect of environmental noise on hearing and health: temporary threshold shift, permanent threshold shift, hearing loss; Audiologist role in hearing conservation programs; prevention of hearing loss, rehabilitation programs.

**Prerequisite:** A1123204 Evaluation of Hearing disorders (2)

**A1124216 Assistive, Augmentative Communication {2} [2-2]**

Types of augmentative or alternative communication that are used in severely disordered individuals; low and high technology devices; differences between different devices; the use of these devices in communication; patient's individual needs.

**Prerequisite:** A1122301 Neuroscience.

**A1124217 Selective topics in Audiology and Speech pathology {2} [2-2]**

This course covers selected topics that are relevant and important to students in the department of hearing and speech. These selected topics can include new advances in the field; modern issues in the field; or important topics that were not fully discussed other courses. The department committee selects and announces all the course topics based on the student's needs