



Program Specification for Master Degree in **Audiology**

Program type: single

Program code: 07-007-AUD-MS

Department offering the program: Department of Ear, Nose, and Throat

Academic year: 2021/2022

Program Coordinators: Prof. Dr. Gehan el-zarea

External evaluators: : Prof. Dr. Mahmoud saleh

Professor of Otolaryngology, minia university

Program aims

The program is a professional degree that enables candidates to specialize in the area of audiology &phoniatics. The candidates should achieve satisfactory levels of basic knowledge, clinical and surgical skills in all aspects of audiology &phoniatics practice, interact with community problems, respect ethical values according to community culture, and promote their medical standards through engaging in continuing medical education. The program also aims to introduce the candidate to the basics of scientific medical research.

Intended learning outcomes of program (ILOs)

A- Knowledge and Understanding

- A1- list the abnormal structure, function, growth and development of human Ear& Throat.
- A2- Understand the natural history of audiology &phoniatic diseases.
- A3- Understand the causation of audiology &phoniatic diseases.
- A4- Enumerate methods of otorhinolaryngology health and preventing their illness and risk factors.
- A5 List the clinical picture and differential diagnosis of otorhinolaryngology illness.
- A6- Describe the various therapeutic methods/alternatives used used for audiology &phoniatic diseases.
- A7- Understand scientific developments in the field of audiology &phoniatic.
- A8- Understand the mutual influence between professional practice and it's impact on the environment.
- A9- Mention the ethical and legal principles of professional practice in the field of audiology &phoniatic.
- A10- Know the principles and fundamentals pf quality assurance of professional practice in the field of audiology &phoniatic.
- A14. Acquire the basic knowledge for interpreting a basic and computerized audiological report.

B-Intellectual Skills

- B.1 Interpret, analyze and evaluate data acquired through history taking to reach a provisional diagnosis for audiology &phoniatic problems
- B.2 Select from different diagnostic alternatives the ones that help reaching a final diagnosis for audiology &phoniatic problems
- B.3 analyze knowledge for professional problems' solving.
- B4. Analyses and relates the results of all different items of the battery of investigations in order to reach at an etiological diagnosis and possible differential diagnosis utilizing his/her theoretical background that draws charts for different groups of ailments in the field of phoniatics.
- B.5 Plan to improve performance in the field of audiology &phoniatic.
- B.6 Identify otorhinolaryngology risks and find solutions.
- B10. Grasps the principles of language rehabilitation for the hearing impaired patient in order to include it efficiently in the comprehensive program for rehabilitation of the hearing handicapped.

C-Practical and Professional Skills

- C.1 Master the basic and modern professional skills in the area of audiology &phoniatic .
- C.2 Write and Evaluate medical reports.

D-General and Transferable Skills

- D.1 Work in a team, and team's leadership in various professional context.
- D.2 Communicate effectively by all types of effective communication.
- D.3 Use information technology to serve the development of professional practice.
- D.3 Assess himself and identify his personal needs.
- D.4 Use different sources to obtain information and knowledge.
- D.5 Manage time effectively.
- D.6 Learn him self continuously.

2- Contents(title) of MSc. program

***** Ear:**

- examination of the ear
- Disorders of the external ear
- Conductive deafness
- Acute inflammation of the middle ear cleft
- Management of chronic suppurative otitis media
- Complications of infections of middle ear
- Tumours of the middle ear cleft and temporal bone
- Diseases of the otic capsule

- The deaf child
- lesions of the inner ear
- Inflammatory lesions of the vestibular and auditory nerve
- vestibular neuroma
- lesion of the inner ear
- Meniere's disease
- Vertigo
- Facial paralysis
- Basic evaluation: Principles and objectives (Pure-tone audiometry, speech audiometry and immittance audiometry).
- Special test battery: Rationale and candidates.
- High level of testing: Objectives and principles (Auditory evoked potentials, otoacoustic emission, central auditory testing).
- Audiological evaluation of hearing impaired infants and young children.
- Amplification (Hearing aids, cochlear implants..) and rehabilitation (introduction).

***Throat

- Methods of examination of the mouth and pharynx
- Diseases of the mouth
- diseases of the salivary glands
- Diseases of the tonsils and adenoid
- Tumours of the pharynx
- Oesophageal conditions in the practice of ear, nose and throat surgery
- Methods of examining the larynx and trachea-bronchial tree
- Congenital diseases of the larynx and pharynx

Academic standards.

a-Academic reference standards:

- ** The academic standards of anatomy program is adopted and accredited by the departmental council .
- ** The Board of Department of Otorhinolaryngology, Faculty of Medicine, Al-Azhar University.
- ** Postgraduate Education&Research committee, Faculty of Medicine, Al-Azhars University.
- ** The Council of the Faculty of Medicine, Al-AzharUniversity.
- ** The Council of Al-Azhar University.
- ** Egyptian ORL Association (EORLA).

b-External References for Standards:

- ** Resident Training Program Handbook of Otolaryngology - Head & Neck Surgery of Kentucky University.
www.mc.uky.edu/surgery/ENT/handbook07-08.pdf
- ** Otolaryngology, Head and Neck Surgery residency program of Toronto University.
www.otolaryngology.utoronto.ca/postgrad/fellowship/
- ** Scott-Brown"s Otorhinolaryngology, Head and Neck Surgery. Edited by Michael Gleeson et al, 7th edition. Hodder Arnold, London, 2008. www.hoddereducation.com
- ** Saudi Board of ORL .
- ** Pan Arab Association of ORL .
- ** Pan African Association of ORL .
- ** European Association of ORL(EUORLA).
- ** American Academy of ORL (AAORL).
- ** Medical Sector of Ministry of High Education,ARE.

NB. Some modifications have been made on the program to be applicable in our institution.

Program admission requirements.

According the Faculty of Medicine, AL-Azhar University Bylaws for Post Graduate Programs , applicants should have MBBCh or equivalent degree. According to Cairo University requirements, all applicants for postgraduate studies should fulfill preliminary courses on the following subjects; Medical statistics I – Computer skills

(ICDL) or equivalent computer course offered by the medical education center (MEDC). Admission to the program is open during July. Training prior to registration may be accredited according to departmental and hospital evaluation. Admission for the program is open during July.

The department will select candidates according to selection criteria approved by departmental committee revised yearly.

Program structure and contents.

Program duration: Three years.

Program structure: Total Credit points 147

First part: 1.5 years - (table 1)

53 credit points

Candidate should fulfill the following:

- Compulsory courses; one academic year (30 weeks Starts October)
 - Basic sciences courses 7 credit points
 - General surgery course(s) 3 credit points
- Elective courses 1 credit points
- Scientific activities 2 credit points
- Residency training program Phase 1: “Basic training” for 18 months 40 credit points

• **Second part: 1.5 years - (table 2)**

74 credit points

Candidate should fulfill the following:

- Compulsory courses; one academic year (30 weeks)
 - Basics of Phoniatics and Audiology 14 credit points
 - Otorhinolaryngology, head and neck course (5 modules) 2 credit points
- Scientific activities 3 credit points
- Residency training program Part 2 55 credit points

Master Thesis: completed during second part

20 credit points.

Table 1: First part

Courses		Credit Points		ILOs
Title		CPs	Total	
COMPULSORY COURSES (One academic year)				
Anatomy and Embryology		3	10	A ₁ , B ₁
Physiology		3		A ₁ , A ₅ , B ₁
ACOUSTICS		2.5		A ₁ , A ₄ , B ₁ D ₁ , D ₂ , D ₃
Medical Genetics & statistics		0.5		A ₁ , B ₁
Internal medicine		1		A ₇ , B ₁ , D ₁
ELECTIVE COURSES (MEDC) choose 2 courses				
Scientific writing		0.5	1	D ₅ , D ₆
Evidence-Based Medicine		0.5		
Medical ethics		0.5		
SCIENTIFIC ACTIVITIES				
^{1st Part} Scientific activities		2	2	D ₃ , D ₄ , D ₅
RESIDENCY TRAINING PROGRAM (Basic training)				
Residency training program		40	40	B ₁ , C ₆ , C ₈ D ₁ , D ₂ , D ₃ , D ₄ , D ₅ , D ₆

Table 2: Second part

Courses		Credit Points		ILOs
Code	Title	CPs	Total	
COMPULSORY COURSES (Two academic years)				
Basic Otorhinolaryngology				
	Phoniatrics and Audiology	16		
SCIENTIFIC ACTIVITIES				
	Scientific activities	3	3	D ₃ , D ₄ , D ₅ ,

RESIDENCY TRAINING PROGRAM (Special Otorhinolaryngology, head and neck)			
Residency training program	55	55	B ₁ , B ₂ , B ₃ , B ₄ , C ₁ , C ₂ , C ₃ , C ₄ , C ₅ , C ₇ , D ₁ , D ₂ , D ₃ , D ₄ , D ₅ , D ₆ ,
MASTER THESIS			
Master Thesis	20	20	D ₅

Residency (practical) Training Program

Residency Training Program

- **Basic Training:**

According to the Faculty of Medicine, AL-Azhar university Bylaws for Post Graduate Programs, all the students should have a basic training for 18 months. In addition, they will spend 6 months in the Ear, Nose, and Throat department. During this period the students will attend the basic sciences courses as well as the general surgery course. They also should complete the elective courses

- **Special Training:**

All students should complete the special part of the residency-training program in the department of Ear, Nose, and Throat. They should spend 18 months in order to complete the needed credit points. The student is expected to attend the outpatient clinics, to share in patients care under the supervision of senior staff members. During this period the students will attend the otorhinolaryngology course, prepare his thesis and participate in the scientific activities of the department.

NB: The details of the training program are provided in separate document. The third phase of residency training (advanced training) is part of the MD degree

Master Thesis

All master-degree students should prepare a thesis in audiology & phoniatrics. The department and the research ethical committee must approve the protocol of the research. The thesis should include a review part and a research part. The Thesis is supervised by one or more senior staff members from the Ear, Nose, and Throat department and may include other specialties according to the nature of the research. The thesis should be evaluated and approved by a committee of three professors including one of the supervisors and an external professor. Approving the thesis is mandatory to allow the student to set for the final exam.

Scientific Activities:

The students should participate in the scientific activities of the departments such as:

- *Journal club.*
- *Seminars (including recent topics and controversial issues). Students are expected to participate in the discussions.*
- *Scientific meetings arranged by the department.*

Each activity is monitored and given credit points registered in a special section in the residency-training logbook. The student should collect the required points before allowed to sit for final exam.

Regulations for progression and program completion

After collecting the required credit points for the respective courses, the first phase of the residency training, and the scientific activities, the student will be eligible to sit for the first part examination. In case the student fails to pass the examination, he may proceed in the clinical training and can resubmit for the next examination. After passing the first part, the student submits a protocol for Master Thesis at the beginning of the second part. Before submitting to the final examination he/she should finish the thesis and get approval, complete phase 2 of special training program, and collect the required credit points. The candidate will receive his degree after passing this final examination. Master degree should be obtained within a maximum of 6 years after registration date.

Assessment

Supervision & Monitoring of the Training Program:

According to the Faculty of Medicine, AL-Azhar university Bylaws for Residency Training Programs, professors carry continuous assessment during the program. A residency-training program logbook will be kept for each student to document all his/her clinical, laboratory and/or operative/procedural activities as well as his/her participation in different scientific activities. The head of the department should allow the students to undergo the final examination when they complete their training program and collect the credit points needed.

A: Assessment Tools:

1. Final Exam Part I

Basic sciences

- **Anatomy and Embryology**: Two-hours written exam (including short essay and multiple choice questions) + oral exam
- **Physiology & Medical genetics & statics**: three-hours written exam (including short essay and multiple choice questions) + oral exam
- **ACAUSTICS**: TWO-hours written exam (including short essay and multiple choice questions) + oral exam
- **Internal medicine**: Two-hours written exam (including short essay and multiple choice questions) + oral exam

The Written exam will be held in four days:

Day one: Anatomy and embryology (2 hours)

Day two: Physiology, Medical genetics & statics (3 hours)

Day three: ACAUSTICS (2 hours)

Day four: internal medicine (3 hours)

This will be followed by the clinical and oral exams in separate days

2. Final Exam Part 2

- **Phoniatics and Audiology:** Two written exams (Three-hours each) including short essay questions, and MCQ (including problem solving) + oral exam + clinical exam

B: ASSESSMENT SCHEDULE:

Examinations

1. First Part Final Exam:

The written exam will be held in April/SEPTEMBER (four days):

Day one: Anatomy and Embryology (2 hours)

Day two: Physiology ,Medical genetics&statistics(3 hours)

Day three: ACAUSTICS (3 hours)

Day four: INTERNAL MEDICINE (3 hours)

This will be followed by the clinical and oral exams in separate days

2. Second Part Final Exam:

The written exam will be held in April/ November (three days):

Day one: audiology & phoniatics 1

Day two: audiology & phoniatics 2

This will be followed by the clinical and oral exams in separate days

C: WEIGHTING OF ASSESSMENT: Marks allocated to courses

(50 marks for each credit point)

Courses		Marks			
Title	Written	Oral	Clinical	Total	
FIRST PART					
Anatomy and Embryology	75	25		100	
Physiology ,genetics &statistics	75	25		100	
Internal medicine	100	----	50	150	
ACAUSTICS	100		50	150	
Total First Part				500	
SECOND PART					
Audiology and Phoniatics 1	200	100	300	800	
Audiology and Phoniatics 2	200				
Total Second Part				800	

Remarks

- It is mandatory to pass all the papers of written exams separately.
- The passing mark in any written exam is $\geq 40\%$.

Evaluation of program intended learning outcomes:

Evaluator	Tool	Sample
1. Senior Students	Questionnaire at the end of the program	All the PG students
2. Alumni	The faculty is currently developing an Alumni office for postgraduates	Not yet determined
3. Stakeholders	A meeting will be arranged during annual conference of the department	Available representatives from: <ul style="list-style-type: none">- Army hospitals- National medical insurance- Medical syndicate- Ministry of health
4. External Evaluators	Review program and courses Attending the final exam	Once before implementation Bi-annual report
5. College Quality Assurance committee	Annual program reviewer	

Date of approval by department council: 8th October, 2021

Program Coordinator

Prof.Gehan el-zarea

Head of Department

Prof.Ali Mahrous