



Program Specification for Master Degree in Otorhinolaryngology

Program type: single

Program code: ORL 830

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

Total credit points: 147

Academic year: 2009/2010

Program Coordinators: Prof. Dr. Mosaad Abdel-Aziz

External evaluators: Clarence Takashi Sasaki, MD, FACS

Professor of Otolaryngology; Director, Head and Neck Unit, Yale.

I. Program aims

The program is a professional degree that enables candidates to specialize in the area of otorhinolaryngology, head and neck diseases. The candidates should achieve satisfactory levels of basic knowledge, clinical and surgical skills in all aspects of otorhinolaryngology, head and neck 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.

II. Intended learning outcomes of program (ILOs)

- 1. Knowledge and understanding: By the end of the program the candidate should be able to:**
 - a) Recognize the basic scientific knowledge related to otorhinolaryngology, head and neck diseases including congenital, inflammatory, traumatic, immunological and neoplastic diseases.
 - b) Identify and discuss common otorhinolaryngology, head and neck disorders in different age groups (children, adult and old)
 - c) Distinguish the basic pathology of underlying different otorhinolaryngology, head and neck disorders
 - d) Understand the anatomical, physiological and radiological basis of otorhinolaryngology, head and neck disorders

- e) Understand basic concepts of outpatient and office-based procedures related to otorhinolaryngology, head and neck.
- f) Describe different management modalities for common otolaryngological, head and neck problems.
- g) Recognize the basic principles of surgical procedures that enables the candidate to perform surgeries related to otorhinolaryngology, head and neck dysfunctions

2. Intellectual skills: By the end of the program the candidate should be able to;

- a) Analyze symptoms & signs, correlate them to the basic knowledge he had acquired and construct a differential diagnosis for common otorhinolaryngological, head and neck complaints.
- b) Design an appropriate diagnostic plan for evaluation of common otorhinolaryngological, head and neck complaints taking into consideration the nature of the clinical situation and the risks, benefits and costs to the patient.
- c) Interpret the results of different investigations related to Otorhinolaryngology, head and neck dysfunctions.
- d) Set up treatment plans for common and rare otolaryngological, head and neck problems taking into account the cultural and individual needs.

3. Professional and practical skills: By the end of the program the candidates should be able to;

- a) Collect clinical data specially the art of history taking in sensitive issues such as cancers of the head and neck and life threatening problems.
- b) Examine and identify signs of common and rare otorhinolaryngological, head and neck disorders.
- c) Perform office clinical procedures related to otorhinolaryngological, head and neck dysfunction.
- d) Comment on radiological studies related to otorhinolaryngology, head and neck including CT and MRI.
- e) Comment on audiological and laboratory investigations related to otorhinolaryngology, head and neck.
- f) Offer proper medical treatment for otorhinolaryngology, head and neck problems.
- g) Perform basic surgical skills and manage common surgical complications related to the field of otorhinolaryngology, head and neck.
- h) Offer surgical interventions whenever indicated to patients with otorhinolaryngological, head and neck dysfunctions.
- i) Manage all otorhinolaryngological, head and neck emergencies properly.

4. General and transferable skills: By the end of the program the candidates should be able to;

- a) Communicate with the patients to gain their confidence.

- b) Respond effectively to a patient's emotional and psychosocial concerns
- c) Communicate with other health care providers.
- d) Appreciate team working.
- e) Achieve Computer skills necessary to make use of medical data bases and use the internet for communication.
- f) Show administrative skills that enables him to fulfill the paper work needed
- g) Show leadership skills that enable him to organize work and lead the junior sand paramedical staff.
- h) Understand different scientific methodologies and have critical reading abilities
- i) Write scientific article according to the basics of scientific research.

III. Academic standards.

1. Academic reference standers: The academic standers of anatomy program m is adopted and accredited by the departmental council
2. External References for Standards:
 - a- Resident Training Program Handbook of Otolaryngology – Head & Neck Surgery of Kentucky University. www.mc.uky.edu/surgery/ENT/handbook07-08.pdf
 - b- Otolaryngology, Head and Neck Surgery residency program of Toronto University. www.otolaryngology.utoronto.ca/postgrad/fellowship/
 - c- Scott-Brown's Otorhinolaryngology, Head and Neck Surgery. Edited by Michael Gleeson et al, 7th edition. Hodder Arnold, London, 2008. www.hoddereducation.com

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

IV. Program admission requirements.

According the Faculty of Medicine, Cairo University Bylaws for Post Graduate Programs (July 2009), applicants should have MBChB or equivalent degree. According to Cairo University requirements, all applicants for postgraduate studies should fulfill preliminary courses on the following subjects; Medical statistics I – English language (Toefl or equivalent degree) – 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.

V. 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

(12 months “General Surgery” + 6 months “Otorhinolaryngology”)

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

74 credit points

Candidate should fulfill the following:

- Compulsory courses; one academic year (30 weeks)
 - Otorhinolaryngology, head and neck 14 credit points
course (5 modules)
 - Basics of Phoniatics and Audiology 2 credit points
- Scientific activities 3 credit points
- Residency training program Part 2 55 credit
points
“Specific Otolaryngology, Head and Neck surgery” for one and half year

Master Thesis: completed during second part

20 credit points.

Table 1: First part

| Courses | | Credit Points | | ILOs |
|--|----------------------------|---------------|-------|---|
| Code | Title | CPs | Total | |
| COMPULSORY COURSES (One academic year) | | | | |
| ORL 801 | Anatomy and Embryology | 2 | 10 | A ₁ , B ₁ |
| ORL 804 | Physiology | 2 | | A ₁ , A ₅ , B ₁ |
| ORL 808 | Pathology | 2 | | A ₁ , A ₄ , B ₁ D ₁ , D ₂ , D ₃ |
| ORL 822 | Clinical Pathology | 0.5 | | A ₁ , A ₅ , B ₁ |
| ORL 806 | Microbiology | 0.5 | | A ₁ , A ₃ , B ₁ |
| ORL 809 | General Surgery | 3 | | A ₇ , B ₁ D ₁ , D ₂ , D ₃ |
| ELECTIVE COURSES (MEDC) choose 2 courses | | | | |
| MEDC 2 | Scientific writing | 0.5 | 1 | D ₅ , D ₆ , D ₈ , D ₉ |
| MEDC 3 | Evidence-Based Medicine | 0.5 | | |
| MEDC 5 | Medical ethics | 0.5 | | |
| SCIENTIFIC ACTIVITIES | | | | |
| 1 st Part | Scientific activities | 2 | 2 | D ₃ , D ₄ , D ₅ , D ₈ , D ₉ |
| RESIDENCY TRAINING PROGRAM (Basic training) | | | | |
| ORL 830 C1 | 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) | | | | |
| ORL 830 | Basic Otorhinolaryngology | | | |
| ORL 830 | Otorhinolaryngology, head and neck | 14 | 16 | A ₂ , A ₆ , B ₁ , B ₂ , B ₃ , B ₄ , D ₁ , D ₂ , D ₃ , D ₄ |
| ORL 830 | Basics of Phoniatics and Audiology | 2 | | |
| ORL | | | | |
| PHAU | | | | |
| SCIENTIFIC ACTIVITIES | | | | |
| 2 nd Part | Scientific activities | 3 | 3 | D ₃ , D ₄ , D ₅ , D ₈ , D ₉ |

| RESIDENCY TRAINING PROGRAM (Special Otorhinolaryngology, head and neck) | | | |
|--|----|----|---|
| ORL 830 C2 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 , C ₈ , D ₁ , D ₂ , D ₃ , D ₄ , D ₅ , D ₆ , D ₇ |
| MASTER THESIS | | | |
| Master Thesis | 20 | 20 | D ₈ , D ₉ |

Residency (practical) Training Program

Residency Training Program

- **Basic Training:**

According to the Faculty of Medicine, Cairo University Bylaws for Post Graduate Programs (July 2009), all the students should have a basic training for 18 months. They should spend at least 12 months in a general surgery. They will spend 6 months in general surgery department, 3 months in emergency department and 3 months in critical care units. 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, inpatient sections, the otolaryngology emergency room, and the operating room 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 one of the four main domains of Otorhinolaryngology, head and neck (Otology, Rhinology, Laryngology head and neck, and Pediatric Otorhinolaryngology). 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.

VI. 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.

VII. Assessment

Supervision & Monitoring of the Training Program:

According to the Faculty of Medicine, Cairo 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:** Two-hours written exam (including short essay and multiple choice questions) + oral exam
- **Pathology, Microbiology, and Clinical Pathology:** Three-hours written exam (including short essay and multiple choice questions) + oral exam

General Surgery: Three-hour written exam (including short essay and multiple choice questions) + clinical exam

The Written exam will be held in four days:

Day one: Anatomy and embryology (2 hours)

Day two: Physiology (2 hours)

Day three: Pathology, Microbiology, and Clinical Pathology (3 hours)

Day four: general surgery (3 hours)

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

2. Final Exam Part 2

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

B: ASSESSMENT SCHEDULE:

Examinations

1. First Part Final Exam:

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

Day one: Anatomy and Embryology (2 hours)

Day two: Physiology (2 hours)

Day three: Pathology, microbiology, and Clinical Pathology (3 hours)

Day four: general surgery (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 May/ November (three days):

Day one: Otorhinolaryngology1

Day two: Otorhinolaryngology2

Day three: Phoniatrics and Audiology

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

C: WEIGHTING OF ASSESSMENT: Marks allocated to courses

(50 marks for each credit point)

| Courses | | Marks | | | |
|--------------------------|--------------------------------------|----------------|-------------|-----------------|--------------|
| Code | Title | Written | Oral | Clinical | Total |
| FIRST PART | | | | | |
| ORL 801 | Anatomy and Embryology | 75 | 25 | | 100 |
| ORL 804 | Physiology | 75 | 25 | | 100 |
| ORL 808 | Pathology | 30 | 20 | ---- | 150 |
| ORL 806 | Microbiology | 30 | 20 | | |
| ORL822 | Clinical Pathology | 30 | 20 | | |
| ORL 812 | General Surgery | 100 | ---- | 50 | 150 |
| Total First Part | | | | | 500 |
| SECOND PART | | | | | |
| ORL 830 | Otorhinolaryngology, head and neck 1 | 150 | 100 | 300 | 700 |
| ORL | Otorhinolaryngology, head and neck 2 | 150 | | | |
| ORL 830 PHAU | Basics of Audiology and Phoniatrics | 60 | 40 | ---- | 100 |
| 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 $\geq 60\%$.

VIII. 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, 2012

Signatures

Program Coordinator

Head of Department

Mosaad Abdel-Aziz

Ismail Zohdi