



PROGRAM SPECIFICATION

Faculty of Medicine- Mansoura University

(A) Administrative information

(1) Program Title & Code	Postgraduate Doctorate degree of Otorhinolaryngology / ENT 600
(2) Final award/degree	M.D.
(3) Department (s)	Otorhinolaryngology Department
(4) Coordinator	Prof. Dr. Asser Abdel Raouf EL-Sharkawy Professor of Otorhinolaryngology - Faculty of Medicine-Mansoura University
(5) External evaluator (s)	Prof.Dr. Ahmed Samy Elgendy Professor of Otorhinolaryngology- Tanta University.
(6) Date of approval by the Department`s council	14/5/2016
(7) Date of last approval of program specification by Faculty council	9/8/2016

(B) Professional information

Otorhinolaryngology is the medical specialty for Ear, Nose & Throat disorders, it is concerned with diseases and disorders of voice, speech, respiration, and hearing (in so far as hearing impairment has its effects on any of the areas previously mentioned) and swallowing, Ear and Nose.

The specialty is based on the anatomical, physiological, diagnostic and therapeutic principles of Otorhinolaryngology and also on other medical disciplines (e.g. neurology, psychiatrics, pediatrics, dentistry, orthodontics) and non-medical sciences (e.g. linguistics, phonetics, psychology, behavior sciences, pedagogics, acoustics, communication sciences).

(1) Program Aims.

The broad aims of the Program are as follows.

- 1- Provide the candidate with all the knowledge and to train the candidate on the basic skills on diagnosis and management of ENT diseases as well as teaching and research work.
- 2- Provide the candidate with the ability to manage patients across all age groups including pediatric, adults and geriatric population, and provide a variety of services skillfully in treatment centers, medical clinics, and in private practice.
- 3- Prepare candidates efficiently to practice in research laboratories, community centers, colleges and universities, and state and federal agencies.
- 4- The final evaluation should reflect the candidate ability to practice competently and independently.
- 5- Provide the candidate with all ethical principles related to his specialty.
- 6- Maintenance of abilities necessary for continuous medical education.

(2) Intended Learning Outcomes (ILOs):

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

A- Knowledge and Understanding:

On successful completion of the program, the candidate will be able to:

- A1.** Identify and recognize basic knowledge related to the anatomy, physiology and pathological physiology of the Ear, Nose and Throat.
- A2.** Explain the basics of physiology and central neural mechanisms and integration processes in speech, hearing, and swallowing.
- A3.** Discuss role of genetics and environmental etiologies on different ENT disorders.
- A4.** Identify the developmental and aging processes as to ORL diseases.
- A5.** Recognize the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics and rehabilitation of the ORL Diseases that include:
 - A5a. Ear Diseases.
 - A5b. Nose Diseases.
 - A5c. Diseases of the larynx.
 - A5d. Diseases of Salivary Glands
- A6.** Discuss the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics of Ear disorders (congenital, inflammatory, neoplastic and allergic ear diseases).
- A7.** Identify and explain the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics of laryngeal diseases (congenital, inflammatory, traumatic, neoplastic, allergic).

A8. Acquire specific knowledge in the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics and maxillofacial trauma.

A8a. Frontal fractures

A8b. Midfacial fractures

A8c. Mandibular fractures

A9. Know the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics and rehabilitation of the swallowing disorders.

A10. Acquire selected knowledge from other disciplines (phoniatics, acoustics, psychology and behavioral science).

A11. Acquire the basic knowledge for evaluating of children with outpatient health problems, disabilities and milestones delay.

A12. Acquire the basic knowledge in evaluating of psychiatric patients in the domain of phoniatics.

A13. Acquire the basic knowledge for interpreting a basic and computerized audiological report.

A14. Acquire teaching abilities relevant to disorders of voice, speech, language and swallowing in order to participate in planning and implantation of that field.

A15. Acquire the basic knowledge of legal and medicolegal issues as well as issues related to medical ethics in his specialty.

A16. Know indications, contraindications, technique and complications of endoscopic diagnosis and management of Ear Nose and throat diseases

B- Intellectual skills :

- B1.** Analyze the different therapeutic options in diseases of ORL, language and swallowing and applies them surgically, pharmacologically and behaviorally in order to be able to draw and perform the strategy of the therapy in the field efficiently.
- B2.** Collects complete, clear and organized information about the patient's ailments in order to be able to analyze it and formulate a preliminary idea concerning the etiological diagnosis of ailments.
- B3.** Ability to listen to the patient complaints and analyse them as well as analyses the speech (verbal) message of the patient concerning voice, phonology, semantic, syntax, and morphology in order to be able to describe precisely the type and degree of pathological aspects of communication.
- B4.** Choose the suitable investigation according to the patient complaint and physical examination as well as the ability to analyse 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 otology.
- B5.** Analyse the different options in pharmacological treatment of diseases of the nose and paranasal sinuses in order to be able to describe them when needed.
- B6.** Grasps the principles of voice therapy in order to criticize the efficiency and pitfalls of each.
- B7.** Recognize the principles of behavior therapy in order to introduce efficiently these measures in the therapeutic programs given to patients.
- B8.** recognize the principles of general language stimulation in order to be able to give efficient family guidance programs to help families that have children with delayed language development to participate efficiently in the therapeutic program.
- B9.** Outline an algorithm for diagnosis and management of patients with dysphasia by using endoscopic tools.
- B10.** Outline an algorithm for diagnosis and treatment for the hearing impaired patient in order to include it efficiently in the comprehensive program for rehabilitation of the hearing handicapped.
- B11.** Identifies the role of prosthetic devices and aids in the therapeutic program for diseases of voice, speech, language and swallowing in order to be able to use it efficiently when indicated.
- B12.** Grasp the principles of scientific research in the field of voice, speech, language and swallowing disorders in order to carry out efficiently academic and field research work.
- B13.** Assess the developmental milestones of children and classify their different types of disabilities.
- B14.** Outline an algorithm for diagnosis and management of children disability and determine the degree of handicap.
- B15.** Determines the cause of the neurological deficit in the domain of ENT).
- B16.** Interprets the results of investigations as CT, MRI and PTA.
- B17.** Outline the tumor staging system (TNM) and algorithm for patient management according to the cancer stage.

C- Professional/practical skills:

- C1.** Practice skills of ENT examination including instrument use and doing related tests on these patients.
- C2.** Ability to collect patient symptoms effectively and to associate these symptoms with the signs that can be elicited from the physical examination of the ear, nose ,pharynx and larynx.
- C3.** Practice stroboscopic laryngeal examination in order to study vocal fold's vibration during phonation and to detect the pathological picture of these vibrations and its significance.
- C4.** Ability to performs the available standardized technique tests in order to draw a diagnostic profile for the various perceptual, affective, social, cognitive aptitudes as well as the performance abilities of the patients.
- C5.** perform measurements and investigations using the available instrumental diagnostic procedures in order to support the preliminary diagnosis objectively .
- C6.** Practice laryngeal microsurgery and phonosurgery for treatment of structural voice disorders, and other vocal fold lesions.
- C7.** Perform and master rehabilitation methods for speakers' and singers' voice.
- C8.** Practices treatment methods for nasality.
- C9.** Practices treatment of the laryngectomized patients.
- C10.** Ability to treat diseases of the ear either by prescribing medical treatment or by performing different surgical procedures..
- C11.** Ability to treat diseases of the nose and paranasal sinuses either by prescribing medical treatment or by performing different surgical procedures..
- C12.** Ability to treat diseases of the larynx either by prescribing medical treatment or by performing different surgical procedures...
- C13.** Practice treatment and rehabilitation methods in pharyngeal diseases including dysphagias.
- C14.** Perform surgical procedures for treatment of salivary gland diseases
- C15.** Perform reduction and fixation of maxillofacial fractures
- C16.** Identify and rehabilitate children with hearing impairment as well as rehabilitate cochlea implanted children.

D- Communication & Transferable skills:

- D1.** Demonstrates consistent behavior of incorporating evidence- based information in common practice areas
- D2.** Exhibits professional behavior (e.g., reliability, industry, integrity, and confidentiality)
- D3.** Maintains respect for patient confidentiality
- D4.** Recognizes ethical issues in practice and is able to discuss, analyze, and manage common ethical situations
- D5.** Displays sensitivity and responsiveness toward all patient populations
- D6.** Analyzes and manages ethical issues in complicated and challenging situations
- D7.** Effectively communicates during transitions of care

(3) Academic standards.

Academic standards for the program are attached in **Appendix I.** in which **NARS** issued by the National Authority for Quality Assurance & Accreditation in Education are used. External reference points/Benchmarks are attached in **Appendix II.**

3.a- External reference points/benchmarks are selected to confirm the appropriateness of the objectives, ILOs and structure of assessment of the program.

The program is structured according to education standards and training program provided by the Accreditation Council for Graduate Medical Education (ACGME).

<http://www.acgme.org/>

<http://www.acgme.org/Portals/0/PDFs/Milestones/OtolaryngologyMilestones.pdf?ver=2015-11-06-120524-560>

3.b- Comparison of the specification to the selected external reference/ benchmark.

- 1- All program aims of the Benchmarks are covered by the current program.
- 2- The program courses are matched by 90% degrees to those offered by the European universities except in the context of credit hours, and the durations of rotations in other specialties.

1. Knowledge and understanding.

Courses	ILOs	ARS	NARS
<p>-Surgical Anatomy & Embryology of ENT head & neck and chest</p> <p>-Pathology of ENT and head & neck neoplasms</p> <p>-Physiology related to ENT, Head and Neck Surgery</p> <p>-ENT: Otology</p> <p>-ENT: Rhinology</p> <p>-ENT: Throat</p> <p>- Basics & Principles of Facial Plastic surgery</p> <p>- Basic of Allergy & Immunology</p> <p>- Basic Principles of Laser Surgery</p> <p>- Surgery of Salivary glands</p>	<p>A1, A2, A4, A5, A6, A7, A8, A9, A10, A11, A12, A13</p>	<p>A1. Identify and recognize basic knowledge related to the anatomy, physiology and pathological physiology of the Ear, Nose and Throat.</p> <p>A2. Explain the basics of physiology and central neural mechanisms and integration processes in speech, hearing, and swallowing.</p> <p>A4. Identify the developmental and aging processes as to ORL diseases.</p> <p>A5. Recognize the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics and rehabilitation of the ORL Diseases that include:</p> <p>A5a. Ear Diseases.</p> <p>A5b. Nose Diseases.</p> <p>A5c. Diseases of the larynx.</p> <p>A5d. Diseases of Salivary Glands</p> <p>A6. Discuss the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics of Ear disorders (congenital, inflammatory, neoplastic and allergic ear diseases).</p> <p>A7. Identify and explain the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics of laryngeal diseases (congenital, inflammatory, traumatic,</p>	<p>1. The theories, concepts and modern knowledge in the field of specialization and other related field</p>

		<p>neoplastic, allergic).</p> <p>A8. Acquire specific knowledge in the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics and maxillofacial trauma.</p> <p>A8a. Frontal fractures A8b. Midfacial fractures A8c. Mandibular fractures</p> <p>A9. Know the epidemiology, etiology, pathogenesis, prophylaxis, clinical physiology, diagnostics, differential diagnostics, therapeutics and rehabilitation of the swallowing disorders.</p> <p>A10. Acquire selected knowledge from other disciplines (phoniatics, acoustics, psychology and behavioral science).</p> <p>A11. Acquire the basic knowledge for evaluating of children with outpatient health problems, disabilities and milestones delay.</p> <p>A12. Acquire the basic knowledge in evaluating of psychiatric patients in the domain of phoniatics.</p> <p>A13. Acquire the basic knowledge for interpreting a basic and computerized audiological report.</p>	
-ENT: Throat	A14	A14. Acquire teaching abilities relevant to disorders of voice, speech, language and swallowing in order to participate in planning and implantation of that field	2. The basics, methodologies, ethics of scientific research and its versatile tools
-ENT: Otology -ENT: Rhinology	A15	A15. Acquire the basic knowledge of legal and medicolegal issues as well as issues related to medical ethics in his specialty.	3. The moral and legal ethics of the professional practice in the area of specialization
-ENT: Otology -ENT: Rhinology	A16	A16. Know indications, contraindications,	4.The concepts and principles of quality of the

		technique and complications of endoscopic diagnosis and management of Ear Nose and throat diseases	professional practice in the area of specialization
-ENT: Otology -ENT: Rhinology -ENT: Throat	A3	A3. Discuss role of genetics and environmental etiologies on different ENT disorders.	5. The knowledge on the effects of professional practice on the environment and ways of development and maintenance of the environment

2. Intellectual skills

Courses	ILOs	ARS	NARS
-ENT: Otology -ENT: Rhinology -ENT: Throat	B4, B13, B14, B15, B16, B17	<p>B4. Choose the suitable investigation according to the patient complaint and physical examination as well as the ability to analyse 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 otology.</p> <p>B13. Assess the developmental milestones of children and classify their different types of disabilities.</p> <p>B14. Outline an algorithm for diagnosis and management of children disability and determine the degree of handicap.</p> <p>B15. Determines the cause of the neurological deficit in the domain of ENT).</p>	1) Analyze and evaluate of information in the field of specialization and make full use of such information to solve problems

		<p>B16. Interprets the results of investigations as CT, MRI and PTA.</p> <p>B17. Outline the tumor staging system (TNM) and algorithm for patient management according to the cancer stage.</p>	
<p>-ENT: Rhinology</p> <p>-ENT: Throat</p> <p>- Basics & Principles of Facial Plastic surgery</p> <p>- Basic of Allergy & Immunology</p> <p>- Basic Principles of Laser Surgery</p> <p>- Surgery of Salivary glands</p>	B1	<p>B1. Analyze the different therapeutic options in diseases of ORL, language and swallowing and applies them surgically, pharmacologically and behaviorally in order to be able to draw and perform the strategy of the therapy in the field efficiently.</p>	2) Solve specific problems on the basis of limited and contradictory information
-ENT: Throat	B12	<p>B12. Grasp the principles of scientific research in the field of voice, speech, language and swallowing disorders in order to carry out efficiently academic and field research work.</p>	3) Carry out a research studies to add new information to the knowledge
-ENT: Throat	B12	<p>B12. Grasp the principles of scientific research in the field of voice, speech, language and swallowing disorders in order to carry out efficiently academic and field research work.</p>	4) Write scientific papers
<p>-ENT: Otology</p> <p>-ENT: Throat</p>	B10	<p>B10. Outline an algorithm for diagnosis and treatment for the hearing impaired patient in order to include it efficiently in the comprehensive program for rehabilitation of the hearing handicapped.</p>	5) Assess and analyze risks in the field of specialization
-ENT: Throat	B6, B7, B8, B11	<p>B6. Grasps the principles of voice therapy in order to criticize the efficiency and pitfalls of each.</p> <p>B7. Recognize the principles of behavior</p>	6) Plan to improve performance in the field of specialization

		<p>therapy in order to introduce efficiently these measures in the therapeutic programs given to patients.</p> <p>B8. recognize the principles of general language stimulation in order to be able to give efficient family guidance programs to help families that have children with delayed language development to participate efficiently in the therapeutic program.</p> <p>B11. Identifies the role of prosthetic devices and aids in the therapeutic program for diseases of voice, speech, language and swallowing in order to be able to use it efficiently when indicated.</p>	
-ENT: Rhinology -ENT: Throat	B5	B5. Analyse the different options in pharmacological treatment of diseases of the nose and paranasal sinuses in order to be able to describe them when needed.	7) Make good decisions in different professional aspects
-ENT: Otology -ENT: Rhinology -ENT: Throat	B4, B13, B14, B15, B16, B17	<p>B4. Choose the suitable investigation according to the patient complaint and physical examination as well as the ability to analyse 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 otology.</p> <p>B13. Assess the developmental milestones of children and classify their different types of disabilities.</p> <p>B14. Outline an algorithm for diagnosis and management of children disability and determine the degree of handicap.</p>	8) Have innovation/creativity

		<p>B15. Determines the cause of the neurological deficit in the domain of ENT).</p> <p>B16. Interprets the results of investigations as CT, MRI and PTA.</p> <p>B17. Outline the tumor staging system (TNM) and algorithm for patient management according to the cancer stage.</p>	
<p>-ENT: Rhinology</p> <p>-ENT: Throat</p> <p>- Basics & Principles of Facial Plastic surgery</p> <p>- Basic of Allergy & Immunology</p> <p>- Basic Principles of Laser Surgery</p> <p>- Surgery of Salivary glands</p>	B2, B3	<p>B2. Collects complete, clear and organized information about the patient's ailments in order to be able to analyze it and formulate a preliminary idea concerning the etiological diagnosis of ailments.</p> <p>B3. Ability to listen to the patient complaints and analyse them as well as analyses the speech (verbal) message of the patient concerning voice, phonology, semantic, syntax, and morphology in order to be able to describe precisely the type and degree of pathological aspects of communication.</p>	9) Discuss and negotiate in high level of confidence based upon proofs and evidences

3. Professional/practical skills

Courses	ILOs	ARS	NARS
<p>-ENT: Otology</p> <p>-ENT: Rhinology</p> <p>-ENT: Throat</p>	C10, C11, C12, C13, C14, C15	<p>C10. Ability to treat diseases of the ear either by prescribing medical treatment or by performing different surgical procedures..</p> <p>C11. Ability to treat diseases of the nose</p>	1) Apply modern and principle professional skills in the area of specialization

		<p>and paranasal sinuses either by prescribing medical treatment or by performing different surgical procedures.</p> <p>C12. Ability to treat diseases of the larynx either by prescribing medical treatment or by performing different surgical procedures.</p> <p>C13. Practice treatment and rehabilitation methods in pharyngeal diseases including dysphagias.</p> <p>C14. Perform surgical procedures for treatment of salivary gland diseases</p> <p>C15. Perform reduction and fixation of maxillofacial fractures</p>	
-ENT: Throat	C4, C5	<p>C4. Ability to perform the available standardized technique tests in order to draw a diagnostic profile for the various perceptual, affective, social, cognitive aptitudes as well as the performance abilities of the patients.</p> <p>C5. Perform measurements and investigations using the available instrumental diagnostic procedures in order to support the preliminary diagnosis objectively.</p>	2) Write and evaluate technical reports
-ENT: Otology -ENT: Rhinology -ENT: Throat	C1, C2, C3	<p>C1. Practice skills of ENT examination including instrument use and doing related tests on these patients.</p> <p>C2. Ability to collect patient symptoms effectively and to associate these symptoms with the signs that can be elicited from the physical examination of the ear, nose, pharynx and larynx.</p> <p>C3. Practice stroboscopic laryngeal examination in order to study vocal fold's vibration during phonation and to detect the pathological picture of these</p>	3) Adopt assessment methods and tools existing in the area of specialization.

		vibrations and its significance	
-ENT: Throat	C6, C7, C8, C9	<p>C6. Practice laryngeal microsurgery and phonosurgery for treatment of structural voice disorders, and other vocal fold lesions.</p> <p>C7. Perform and master rehabilitation methods for speakers' and singers' voice.</p> <p>C8. Practices treatment methods for nasality.</p> <p>C9. Practices treatment of the laryngectomized patients</p>	4) Use of the appropriate technological means to serve the professional practice.
-ENT: Throat	C16	C16. Identify and rehabilitate children with hearing impairment as well as rehabilitate cochlea implanted children.	5) Plan to improve the performance of the professional practice and development of the performance of others

4. Communication & Transferable skills

Courses	ILOs	ARS	NARS
-ENT: Otology -ENT: Rhinology -ENT: Throat	D3, D4, D5, D6	<p>D3. Maintains respect for patient confidentiality</p> <p>D4. Recognizes ethical issues in practice and is able to discuss, analyze, and manage common ethical situations</p> <p>D5. Displays sensitivity and responsiveness toward all patient populations</p> <p>D6. Analyzes and manages ethical issues in complicated and challenging situations</p>	1) Communicate effectively in different aspects
-ENT: Otology	D7	D7. Effectively communicates during	2) Demonstrate efficient

-ENT: Rhinology -ENT: Throat		transitions of care	IT capabilities in such a way that serves in the development of the professional practice
-ENT: Otology -ENT: Rhinology -ENT: Throat	D2	D2. Exhibits professional behavior (e.g., reliability, industry, integrity, and confidentiality)	3) Manage the scientific meetings and manage time
-ENT: Otology -ENT: Rhinology -ENT: Throat	D2	D2. Exhibits professional behavior (e.g., reliability, industry, integrity, and confidentiality)	4) Adopt self-assessment and Adopt life-long learning
-ENT: Otology -ENT: Rhinology -ENT: Throat	D1	D1. Demonstrates consistent behavior of incorporating evidence-based information in common practice areas	5) Use different resources for information and knowledge
-ENT: Otology -ENT: Rhinology -ENT: Throat	D2	D2. Exhibits professional behavior (e.g., reliability, industry, integrity, and confidentiality)	6) Collaborate effectively within multidisciplinary team and lead team works
-ENT: Otology -ENT: Rhinology -ENT: Throat	D2	D2. Exhibits professional behavior (e.g., reliability, industry, integrity, and confidentiality)	7) Demonstrate a high level of competence in the management of time and scientific meetings

(1) Curriculum structure and contents:

4.a- Duration of the program (in years or months): 42 months

4.b- program structure:

*The program consists of two parts; the first part composed of three courses which are: surgical anatomy & embryology of ENT head & neck and chest, Pathology of ENT and head and neck neoplasms, and physiology related to ENT, Head and Neck Surgery.

The second part composed of two courses which are: ENT & head and Neck Surgery, Elective course that include Basic & Principles of Facial Plastic Surgery sub course, Basic of Allergy & Immunology sub course, Basic Principles of Laser Surgery sub course and Surgery of Salivary Glands sub course.

*Candidates should fulfill a total of **60 credit hours**.

●4.b.1: Number of credit hours (minimum) :

First part: **5 credit hours**. Second part: **25 credit hours**. Thesis: **15 credit hours**.
Activities included in the log book: **15 credit hours**.

●4.b.2: Teaching hours/week:

First part:

Lectures: 5 hour/week. Total: 75 hours for 20 weeks (referred to the table below)

Second part:

Lectures/seminars: 300 hours in 75 wks.

Clinical/practical: 450 hours in 75 wks.

(referred to the table below)

(2) Program courses:

First part (20 weeks duration over a period of 5 months):

a- Compulsory courses:

Course Title	Course Code	Credit hours	NO. of hours per week				Total teaching hours/20 wks	Program ILOs covered (REFERRING TO MATRIX)	
			Theoretical		Lab. /practical	Field			Total
			Lectures	seminar					
Surgical Anatomy & Embryology of ENT head & neck and chest	ENT 601 ENT 624	2	30 hours	-----	-----	-----	30 hours	A1	
Pathology of ENT and head & neck neoplasms	ENT 605 ENT 624	2	30	-----	-----	-----	30 hours	A1, A2, A6, A7, A8	
Physiology related to ENT, Head and Neck Surgery	ENT 603 ENT 624	1	15				15 hours	A1	

* Advanced studies in medical fields consist of two hours lecture for 1½ lectures over four weeks.

b- Elective courses: none

Second part (76 weeks duration/19 months)

a- Compulsory courses

Course Title	Course Code	Credit hours	NO. of hours per week				Total teaching hours	Program ILOs covered (REFERRING TO MATRIX)	
			Theoretical		clinical	Field			Total
			Lectures	seminars					
ENT & Head and Neck surgery	ENT 624	23				-----			
1- otology and neuro-otology	ENT 624(1)	8	5 hours weekly 15 weeks		7 hour weekly 15 weeks	-----		180	A1,A2,A3, A4,A5,A6,A15, A16 B4,B10,B15,B16 C1,C2,C10 D1-7
2- rhinology and anterior skull base	ENT 624(2)	8	5 hours weekly 15 weeks		7 hour weekly 15 weeks	-----		180	A1,A2,A3, A8,A15,A16 B1,B2,B5, B15,B16 C1, C2. C11 D1-7
3- Throat, head and neck surgery and facial plastic surgery	ENT 624(3)	7	13 hours weekly 15 weeks		16 hour weekly 15 weeks	-----		435	A1, A2, A3, A4, A7,A8, A9, A10, A11, A12, A14 B1, B2, B3, B6-17 C1-15 D1-7
Elective Course : - Basics & Principles of Facial Plastic surgery - Basic of Allergy & Immunology - Basic Principles of Laser Surgery - Surgery of Salivary glands	ENT 624 BFPS ENT 624 BAI ENT624 BLS ENT 624 BSG	2	2 hours weekly 15 weeks			-----		30	A1,A2 B1,B2
Log book	ENT 624 C 5 ENT 624 P							15 credit hours	
Thesis								15 credit hours	

b- Elective courses: none

Program–Courses ILOs Matrix

Program ILOs are enlisted in the first row of the table (by their code number: a1, a2.....etc), then the course titles or codes are enlisted in first column, and an "x" mark is inserted where the respective course contributes to the achievement of the program ILOs in question.

Course Title/Code																		B1	B2	B3	B4	B5	B6	B7	B8	B9	B10	B11	B12	B13	B14	B15	B16	B17	
	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	A11	A12	A13	A14	A15	A16																			
Surgical Anatomy & Embryology of ENT head & neck and chest	X																																		
Pathology of ENT and head & neck neoplasms	X	x				x	x	x																											
Physiology related to ENT, Head and Neck Surgery	x																																		
ENT:Otology	x	x	x	x	x	x									x	x			x												X				
ENT:RhinoLOGY	x	x	x					x							x	x	x	x													x	X			
ENT:Throat	x	x	x	x			x	x	x	x	x	x		x					x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	X	
Elective Course : - Basics & Principles of Facial Plastic surgery - Basic of Allergy & Immunology - Basic Principles of Laser Surgery - Surgery of Salivary glands	x	x																	x	x															

Course Title/Code	C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	D1	D2	D3	D4	D5	D6	D7
	Surgical Anatomy & Embryology of ENT head & neck and chest																						
Pathology of ENT and head & neck neoplasms																							
Physiology related to ENT, Head and Neck Surgery																							
ENT:Otology	x	x								X							x	x	x	x	x	x	X
ENT:Rhinology	x	x									X						x	x	x	x	x	X	x
ENT:Throat	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	X
Elective Course : - Basics & Principles of Facial Plastic surgery - Basic of Allergy & Immunology - Basic Principles of Laser Surgery - Surgery of Salivary glands																							

P.S. All courses' specifications are attached in [Appendix III](#).

Program aims - ILOs matrix (MD, Otorhinolaryngology)

Program aims	A 1	A 2	A 3	A 4	A 5	A 6	A 7	A 8	A 9	A 10	A 11	A 12	A 13	A 14	A 15	A 16	B 1	B 2	B 3	B 4	B 5	B 6	B 7	B 8	B 9	B 10	B 11	B 12	B 13	B 14	B 15	B 16	B 17	C 1	C 2	C 3	C 4	C 5	C 6	C 7	C 8	C 9	C 10	C 11	C 12	C 13	C 14	C 15	C 16	D 1	D 2	D 3	D 4	D 5	D 6	D 7						
1- Provide the candidate with all the knowledge and to train the candidate on the basic skills on diagnosis and management of ENT diseases as well as teaching and research work .	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X																													
2- Provide the candidate with the ability to manage patients across all age groups including pediatric, adults and geriatric population, and provide a variety of services skillfully in treatment centers, medical clinics, and in private practice .																	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												
3- Prepare candidates efficiently to practice in research laboratories, community centers, colleges and universities, and state and federal agencies .																																																			X	X	X	X	X	X	X					
4- The final evaluation should reflect the candidate ability to practice competently and independently.																																				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X						
5- Provide the candidate with all ethical principles related to his specialty.																X																																														X
6- Maintenance of abilities necessary for continuous medical education.																																																								X	X	X	X	X	X	X

(3) Program admission requirements.

●General requirements.

According to the postgraduate by laws. [Appendix IV](#).

●Specific requirements (if applicable): NONE

(4) Regulations for progression and program completion.

●Student must complete minimum of 60 credit hours in order to obtain the Doctorate degree, which include the courses of first and second parts, thesis and activities of the log book and pass the final exam (written, oral, clinical) at the end of the first and second parts.

●Courses descriptions are included in [Appendix III](#).

●Registration for the M.D. thesis is allowed 18 months from the day of admission to the program and must fulfill a total of 15 credit hours including material collection, clinical/practical work, patients follow-up, and meetings with supervisors.

Log book fulfillment.

● Student must fulfill a minimum of 15 credits of log book activities including clinical/practical work and conferences attendance or speaking.

●Lectures and clinical activities must be documented in the log book and signed by the lecturer and clinical supervisors.

● Works related to thesis must be documented in the log book and signed by the supervisors.

●Any workshops, conferences and scientific meetings should be included in the log book.

Final Exam.:

First part:

الدرجة		الاختبار	المقرر
MCQ	تحريري		
20	80	إختبار تحريري مدته ساعتين	التشريح الجراحي والنمو الجنيني
20	80	إختبار تحريري مدته ساعتين	الباثولوجيا
20	80	إختبار تحريري مدته ساعتين	الفسيولوجيا

Second Part:

إجمالي	الدرجة					الاختبار	المقرر
	مملی	إكلينيكي	شفهي	MCQ	تحريري		
٦٠٠	١٠٠	١٠٠	١٠٠	٦٠	٩٠+٩٠	اختباران تحريريان مدة كل منهما ثلاث ساعات + اختبار شفهي + اختبار اكلينيكي + اختبار عملي (عمليات)	أمراض الأذن والأنف والحنجرة وجراحة الرأس والرقبة
					٦٠		وصف حالة
٥٠			٢٠	٦	٢٤	المقرر الاختياري	

Assessment methods:

- 5.1: Written exam for assessment of knowledge and intellectual skills.
- 5.2: MCQ exam for assessment of knowledge and intellectual skills.
- 5.3: Oral exam for assessment of knowledge and intellectual skills.
- 5.4: clinical exam for assessment of professional, practical and transferrable skills.
- 5.5: operative exam for assessment of professional, practical and transferrable skills.

Evaluation of Program's intended learning outcomes (ILOs):

Evaluator	Tools*	Signature
Internal evaluator (s) Prof. Dr. Ahmed Eldegwi	Focus group E_mail Group discussion	
External Evaluator (s) Prof. Dr. Ahmed Samy Elgendy Tanta University	E_mail Interview checklist	
Senior student (s)	none	
Alumni	none	
Stakeholder (s)	none	
others	none	

* TOOLS= QUESTIONNAIRE, INTERVIEW, WORKSHOP, COMMUNICATION, E_MAIL

We certify that all information required to deliver this program is contained in the above specification and will be implemented. All course specification for this program are in place.

Program coordinator: Name: Prof. Dr. Ahmed Eldegwi	Signature & date:
Dean: Name: Prof. Dr. Elsaeed Abdelhady	Signature & date:
Executive director of the quality assurance unit: Name: Prof. Dr. Seham Gad El-hak	Signature & date: