PROGRAMME SPECIFICATION

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme Title & Code	Master degree of audiology AUDI 500
(2) Final award/degree	Master of audiology
(3) Department (s)	ENT department/ audiology unit
(4) Coordinator	Prof/ Dr. Hesham Zaghloul
(5) External evaluator (s)	Prof. Dr/ Soha Mekki
(6) Date of approval by the Department`s council	6-8-2016
(7) Date of last approval of programme specification by Faculty council	9-8-2016

(B) Professional information

(1) Programme Aims:

The broad aims of the Programme are as follows: (either to be written in items or as a paragraph)

This program aims at providing participants with the knowledge and basic skills related to audiology specialty, as well as motivating them for research and positively changing their attitude to improve the outcome of the educational process.

1- Equip candidates with knowledge, practical experience to enable them to work effectively as qualified audiologists coping with international standards.

2- To enable the candidates to manipulate diagnostic procedures needed for the diagnosis of peripheral and central auditory system disorders.

3- To enable the candidates to evaluate vestibular system and diagnose and manage disorders

4- To educate the candidates the strategies to maximize the use of one's remaining hearing (aural rehabilitation), hearing aid selection and fitting and manipulation skills.

5- To prepare the candidates to be part of team intervention plan involving speech language pathologists, clinical psychologist, otorhinolaryngologists, neurologists, receives and referral from those other agencies for multidisciplinary assessment and prepare candidates for effective integrated working with families and other professionals working with the hearing impaired.

6- Enable candidates to perform screening as for neonates, school children and industrial work places.

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.

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

A- Knowledge and Understanding

	By the end of the study of Master Program in Audiology the Graduate should be able to:
A 1	Recognize basic audiological evaluation
A1a	Recognize the physiology and pathophysiology of the peripheral and central auditory system.
A1b	Enumerate causes of conductive hearing loss such as otoslerosis, glomus tumors, acute and chronic inflammation of the middle ear.
A1c	Recognize the anatomy, embryology of the peripheral and central auditory system.
A 2	Recognize different evoked potential ands otoacoustic emissions
A2a	Recognize physiology and pathophysiology of the peripheral and central vestibular system.
A2b	Recognize presbycusis, sudden and fluctuating hearing loss.
A2c	Recognize anatomy, embryology of the peripheral and central vestibular system.
A 3	Recognize types, selection and technology of hearing aids.
A3a	List components of cochlear implants and enumerate its candidate
A3b	Explain different methods of rehabilitation of hearing impaired.
A 4	History taking, causes, clinical picture, differential diagnosis of different otological disorders.
A 5	List modes of inheritance of genetic diseases.

A6	Enumerate some examples of syndromic and nonsyndromic hearing loss and recognize the investigations and management of genetic hearing loss
A7	Identify the high risk groups and select the screening tests pertinent to them.
A8	Enumerate hearing aids components
A8a	Explain instrumentation of evoked potentials and otoacoustic emissions
A8b	Recognize impedence probe and types of couplers
A9	Recognize acoustics of sound including fundamental properties of sound and nature, analysis and measurement of sound.
A10	Describe different psychoacoustic aspect of sound such as pitch, loudness, masking and temporal aspect of hearing.
A11	Recognize binaural hearing.
A11a	Explain theories of hearing.
A12	Enumerate types of data, construct tables and graphs
A13	Explain measures of central tendency and measures of dispersion
A14	tests of significance and the inferences obtained from such tests
A 15	Enumerate causes of hemiplegia, mythenia and peripheral neuritis.
A 16	Recognize migraine, demylinating disease and meningitis.
A 17	History taking, causes, clinical picture, differential diagnosis of different neurological disorders

The Postgraduate Degree provides opportunities for candidates to achieve and demonstrate the following intellectual qualities:

B–Intellectual skills

	By the end of the study of Master Program in Audiology the Graduate should be able to
B1	Integrate basic anatomical knowledge with clinical data.
B2	Interpret data acquired through history taking to reach a provisional diagnosis.
B3	Conduct a comprehensive examination and evaluation to reach diagnosis,
B4	Select the appropriate diagnostic procedures that help to reach the final diagnosis.
B5	Interpret results of evaluation to establish type and severity of the disorder.
B6	Predict individuals at risk for hearing impairment.
B7	Refer for other physicians for further investigations.
B8	Interact effectively with patients, families and other professionals.
B9	Prevent the onset and minimize the development of communication disorders through appropriate rehabilitation,
B10	Conduct a research study and / or write a scientific study on a research.
B11	Utilize scientific facts and theories to analyze and interpret practical data.
B 12	Conduct a comprehensive examination and evaluation to reach diagnosis

C– Professional/practical skills

	By the end of the program the Graduate should be able to:
C 1	Master the basic and modern professional clinical skills in the area of Audiology.
C 2	Perform proper general examination and identify normal and major abnormal physical signs.
C3	Perform basic and advanced audiological and vestibular evaluation
C4	Integrate the patient's symptomatology, historic data, abnormal physical signs and investigations into a comprehensive differential diagnosis of internal medicine and psychiatric disorders..
C5	Use properly calibrated instrumentation according to manufacturer's recommendations and specifications.
C6	Conduct researches
C 7	Integrate the patient's symptomatology, historic data, abnormal physical signs and investigations into a comprehensive differential diagnosis of neurological disorders..
C9	Identify different component of hearing aids
C10	Selection & verification of hearing aids
C11	Fitting & programing of different hearing aids
C12	Identify different assistive listening devices
C13	Identify component & strategies of cochlear implants
C14	Select candidate for cochlear implants
C15	Mapping different cochlear implants
C16	Conduct researches

D– Communication & Transferable skills

	By the end of the study of Master Program in Audiology the Graduate should be able to:
D 1	Use standard computer programs for statistical analysis effectively.
D 2	Utilize computers in conducting researches
D 3	Analyze and interpret data.
D 4	Use different sources to obtain information and knowledge
D 5	Manage time and prioritize work loads.
D6	Think independently, set tasks and solve problems on scientific basis.
D7	Work in teams effectively.
D8	Collaborate and communicate with others positively.
D9	Acquire self- and long life–learning.
D 10	Use different sources to obtain information and knowledge
D 11	Acquire self- and long life–learning.

3) Academic standards:

The programme of master of audiology adopt the national academic reference standards **(NARS)** issued by the National Authority for Quality Assurance & Accreditation in Education.

3.a– External reference points/benchmarks are selected to confirm the appropriateness of the objectives, ILOs and structure of assessment of the programme: (please list here the references and the website)

> External reference point/Benchmark Mary Hare MSc Educational Audiology (Oxford Brookes University)

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

(E.g. all programme aims of the Benchmark are covered by the current programme)

- At least 85% programme aims of the Benchmark are covered by the current programme.
- Timing is differing from the structure of the programme specification of the benchmark.

4) Curriculum structure and contents:

4.a– Duration of the programme (in years or months):………………………....................

4.b– programme structure:

Candidates should fulfill a total of 45 credit hours

●4.b.1: Number of credit hours:

First part: 5   Second part: 18   Thesis: 6   Practical training: 14

Scientific activities: 2

5) Programme courses:

First part

a- Compulsory courses: 15 WEEKS

Course Title	Course Code	NO. of hours per week					Total teaching hours (15wks)	Programme ILOs covered (REFERRING TO MATRIX)
		Theoretical		Laboratory /practical	Field	Total credits		
		Lectures	seminars					
Applied Anatomy	AUDI501	0.5				0.5	7.5	A1,A2,B1
Applied physiology	AAUDI 503	0.5				0.5	7.5	A1,A2,A11 B1
Acoustics	AUDI 524 AC	1.5				1.5	22.5	A9,A10,A11, B11
Electronics	AUDI 524 ET	1.5				1.5	22.5	A8,B11
Statistics	AUDI 518	0.5				0.5	7.5	A12,A13,A14 B10
Genetics	AUDI 509	0.5				0.5	7.5	A5,A6,B2 B4

b- Elective courses:

N/A

Second part

a-   Compulsory courses 45 WEEKS

(thesis will be included in this table):

Course title	Course code	NO. of hours per week					Total teaching hours	Programme ILOs Covered(REFERRING TO MATRIX)
		Theoretical		Laboratory /practical	Field	Total credits		
		Lectures	Seminars					
Basics for evaluation peripheral and central auditory and vestibular systems	AUDI524AV	10		20		20	450	**A1,A2,A4,B1,B2 B3,B4,B5,B6 C1,C2,C3.C4,C5,C6,C7 C,8,C16,D1,D2,D3,D4 D5,D6,D7,D8,D9,D10 D11**
Basics of auditory rehabilitation, hearing aids and cochlear implant	AUDI 524AR	6		8		10	210	**A3,A3a,A3b,B9,B10, C9,C10,C11,C12,C13, C1,C15,16,D1,D2,D3,D 4,D5,D6,D7,D8,D9, D10,D11**
Thesis						6		

B.Elective courses:

Course title	Course code	NO. of hours per week					Total teaching hours	Programme ILOs Covered(REFERRING TO MATRIX
		Theoretical		Laboratory /practical	Field	Total credits		
		Lectures	Seminars					
Neurology	**AUDI 500**	2				2	30	**A15,A16,A17,B12**
Otology	AUDI 524EN	2				2	30	**A1,A2,A4,B3**

نظام الامتحان وتوزيع الدرجات

امتحان الجزء الاول

اجمالى	الدرجة			الاختبار	المقرر
	شفهى	MCQ	تحريرى		
٢٠٠	80	24	96	اختبار تحريرى مدته ساعتين+اختبار شفهى	التشريح التطبيقى
٢٠٠	80	24	96	اختبار تحريرى مدته ساعتين+اختبار شفهى	الفسيولوجيا التطبيقية
٢٠٠	80	24	96	اختبار تحريرى مدته ساعتين+اختبار شفهى	علم الصوتيات
٢٠٠	80	24	96	اختبار تحريرى مدته ساعتين+اختبار شفهى	علم الالكترونيات
١٠٠	٤٠	١٢	٤٨	اختبار تحريرى مدته ساعة+اختبار شفهى	علم الاحصاء الطبى
١٠٠	٤٠	١٢	٤٨	اختبار تحريرى مدته ساعة+اختبار شفهى	علم الوراثة
١٠٠٠					اجمالى الدرجة

الامتحان النهائى الشامل

اجمالى	الدرجة				الاختبار	المقرر
	اكلينكى	شفهى	MCQ	تحريرى		
٦٠٠	١٥٠	١٥٠	٣٠ + ٣٠	١٢٠ + ١٢٠	اختباران تحريريان مدة كل منها ثلاث ساعات + اختبار اكلينيكى+ اختبار شفهى	اساسيات تقييم جهاز السمع والاتزان الطرف المركزى
٣٠٠		١٥٠	٣٠	١٢٠	اختبار تحريرى مدته ثلاث ساعات +اختبار شفهى	اساسيات التاهيل والمعينات والقوقعة السمعية
١٠٠		٢٥	١٥	٦٠	اختبار تحريرى مدته ساعة + اختبار شفهى	المقرر الاختيارى
١٠٠٠						اجمالى الدرجة

6) Programme admission requirements:

● General requirements:

According to the faculty postgraduate bylaws

● Specific requirements (if applicable):

N/A

7) Regulations for progression and programme completion:

Student must complete minimum of 45 credit hours in order to obtain the Master degree, which include the courses of first and second parts, thesis and activities of the log book.

● Registration for the M.Sc. thesis is allowed 6 months from the day of registration to the programme.

Log book fulfillment:

● Student must fulfill a minimum of 16 credits of log book activities including conferences attendance or speaking.

● Lectures and seminars of the previously described courses must be documented in the log book and signed by the lecturer.

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

8)Evaluation of Programme's intended learning outcomes (ILOs):

Evaluator	Tools*	Sample size
Internal evaluator (s)		
External Evaluator (s)		
Senior student (s)		
Alumni		
Stakeholder (s)		
Others		

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

We certify that all information required to deliver this programme is contained in the above specification and will be implemented. All course specification for this programme is in place.	
Programme coordinator: Name:	Signature & date:
Dean: Name:	Signature & date:
Executive director of the quality assurance unit: Name:	Signature & date:

P.S. The programme specification should have attached to it all courses specifications for all courses listed in the matrix.