COURSE SPECIFICATION

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course:	MD AUDIOLOGY
(2) Department offering the programme:	ENT/ Audiology unit
(3) Department responsible for teaching the course:	Audiology unit
(4) Part of the programme:	First part
(5) Date of approval by the Department`s council	6-8-2016
(6) Date of last approval of programme specification by Faculty coun	9/8/2016
(7) Course title:	Acoustics & psychoacoustics
(8) Course code:	AUDI 624 AP

(9) Total teaching hours:	22.5

(B) Professional information

(1) Course Aims:

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

The aim of this course is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mastering of the practice of Acoustic specialty through providing:

1. Recent scientific knowledge essential for the mastering of practice of Acoustics according to the international standards
2. Leadership skills, problem solving strategies.
3. Clinical experience within department clinics as well as clinical sites outside the university.
4. Linking teaching with research

(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 course, the candidate will be able to:

A- Knowledge and Understanding

By the end of the program, the graduate should be able to:

A 5	Recognize the recent advances in nature and analysis of sounds.
A6	Explain acoustics and psychoacoustics of different sounds.

B- Intellectual skills

By the end of the program the Graduate should be able to:

B7	Measure intensities of different sounds.
B10	Utilize scientific facts and theories to analyze and interpret practical data.

(3) Course content:

Subjects	Lectures	Clinical	Laboratory	Field	Total Teaching Hours
Physical concepts:					
• Fundamental physical quantities.	0.5				
• Force.	0.5				
• Work, energy, power.	0.5				
• Simple harmonic motion.	0.5				
• Free vibration.	0.5				
• Forced vibration.	0.5				
• Impedance.	0.5				
Acoustics					
• Definition of sound	0.5				
• Fundamental properties of sound.	0.5				
• Sound wave phenomena.	0.5				
• Sound field.	0.5				
• Resonance	0.5				
Measurements of sound					
• Amplitude	0.5				
• Decibel notation.	1				
• Octave notation.	1				
• Types of sounds.	0.5				
• Filters	1				
• Distortion.	1				

Psychoacoustics:	
• The concept of threshold.	1
• The auditory response area.	1
• Measurement of hearing.	1
• Differential sensitivity.	1
• Loudness.	1
• The power low.	0.5
• Pitch.	1
• Perception of complex sounds.	1
• Masking.	1
• Frequency resolving power of auditory system.	1
• Temporal aspects of hearing.	1
• Binaural hearing.	1
	22.5

(4) Teaching methods:

4.1: Lectures

4.2: Assignments.

(5) Assessment methods:

5.1: Written Exam Short essay to assess knowledge & intellectual skills
5.2: MCQ: to assess knowledge & intellectual skills

Assessment schedule:

Assessment 1: Written Exams Week: 18-20

Assessment 2: MCQ Exams Week: 18-20

Percentage of each assessment to the total mark:

Written Exams : 80 degree
MCQ Exams: 20 degree

Other assessment without marks:

Research assignment to assess general transferable skills, intellectual skills.

(6) References of the course:

6.1: Hand books: Fundamental of hearing

6.2: Text books: Bases of hearing science

6.3: Journals: American Journal of Audiology

6.1: Websites:

Audiology online

- ASHA
- ANSI …

(7) Facilities and resources mandatory for course completion:

a. Teaching places (teaching class, teaching halls, teaching laboratory).
b. Teaching tools: including screens, computers including CD, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier and laser printers.

Course coordinator:

Head of the department:

Date:

P.S. This specification must be done for each course.