

كلية الطب جامعة أسيوط



Faculty of Medicine Quality Assurance Unit

# MEDICAL DOCTORATE (M.D.) DEGREE PROGRAM AND COURSES SPECIFICATIONS FOR PHONIATRICS DISORDERS

(According to currently applied bylaws)

Otorhinolaryngology - Head & Neck Surgery Department

Faculty of Medicine Assiut University 2022/2023

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Assiut University Faculty of Medicine Quality Assurance Unit (QAU)



# M. D. degree of Phonaitrics Disorders

# A. Basic Information

- Program Title: M. D. degree of Phoniatrics
- Nature of the program: Single.
- Responsible Department: Department of ENT (Phoniatric Unit)- Faculty of Medicine- Assiut University.
- Program Academic Director (Head of the Department): Prof. Dr.Ahmed Abuol Waffa.

Prof. Dr. Eman sayed Hassan (Head of the unit).

- Coordinator (s):
  - Principle coordinator (S): Prof. Dr. Essam Mohamed Aref
  - Assistant coordinator(S):
  - Prof. Eman sayed
  - Dr. Hanan Abdel Rashed
- 🖊 Internal evaluators: Prof. Dr. Mohamed Salama
- External evaluator:Prof. Dr Mahmoud Yousef Abou El Ella –
   Professor of Phoniatrics Ain-Shamis University
- Date of Approval by the Faculty of Medicine Council of Assiut University: 23-9-2014.
- Date of most recent approval of program specification by the Faculty of Medicine Council of Assiut University: 27-11-2022.
- **4** Total number of courses: 5 courses
- First part : 4 courses
- Second part 1 Course.
- **Lective course: 2 courses.**

# **B.** Professional Information

#### 1- Program aims

I/1. To enable candidates to keep with international standards of patients care by teaching high level of clinical skills, bedside care skills, in addition to update medical knowledge as well as clinical experience and competence in the area of language, speech, voice and swallowing disorders and enabling the candidates of making appropriate referrals to a sub-specialist.

1/2. Provide assistant lecturers with fundamental knowledge of rehabilitation of communicative disorders.

1/3. To introduce candidates to the basics of scientific medical research.

1/4.To provide the candidates with fundamental knowledge of rehabilitation of communicative disorders.

- Enabling them to start professional careers as specialists in Egypt.
- Making them recognized as specialists abroad.
- Enabling them to pursue higher studies and subspecialties.
- Enabling them to understand and get the best of published scientific research and do their own.

## 2-Intended learning outcomes (ILOs) *for the whole program*:

# 2/1Knowledge and understanding:

- A. Demonstrate in-depth knowledge and understanding of theories, basics and updated biomedical, clinical epidemiological and socio – behavioral science relevant to phoniatrics as well as the evidence – based application of this knowledge to patient care.
- B. Explain basics, methodology, tools and ethics of scientific medical, clinical research.

- C. Mention ethical, medico logical principles and bylaws relevant to his practice in the field of phoniatrics.
- D. Mention principles and basics of quality assurance and quality improvement in medical education and in clinical practice of phoniatrics.
- E. Mention health care system, public health and health policy, issues relevant to this speciality and principles and meth\]

F.

G. ds of system – based improvement of patient care in common health problems of the field of phoniatrics.

#### 2/2 Intellectual outcomes

A. Apply the basic and clinically supportive sciences which are appropriate to phoniatrics related conditions / problem / topics. including:

- Language disorders& rehabilitation
- Speech disorders& rehabilitation
- Voice disorders& rehabilitation.
- Swallowing disorders& rehabilitation.
- Learning disorders & rehabilitation.

B. Demonstrate an investigatory and analytic thinking "problem

- solving "approaches to clinical situation related to phoniatrics
- C. Plan research projects.

D. Write scientific papers.

E. Participate in clinical risk management as a part of clinical governance.

F. Plan for quality improvement in the field of medical education and clinical practice in phoniatrics.

G. Create / innovate plans, systems, and other issues for improvement of performance in his practice.

H. Present and defend his / her data in front of a panel of experts.

I. Formulate management plans and alternative decisions in different situations in the field of phoniatrics disorders.

## 2/3 Skills

## 2/3/1 Practical skills (Patient Care)

#### Students will be able to:

A. Provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

**p.s.** Extensive level means in-depth understanding from basic science to evidence – based clinical application and possession of skills to manage independently all problems in field of phoniatric practice.

B. Provide extensive level of patient care *for patients with all common diagnoses and for uncomplicated procedures* related to Phoniatrics

C. Provide extensive level of patient care *for non-routine, complicated patients and under increasingly difficult circumstances,* while demonstrating compassionate, appropriate and effective care.

D. Perform diagnostic and therapeutic procedures considered essential in the field of Phoniatrics

E. Handles unexpected complications, while demonstrating compassion and sensitivity to patient needs and concerns.

F. Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families in the Phoniatrics related situations.

G, Gather essential and accurate information about patients of Phoniatrics related conditions.

H. Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence and clinical judgment for Phoniatrics related conditions.

I. Develop and carry out patient management plans for Phoniatrics related conditions.

J. Counsel and educate patients and their families about Phoniatrics related conditions.

K. Use information technology to support patient care decisions and patient education in all Phoniatrics related clinical situations.

L. Perform competently all medical and invasive procedures considered essential for the Phoniatrics related conditions / area of practices.

M. Provide health care services aimed at preventing the Phoniatrics related health problems.

N. Lead health care professionals, including those from other disciplines, to provide patient-focused care in Phoniatrics related conditions.

O. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets (Write a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and maintaining medical records)

# 2/3/2 General skills

#### Including:

- Practice-based Learning and Improvement
- Interpersonal and Communication Skills
- Professionalism
- Systems-based Practice

# **Practice-Based Learning and Improvement**

- A. Demonstrate the competency of care provision to patients in the different area of Phoniatrics.
- B. Appraise scientific evidence.
- C. Continuously improve patient care based on constant selfevaluation and <u>life-long learning.</u>
- D. Participate in clinical audit and research projects.
- E. Practice skills of evidence-based Medicine (EBM).
- F. Educate and evaluate students, residents and other health professionals.
- G. Design logbooks.
- H. Design clinical guidelines and standard protocols of management.
- I. Appraise evidence from scientific studies related to the patients' health problems.
- J. Apply knowledge of study designs and statistical methods to the appraisal of clinical studies.
- K. Use information technology to manage information, access on-line medical information; for the important topics.

# Interpersonal and Communication Skills

L. Master interpersonal and communication skills that result in the effective <u>exchange of information and collaboration</u> with patients, their families, and health professionals, including:-

- Present a case.
- <u>Write</u> a consultation note.
- <u>Inform patients</u> of a diagnosis and therapeutic plan completing and maintaining comprehensive.
- Timely and legible medical records.
- Teamwork skills.

M. Create and sustain a therapeutic and ethically sound relationship with patients.

N. Elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.

O. Work effectively with others as a member or leader of a health care team or other professional group.

#### **Professionalism**

P. Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.

Q. Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.

R. Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.

# **Systems-Based Practice**

S. Work effectively in health care delivery settings and systems related to Phoniatrics.

T. Practice cost-effective health care and resource allocation that does not compromise quality of care.

U. Advocate for quality patient care and assist patients in dealing with system complexities.

V. Design, monitor and evaluate specification of under and post graduate course and programs.

W. Act as a chair man for scientific meetings including time management.

#### 3- Program Academic Reference Standards (ARS) (Annex 2)

Academic standards for Medical Doctorate (MD) degree in Phoniatrics Disorders

Assiut Faculty of Medicine developed MD degree programs' academic standards for different clinical specialties.

In preparing these standards, the General Academic Reference Standards for post graduate programs (GARS) were adopted. These standards set out the graduate attributes and academic characteristics that are expected to be achieved by the end of the program.

These standards were approved by the faculty council on 20/3/2010. These standards were revised and approved without changes by the Faculty Council on 23-9-2014. These standards were revised and approved without changes by the Faculty Council on 27-11-2022.

#### 4- Program External References (Benchmarks)

**1. ACGME (Accreditation Council for Graduate Medical Education).** 

http://www.acgme.org/acWebsite/navPages/nav\_Public.asp

2. Education standards and training program provided by the Union of the European Phoniatrician (UEP) under the section of the European Union of Medical Specialists (UEMS)

http://www.phoniatrics-uep.org/education.htm

#### 5- Program Structure

#### 5- Program Structure

A. Duration of program: 4-6 years
B. Structure of the program:
Total number of credit points: = 420 CP
Master degree: 180 credit point
Didactic #: 37 (23.1%), practical 123 (76.9%), total 160 CP
Thesis and researches: 80 CP (33.3%)

First part Didactic 10 (100%), practical 0 (0 %), total 10 CP Second part Didactic 24, (16.3 %), practical 123 (83.7 %), total 147 CP Elective courses: 3 credit points #Didactic (lectures, seminars, tutorial)

According the currently applied bylaws: Total courses: 160 credit point Compulsory courses: 157 credit point (98.1%) Elective courses: 3 credit point (1.9%)

	Credit point	% from total	
Basic science courses	10	4.1%	
Humanity and social courses	3	1.2%	
Speciality courses	147	61.3%	
Others ( Computer,)	-	0	
Field training	123	51.3%	
Thesis	40	16.7%	
2 published researches	40	16.7%	
Master degree	180		

#### **C- Program Time Table**

Duration of program 4 years divided into

o Part 1

Program-related Basic science courses

Program-related Basic science courses

- Medical statistic
- Research methodology

- Medicolegal Aspects and Ethics in Medical Practice and Scientific Research

Students are allowed to sit the exams of these courses after 6 months from applying to the M D degree.

Students are allowed to sit the exams of the remaining essential courses after 12 months from applying to the MD degree.

Thesis and 2 published researches

For the M D thesis;

MD thesis subject should be officially registered within 1 year from application to the MD degree,

Discussion and acceptance of the thesis should not be set before 24 months from registering the M D subject;

It could be discussed and accepted either before or after passing the second part of examination

o Part 2

Program –related specialized science courses and ILOs Students are not allowed to sit the exams of these courses before 4 years from applying to the MD degree.

Two elective courses can be set during either the 1<sup>st</sup> or 2<sup>nd</sup> parts.

The students pass if they get 50% from the written exams and 60% from oral exams, 60% from clinical exams of each course and 60% of summation of the written exams, oral and clinical exams of each course

Total degrees 1700 marks. 500 marks for first part 1200 for second part Written exam 40% - 70%. Clinical and oral exams 30% - 60%.

# **Curriculum Structure: (Courses):**

Levels and courses of the program:

Modules/ Units delivering	Course	СР		
courses and student work	Code	Lectures	training	total
load list				
First Part				-
Basic science courses				
<b>Course1:</b> Medical statistics.	FAC309A	1	-	1CP
Course 2: Research				
methodology	FAC309B	1	-	1CP
Course 3: Medicolegal				
Aspects and Ethics in	FAC310C	1	-	1CP
Medical Practice and				
Scientific Research				
Course 4: Phoniatrics1	<u>PHO330A</u>	<u>7</u>	-	<u>7CP</u>
-Unit 1:Anatomy&		1.5	-	1.5
- unit 2: Physiology&		1.5	-	1.5
-unit 3: Phonetic		2	-	2
&Linguistic		2	-	2
Second Part		Speciality co		
	Sneciality Cl	inical Work (		
Speciality course	Speciality ci			
Course 5: Phoniatrics 2	PHO330B	24CP	123CP	147
(communicative disorders	#			
&rehabilitation advanced)				
unit (module)1: Language				
disorders& rehabilitations		6	40.5	46.5
unit (module)2:Speech				
disorders& rehabilitations		6	40.5	46.5
unit (module)3:Voice				

disorders & rehabilitations		6	31	37
unit (module)4: Swallowing disorders &rehabilitations.		2	9	11
Unit (module)5: Learning disabilities& rehabilitation.		1.5	_	1.5
Unit(Module)6: Neurological diseases.		1.5	2	3.5
Unit(module)7: Psychiatric disorders		1	-	1
Third Part				
Thesis and at least one published research				
Elective courses*		3 0	CP CP	
<ul> <li>Elective course 1</li> </ul>				
<ul> <li>Elective course 2</li> </ul>				
Thesis	40 CP			
Published researches**	40 CP			

**#Didactic (lectures, seminars, tutorial)** 

\* Elective courses can be taken during either the 1<sup>st</sup> or 2<sup>nd</sup> parts. Student work load calculation:

Work load hours are scheduled depending on the type of activities and targeted competences and skills in different courses **Elective Courses#:** 

- Advanced medical statistics.
- Evidence based medicine.
- Advanced infection control.
- Quality assurance of medical education.
- Quality assurance of clinical practice.
- o -Hospital management

# Two of the above mentioned courses are prerequisites for fulfillment of the degree.

#### 3. Thesis / Researches:

40 CP are appointed to the completion and acceptance of the thesis.

\*\*Another 40 points are appointed to acceptance or publication of one research from the thesis in international indexed medical journals or publication of 2 researches from the thesis in local specialized medical journals.

#### **Curriculum Structure: (Courses):**

Levels and courses of the program:

#### 6. Courses Contents (Annex 1)

The competency based objectives for each course/module/rotation are specified in conjunction with teaching/training methods, requirements for achieving these objectives and assessment methods.

#### See Annex 1 for detailed specifications for each course/ module Annex 6 II: Program Matrix

#### 7-Admission requirements

#### Admission Requirements (prerequisites) if any :

# - Master degree in the speciality with at least grade good

-The candidate knows (basic and advanced) the structures, functions, and dysfunctions of the communication organs and masters the treatment and rehabilitation methods as well as most important methods of alternative and augmentative communication (AAC).

- The candidate master instrumental examination methods of the discipline.

- The candidate is able to work in multidisciplinary team.

- The candidate is able to teach health care and nonhealth care professionals on phoniatric issues.

- The candidate has learnt methods for finding and adopting new phoniatric information

#### **II.Specific Requirements**

- Candidates graduated from Egyptian Universities should have at least grade good in their final year examination

- Candidates should have at least grade good in their final of Master degree.

- Candidate should be fluent in English (Study Language)

#### VACATIONS AND STUDY LEAVE

The current departmental policy is to give working assistant lecture one month leave prior to first/ second part exams. **FEES:** 

As regulated by the postgraduate studies rules and approved by the faculty vice dean of post graduate studies and the faculty and university councils.

#### 8-Progression and completion requirements

- Examinations of the first part (Medical statistic, Research methodology and Medicolegal Aspects and Ethics in Medical Practice and Scientific Research) could be set at 6 months from registering to the MD degree.
- Students are allowed to sit the exams of the remaining essential courses of the first part after 12 months from applying to the MD degree.
- Examination of the second part cannot be set before 4 years from registering to the degree.
- Discussion of the MD thesis could be set after 2 years from officially registering the MD subject, either before or after setting the second part exams.
- **4** The minimum duration of the program is 4 years.

#### The students are offered the degree when:

1. Passing the exams of all essential, elective and specialized courses of this program as regulated by the post graduates approved rules by the faculty council.

- 2. Completing all scheduled CP and log book (minimum 80%).
- 3. Discussion and acceptance of the MD thesis.

4. Acceptance or publication of one research from the thesis in international indexed medical journals or publication of 2 researches from the thesis in local specialized medical journals.

#### 9-Program assessment methods and rules (Annex IV)

Method	ILOs measured
Written examinations:	K & I
Structured essay questions	
<b>Objective questions</b>	
MCQ	
Problem solving	
Clinical:	K ,I, P &G skills
Long/short cases	
OSCE	
Structured oral	K ,I &G skills
Logbook assessment	All
Research assignment	I &G skills

#### Weighting of assessments:

Courses Degrees					
First Part	Course	Written Exam	Oral and	/or	Total
	code		Practical	l Exam	
Basic science courses:				-	
Course 1:Medical	FAC309A	35	15	-	50
statistics					
Course2: Research	FAC309B	35	15	-	50
methodology					
Course3:Medicolegal	FAC310C	35	15	-	50
Aspects and Ethics in					
Medical Practice and					
Scientific Research					
Course4:	PHO330A	140	210	-	350
Phoniatrics 1					
Total		245	255	-	500
	Sec	ond Part			
	Course	written	oral	clinical	total
	code				
Speciality Courses					
Course 5	PHO330B#				
Phoniatrics2					
(Advanced					
Communicative					
disorders					
&rehabilitation)					
- Unit (1-5) <b>: 3</b>		3X120=360	320	320	1000
papers.		+	+	+	+
- Unit 6,7 ; paper 4		120(80+40)	40	40	200
Total		480	360	360	1200

\* 25% of the oral exam for assessment of logbook

Total degree 1900

500 marks for first part

**1200** for second part

**200** for elective courses.

#### **4** Examination system:

#### First part:

- Written exam 2 hours in Medical Statistics and Research Methodology + oral examination
- Written exam 1 hour in Medico legal Aspects and Ethics in Medical Practice and Scientific Research + oral examination.
- Written exam 3 hours in phoniatrics1+ Oral exam.

#### > Second part:

• 4 Papers, each one 120 marks and 3 hours in time for phoniatrics2+ 360 marks for oral sittings+360 marks for practical/clinical settings.

#### Elective courses

- Written exam one paper 1 hour in Elective course 1 + Oral & Practical exam
- Written exam one paper 1 hour in Elective course 2 + Oral & Practical exam

#### **10-Program evaluation**

Annex 5 cont	ains evaluation	templates and
Alumni	questionnaires	#
Senior students	questionnaires	#
	questionnaires	
	Field visits	
Stakeholders	Reports	#
council		
department		
(s): According to		
External Examiner		
council		
department		
(s):According to	Field visits	
External Evaluator	Reports	#
Unit	Field visits	
Quality Assurance	Reports	#
By whom	method	sample

#Annex 5 contains evaluation templates and reports(Departmental folder).

#### 11-Declaration

We certify that all of the information required to deliver this program is contained in the above specification and will be implemented.

All course specifications for this program are in place.

Contributor	Name	Signature	Date
Program Principle Coordinator:	Prof.Dr Essam		
	Mohamed Aref		
Head of the Responsible	Prof. Dr Ahmed		
Department (Program	Abuol-wafa		
Academic Director):			

# Annex 1, Specifications for Courses / Modules

#### **Annex 1: specifications for courses/ modules**

#### **First Part**

Course 1: Medical statistics

#### **Course 2: Research Methodology**

**Course 3:** Medicolegal Aspets and Ethics in Medical Practice and Scientific Research.

Course 4: Phoniatrics 1 (Anatomy & Physiology & Phonetic & Linguistics).

**Course 1: Medical statistics** 

Name of department: Public Health and Community Medicine

Faculty of medicine Assiut University 2022-2023

#### 1. Course data

- **4** Course Title: Medical statistics
- **4** Course code: FAC309A
- Specialty: offered to all clinical and academic specialties
- **4** Number of credit points: 1 credit point
- **4** Department (s) delivering the course: Pubic Health and Community Medicine
- Coordinator (s):
  - Course coordinator: Prof. Farag Mohammed Moftah
- Assistant coordinator (s):
  - Prof. Medhat Araby Khalil Saleh
- Locate last reviewed: January -2022
- Requirements (pre-requisites) if any:
  - Completed Master degree in any of the academic or clinical departments of Medicine.

# 2. Course Aims

Enable gradute students to use statistical principles to improve their professional work and develop the concept of critical interpretation of data

# 3. Intended learning outcomes (ILOs):To be able to use statistical principals to manage data

ILOS Methods of Method		
	teaching/	Evaluation
	learning	
A. List the types of variables	Lecture and	Written
	discussion	examination
B. Identify the methods of data collection	Lecture and	Written
,	discussion	examination
C. Describe the different sampling	Lecture and	Written
strategies	discussion	examination
D. Identify types of tabular and graphic	Lecture and	Written
presentation of data	discussion	examination
E. Identify measures of central tendency	Lecture and	Written
and dispersion	discussion	examination
F. Identify the characters of normal	Lecture and	Written
distribution curve.	discussion	examination
G. Detect the difference between	Lecture and	Written
parametric and non-parametric tests	discussion	examination
H. Identify the concepts of correlation and	Lecture and	Written
regression	discussion	examination

# A knowledge and understanding

D. Intellectual			
ILOs	Methods of teaching/ learning	Methods of Evaluation	
A. Describe the normal curves.	Lecture& Discussions	Written examination	
B. Describe and summarize data	Lecture& Discussions	Written examination	
C. Select the proper test of significance	Lecture& Discussions	Written examination	
D. Interpret the proper test of significance	Lecture& Discussions	Written examination	
E. Describe the difference between parametric and non-parametric tests	Lecture& Discussions	Written examination	

# **B. intellectual**

# **C. Practical skills**

ILOs	Methods of teaching/ learning	Methods of Evaluation	
A. Design data entry files.	Tutorial on SPSS	Assignments SPSS exam	
B. Validate data entry.	Tutorial on SPSS	Assignments SPSS exam	
C. Manage data files.	Tutorial on SPSS	Assignments SPSS exam	
D. Construct tables and graphs.	Tutorial on SPSS	Assignments SPSS exam	
E. Calculate measures of central tendency and dispersion.	Tutorial on SPSS	Assignments SPSS exam	
F. Select, apply and interpret the proper test of significance.	Tutorial on SPSS	Assignments SPSS exam	

# D general skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Appraise scientific evidence	Discussions	Research assignment
B. Use information technology to manage information, access on-line medical information; for the important topics.	tutorial	Research and audits' assignment

# 4. Course contents (topic s/modules/rotation Course Matrix

# Time Schedule: First Part

Topic	Covered ILOs			
-	Knowledge	Intellectual	Practical skills	General Skills
Introduction	A A-F	B A-D	С	D A&B
	D A-F	A-D A-D	-	A&B A&B
Tables and graphics	C D	A-D	-	
Sampling	C	-	-	A&B
Methodology of data collection	В	-	-	A&B
Type of variables	А	-	-	A&B
Proportion test&	E,F	C&D	-	A&B
Chi-square test				
Student T test&	E,F	C&D	F	A&B
Paired T test				
ANOVA test	E,F	C&D	F	A&B
Non parametric tests	E,F	C&D	F	A&B
Discrimination analysis factor	E,F	C&D	-	A&B
analysis				
SPSS Introduction	A-F	A-D	-	A&B
Data entry and cleaning of	А	A-D	A-C	A&B
data				
Transforming of variables	А	A&B	A-C	A&B
Descriptive statistics	D	A-D	D&E	A&B
Graphic presentation	D	A&B	D	A&B
Chi square and interpretation	E,F	C&D	F	A&B
of results				
Correlation Regression	E,F	C&D	F	A&B
Multiple and logistic	E,F	C&D	F	A&B
Regression				

#### **5. Course Methods of teaching/learning**

- 1. Lectures
- 2. Assignments
- 3. Discussions
- 4. Exercises
- 5. Tutorial on SPSS v.16

#### 6. Course assessment methods:

- i. Assessment tools:
  - **1.** Attendance and active participation
  - 2. Assignment
  - **3.** Practical SPSS examination
  - 4. Written exam

**ii. Time schedule:** After 6 months from applying to the M D degree.

iii. Marks: 50 (35 for written exam and 15 for practical exam).

# 7. List of references

#### i. Lectures notes

Department lecture notes

#### ii. Essential books

- Medical Statistics: Book by Ramakrishna HK 2016
- Janet Peacock and Philip Peacock. Oxford Handbook of Medical Statistics (second edition.) Publisher: Oxford University Press, Print Publication Date: Nov 2010 Print ISBN-13: 9780199551286, Published online: Jun 2011. DOI: 10.1093/med/9780199551286.001.0001
- Leslie E. Daly MSc, PhD, Hon MFPHM, Geoffrey J. Bourke MA, MD, FRCPI, FFPHM, FFPHMI, Interpretation and Uses of Medical Statistics, Fifth Edition, First published:1 January 2000, Print ISBN:9780632047635
   |Online ISBN:9780470696750 |DOI:10.1002/9780470696750
- Marcello Pagano, Kimberlee Gauvreau: Principles of Biostatistics second edition published in 2000 by Brooks/Cole and then Cengage Learning. CRC Press, Feb 19, 2018 Mathematics 584 pages.

#### lii- Recommended books

- Ji-Qian Fang (Sun Yat-Sen University, China) Handbook of Medical Statistics: <u>https://doi.org/10.1142/10259</u> | September 2017.Pages: 852
- Robert H. Riffenburgh: Statistics in Medicine 4th Edition (2020). EvidenceEvidence Based Medicine How to practice and teach EBM.
- Discovering Statistics Using IBM SPSS Book by Andy Field, 2013.

#### iii. Periodicals, Web sites, etc

- iv. Periodicals , etc Statistics in Medicine Wiley Online Library
- v. **Web sites** https://www.phc.ox.ac.uk/research/medicalstatistics

8. Signatures

Course Coordinator: - Farag Mohammed Moftah	Head of the Department: - Prof. Eman Morsy Mohamed
Date: 10-1-2022	Date: 10-1-2022
Associated Coordinator: Prof. Medhat Araby Khalil Saleh	
Date: 10-1-2022	

#### **Course 2: Research Methodology**

Name of department: Public Health and Community Medicine Faculty of medicine Assiut University 2021-2022

#### 1. Course data

- Course Title: Research methodology
- 🔸 🛛 Course code: FAC309B
- Specialty: Offered to all clinical and academic specialties
- Number of credit points: 1 credit point
- Department (s) delivering the course: Department of public health
- Coordinator (s):
  - Course coordinator: Prof. Mahmoud Attia

Assistant coordinator (s): Prof. Ekram Mohamed

Prof. Medhat Araby Khalil

- **Date last reviewed:** January 2022
- **Requirements (prerequisites) if any:** 
  - Completed Master degree in any of the academic or
    - clinical departments of Medicine.

# 2. Course Aims

To provide graduate students with the skills of:

- planning and implementing sound research
- writing a scientific research proposal

# 3. Intended learning outcomes (ILOs)

# A knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Explain differences between different	Lecture and	Written exam
study designs.	discussion	Log book
	Practical sessions	assignments
	Workshops	Practical exam
B. Identify sources and types of bias in	Lecture and	Written exam
research.	discussion	Log book
	Practical sessions	assignments
		Practical exam
C. Identify methods of data collection.	Lecture and	Written exam
	discussion	Log book
	Practical sessions	assignments
D. Select and design valid measurement	Lecture and	Written exam
tools for research.	discussion	Log book
	Practical sessions	assignments
	Workshops	Practical exam
E. Explain ethical issues in conducting	Lecture and	Written exam
research on human subjects.	discussion	Log book
	Practical sessions	assignments
	Workshops	
F. List the steps involved in proposal	Lecture and	Written exam
writing.	discussion	Log book
	Practical sessions	assignments
	Workshops	Practical exam
G. Identify a research problem within a	Lecture	Written exam
conceptual framework.	Discussion	Log book
		assignments

		Practical exam
H. Use the web sources to do a literature	Practical tutorial on	Log book
search	web	assignment
I. Describe the rules of authorship in	Lecture and	Written exam
scientific writing.	discussion	Log book
	Practical sessions	assignments
	Workshops	
J. Select the appropriate study design for	Lecture	Written exam
the research question.	Practical sessions	Practical exam
K. Minimize bias in designing research.	Lecture	Written exam
L. Screening & theoretical background	Lectures	Written exam
L. Sereening & theoretical background		Practical exam
M. Mention the basic ethics for conducting a	lectures	Written exam
research and medicolegal principles relevant	seminar	Practical
to data confidentiality.		exam

# **B. intellectual**

Competency and Skills	Methods of	Methods of
	teaching/	Evaluation
	learning	
A-Apply basic science & knowledge for	Discussions	Written exam
appraising scientific literature.	&seminars	Practical exam
B- Design research and present study data,	lecture	log book
in seminars.	seminar	assignments
C- Design suitable epidemiological study.	lecture	log book
	seminar	assignments
D-Design strategies for resolving ethical	lecture	Written exam
concerns in research, law, and regulations.	Workshops	log book
		assignments
E- Apply coherently synthesize ideas and	lecture	log book
integrate lateral and vertical thinking.	Workshops	assignments
F- Evaluate screening tests and interpreting	lecture	Written exam
their uses in different population.		Practical exam

# **C.** Practical skills

Competency and	Methods of	Methods of
Skills	teaching/	Evaluation
	learning	
A- Conduct epidemiological studies, screening	lectures	written exam
and surveys.	seminar	log book
		assignments
B- Identify steps required in fielding the study.	Lecture	Assignments
		Written exam
C- Managing data collection team.	lectures	log book
	seminar	assignments
D- Identify steps required for calculation	Lecture	Assignments
sensitivity, specificity, positive predictive	Practical	Written exam
value, negative predictive value, accuracy of	sessions	Practical exam
a screening test.		
E- Be able to define and apply the	Lecture	Assignments
epidemiologic criteria of causality and be	Practical	Written exam
able to distinguish between a measure of	sessions	Practical exam
association and evidence of causality.		
F- Synthesize information from multiple	Lecture	Assignments
sources for research writing and the ability	Practical	Written exam
to perform paper critique.	sessions	Practical exam
G- Identify bias and confounding in	Lecture	Assignments
epidemiological study designs, their types	Practical	Written exam
and ways to control them in various types of	sessions	Practical exam
biases.		

D General skills
Practice-Based Learning and Improvement

Practice-Based Learning and Impro		
ILOs	Methods of teaching/ learning	Methods of Evaluation
A- Scientific paper and proposal writing skills: be able to write an introduction, objectives and the methodological section.	Tutorial	Written examination
B- Learn authorship ethical rules.	Tutorial	Written examination
<ul> <li>C- Perform practice-based improvement activities using a systematic methodology (audit, logbook, critical appraisal)</li> <li>D- Appraise evidence from scientific studies(journal club)</li> </ul>	<ul> <li>Lectures</li> <li>Practical sessions</li> <li>Discussion</li> <li>Readings</li> <li>Lectures</li> </ul>	critical appraisal critical
	- Lectures -Practical sessions - Discussion - Readings	appraisal
E- Conduct epidemiological studies, screening and surveys.	<ul> <li>Lectures</li> <li>Practical sessions</li> <li>Discussion</li> <li>Readings</li> </ul>	attendance and participation
F- Facilitate training of junior students and other health care professionals in different screening activities.	Field work Participation in projects	attendance and participation

#### **Interpersonal and Communication Skills**

ILOs	Methods of teaching/ learning	Methods of Evaluation
G-Maintain ethically sound relationship with		Written
community members.	-Practical sessions	exams
	- Discussion	
	- Readings	
H-Provide information using effective nonverbal,	- Lectures	Written
explanatory, questioning, and writing skills.	-Practical sessions	exams
	- Discussion	Practical
	- Readings	exams
I- Present results of researches in seminars.	- Lectures	Log book
	-Practical sessions	assignments
	- Discussion	_
	- Readings	

Professionalism		
ILOs	Methods of teaching/ learning	Methods of Evaluation
J- Demonstrate respect, compassion, and integrity to the needs of society.	<ul><li>Lectures</li><li>Discussion</li><li>Readings</li></ul>	Written exams
K- Manage potential conflicts of interest encountered by practitioners, researchers, and organizations.	<ul><li>Lectures</li><li>Discussion</li><li>Readings</li></ul>	Written exams
L- Design strategies for resolving ethical concerns in research, law, and regulations.	Lectures - Discussion - Readings	Written exams Practical exams
M- Demonstrate ways to control for confounding in the analysis phase of a study	Lectures - Discussion - Readings	Written exams Practical exams
N- Demonstrate a commitment to ethical principles including confidentiality of participants' information and informed consent.	Lectures - Discussion - Readings	Written exams
O-Assess ethical considerations in developing communications and promotional initiatives.	<ul><li>Lectures</li><li>Discussion</li><li>Readings</li></ul>	Written exams

# 4. Course contents (topic s/modules/rotation Course Matrix

### **Time Schedule: First Part**

Торіс	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	Α	В	С	D
Over view on research conduction and research ethics	A&E	A-D	A-C	C-G, I,L&M-O
How to write a research proposal	F,I	E	F	A-C&H
Observational study design	A& D	B & C	D	E & F
Experimental study design	A& D	B & C	В	E & F
Evaluation of diagnostic tests (Screening)	L	А	B& E	F
Systematic reviews and meta analysis	G, H & M	E& F	F	C, D
Confounding, bias & effect modification	B & K	D	E & G	М

# **5. Course Methods of teaching/learning:**

- 1. Lectures
- 2. Assignments
- 3. Discussion
- 4. Exercises

### 6. Course assessment methods:

#### i. Assessment tools:

- 1. Attendance and participation
- 2. Log book assignments
- 3. Written examination
- 4. Practical examination

**ii. Time schedule:** After 6 months from applying to the M D degree.

iii. Marks: 50 (35 for written exam and 15 for practical exam).

7. List of references

#### i. Lectures notes

• Department lecture notes

### ii. Essential books

- Research Design: Qualitative, Quantitative and Mixed Methods Approaches 4th Edition by John W. CreswellSAGE Publications, Inc; 4th edition (January 1, 2014)
- Research methodology: A step by step Guide for Beginners.
   Ranjit Kumar, 2020. Second edition <a href="https://books.google.com.eg/books">https://books.google.com.eg/books</a>?
- Medical Research Essentials Rania Esteitie, McGraw Hill Professional, third edition, Feb 5, 2014 Medical 104 pages
- Research Methodology in the Medical and Biological Sciences Petter Laake, Haakon Breien Benestad, Bjorn R. Reino Olsen, 4th edition, Academic Press, Nov 5, 2007 - Science - 512 pages

#### iv. Recommended books

- Research Methods in Education 7th Edition, by Louis Cohen, Lawrence Manion, Keith Morrison Publisher: Routledge; (April 22, 2011) www.routledge.com/textbooks/cohen7e.
- Research Methodology: A Practical and Scientific Approach Vinayak Bairagi, Mousami V. Munot · 2019, Research Methodology: A Practical and Scientific Approach - Google Books
- Based Medicine How to practice and teach EBM. David Sachett, Sharon E. Straus, W. Scott Richardson, William Rosenberg R.Brain Haynes
- Dissertation workshop open courseware JHSPH

8. Signatures

Course Coordinator:	Head of the Department:
Prof.Mahmoud Attia	Prof. Eman Morsy Mohamed
Date: 10-1-2022	Date: 10-1-2022

### Course 3: Medicolegal Aspects & Ethics in Medical Practice and Scientific Research

Name of department: Forensic medicine and clinical toxicology Faculty of medicine Assiut University 2022-2023

#### 1. Course data

**4** Course Title: Medicolegal Aspects and Ethics in Medical

**Practice and Scientific Research** 

- **4** Course code: FAC310C
- Speciality:General and special surgery (1<sup>st</sup> part), and Radiology
- **4** Number of credit points: 1 credit point
- Department (s) delivering the course: Forensic Medicine and Clinical Toxicology
- Coordinator (s):
- Course coordinator: Prof. Ghada Omeran
- Date last reviewed: 6– 2022
- Requirements (prerequisites) if any :
  - Completed Master degree

# 2. Course Aims

To describe the basic ethical and medicolegal principles and bylaws relevant to practice in the field of General and special surgery Rheumatology

# **3. Intended learning outcomes (ILOs):**

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. Mention principals of writing consent forms.	Lecture and discussion	Written & oral exam
B. Mention principals of Writing a death certificate	Lecture and discussion	Written & oral exam
C. Explain principals of medical reports.	Lecture and discussion	Written & oral exam
D. Mention principals of Dealing with wounds.	Lecture and discussion	Written & oral exam
E. Mention principals of firearm injuries.	Lecture and discussion	Written & oral exam
<ul> <li>F. List indications of induced emesis, gastric lavage and samples collection.</li> </ul>	Lecture and discussion	Written & oral exam

# A. knowledge and understanding

## **B. Intellectual**

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. Design and present case , seminars in death certificate	Lecture and discussion	Written & oral exam
B. Design and present case, seminars in toxicological cases	Lecture and discussion	Written & oral exam

# C. Practical skills

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. Identify medical ethics and ethics in research.	Lecture and discussion	Discussion
B. Prepare and write consent.	Lecture and discussion	Discussion
C. Identify medical responsibilities.	Lecture and discussion	Discussion
D. Write death certificate.	Lecture and discussion	Discussion and active participation
E. Deal with a case of Suspicious death	Lecture and discussion	Discussion and active participation
F. Write medical reports	Lecture and discussion	Discussion and active participation
G. Identify types of wounds and deal with them.	Lecture and discussion	Discussion and active

		participation
<ul> <li>H. Identify types, distance and direction of firearm wounds and deal with them</li> </ul>	Lecture and discussion	Discussion and active participation
<ol> <li>Elicit death associated with surgical anesthesia.</li> </ol>	Lecture and discussion	Discussion and active participation
J. Perform gastric lavage, induce emesis, and obtain samples	Lecture and discussion	Discussion and active participation

### **D. General Skills**

Competency and Skills	Methods of teaching/ learning	Methods of Evaluation
A. Present a case.	Lecture and discussion	Global rating logbook
B. Write a consultation note	Lecture and discussion	Global rating logbook
C. Inform patients and maintaining comprehensive.	Lecture and discussion	Global rating logbook
D. Make timely and legible medical records	Lecture and discussion	Global rating logbook
E. Acquire the teamwork skills	Lecture and discussion	Global rating logbook

# 4. Course contents (topic s/modules/rotation Course Matrix

#### **Time Schedule: First Part**

Торіс	Covered ILOs			
	Knowledge	Intellectual	Practical skills	General Skills
	Α	В	С	D
<ol> <li>Death and death certificate.</li> </ol>	В	А	D	
2. Suspicious death	В		E	В
<ol> <li>Death associated with surgical anesthesia</li> </ol>	В		Ι	В
4. Medical reports	С	В	F	A,D,E
5. Toxicological Reports	F	В	J	A,E
6. Wounds	D		G	В
7. Firearm injuries	E		Н	В
8. Ethics in research			А	
9. Medical ethics.	А		A,B,C	C,E

### **5. Course Methods of teaching/learning:**

- 1. Lectures.
- 2. Discussions.
- 3. Exercises.

### 6. Course assessment methods:

#### i. Assessment tools:

- 1. Written examination.
- 2. Attendance and active participation.
- 3. Oral examination.

# **ii. Time schedule:** After 6 months from applying to the M D degree.

iii. Marks: 50 (35 for written exam and 15 for oral exam).

### 7. List of references

#### i. Lectures notes

- Course notes.
- Staff members print out of lectures and/or CD copies.

#### ii. Essential books

- Bernard Knight and Pekka Saukko (2015: Knight Forensic Pathology. Hodder Arnold press
- Goldfrank, Lewis R.; Howland, Mary Ann; Hoffman, Robert S.; Nelson, Ewis S.; Lewin, Neal A (2019): Goldfrank's Toxicologic Emergencies, 11<sup>th</sup> ed. McGraw Hill / Medical.
  - Medical Ethics Manual. World medical association. Third edition 2015.
    - Medical ethics and law. Dominic Wilkinson, 3<sup>rd</sup>edition 2019.

#### iii. Recommended books

• Biswas Gautam (2021): Review of Forensic Medicine & Toxicology. 5<sup>th</sup> ed. Jaypee Brothers Medical Pub.

#### iv. Journal and web site

- Journals of all Egyptian Universities of Forensic Medicine and Clinical Toxicology.
- All International Journals of Forensic Medicine and Clinical Toxicology which available in the university network at <u>www.sciencedirect.com</u>. As :
  - Forensic Science International Journal.
  - Toxicology Letter.

v. others

### 8. Signatures

- Course Coordinator:	- Head of the Department:
Prof. Ghada Omeran	Prof. Randa Hussein Abdelhady
Date: 6-2022	Date: 6-2022

### **Course 4 Phoniatrics 1**

Name of department: Otolaryngeal – Head and Neck Surgery (Phoniatrics Unit) Faculty of medicine. Assiut University. 2022/2023 - It is divided into 3 units; Unit 1: Anatomy.1.5CP

Unit 2: Physiology.1.5CP

Unit 3: Phonetics & Linguistics 4CP.

#### I. Course data

- Course Title: Phoniatrics1.
- **Course code: PHO330A**
- **Speciality:** Phoniatrics disorders
- Number of CP: Total 7CP; Didactics 7CP(100%), Practical 0 CP(0%).

It is divided into 3 units;

- Unit 1: Anatomy.1.5CP
- Unit 2: Physiology.1.5CP

Unit 3: Phonetics & Linguistics 4CP.

Department (s) delivering the course: Phoniatrics Unit - ENT DEPARTMENT

Co ordinator (s):

- **Course coordinator:** Prof. Dr Essam Mohamed Aref
- Assistant coordinator (s):
- Prof. Eman Sayed
- Dr. Hanan Abdel Rashed
- **Jote last reviewed: 7-2022.**
- **Requirements (prerequisites) if any :NONE.**
- Requirements from the students to achieve course ILOs are clarified in the joining log book.

# 2. Course Aims

2/1.Acquire the facts of basic sciences(Anatomy, Physiology, phonetics and linguistics) which are appropriate to Phoniatrics disorders in clinical reasoning, diagnosis and management of Communicative disorders and rehabilitation.

### **3.** Course intended learning outcomes (ILOs):

### A -Knowledge and understanding

ILOs	Methods of teaching/	Methods of Evaluation
	learning	
<ul> <li>A. Explain the facts and principles of the relevant basic and clinically supportive sciences related to Phoniatrics disorders including:</li> <li><u>Anatomy</u>(unit 1): <ul> <li>Embryology of the larynx.</li> <li>Function of the larynx.</li> <li>Anatomy of the larynx.</li> <li>Histoanatomy of the vocal folds.</li> <li>Development of vocal fold structures.</li> <li>Difference between larynx of the newborn and adult.</li> <li>Muscles, blood and nerve supply of the larynx.</li> <li>Laryngeal mutation.</li> <li>Anatomy of the Pharynx.</li> <li>Anatomy of Lips and palate.</li> <li>Neuroanatomy.</li> </ul> </li> </ul>	Lectures- didactics	Written and oral examination Log book
Physiology(unit 2):		
<ul> <li>Physiology of the Larynx:- Sphincteric function of the larynx Phonatory function</li> </ul>		
• Anatomical points of importance in vibratory patterns of the vocal folds		
<ul> <li>Mechanism of vocal fold vibration</li> </ul>		

<ul> <li>Aerodynamic analysis of voice.</li> </ul>	
<ul> <li>Myoelastic aerodynamic mechanism of phonation</li> </ul>	
<ul> <li>Mechanics of laryngeal function</li> </ul>	
<ul> <li>Physiology of post. Glottis</li> </ul>	
<ul> <li>Correlates of voice production</li> </ul>	
<ul> <li>Physiology of palatal function</li> </ul>	
<ul> <li>Physiology of swallowing</li> </ul>	
Dysphagia	
Neurophysiology:-	
Strata of communication	
<ul> <li>Hierarchy of motor organization of speech</li> </ul>	
Central organization of language in the brain	
Brain plasticity	
Phonetics(unit 3.1)	
Articulatory phonetics:	
* Articulators	
* Vowels	
* Consonants (Plossives, Fricatives, affricates, glides,	
semivowels and nasals)	
* Distinctive features	
* Phonological processes	
* Supra segmental features	
Acoustic phonetics:	
* Vowels	
* Formants (F1, F 2, lip rounding rules)	
* Consonants (Plossives, Fricatives, affricates, glides,	
semivowels and nasals)	
<u>Linguistics:</u> (unit 3.2)	
* Distinctive features	
* Phonological processes	
* Supra segmental features	
Definitions	
Language structure	
Language and cognition	
Language and thought	
Theories of language acquisition	
Phonology	
Semantics	
Syntax	
Pragmatics	

Language development	
*Phonological development	
* Semantic development	
* Syntactic development	
*Pragmatic development	
B. Explain the facts and principles of the	
relevant basic communicative sciences related	
to Phoniatrics as mentioned in A.A.	

### **B-Intellectual outcomes**

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Apply the basic communicative sciences which are appropriate to the Phoniatrics related conditions / problem / topics.	Didactic (lectures, seminars, tutorial)	-Written and oral examination -Log book

# **C-Practical skills (Patient Care)**

ILOs	Methods of teaching/ learning	Methods of Evaluation
A -Use information of the basic communicative sciences to support decisions related to Phoniatric disorders	Clinical round - discussion	-Logbook Oral- written exam-

# **D-General Skills**

# Practice-Based Learning and Improvement

ILOs		Methods of teaching/ learning	Methods of Evaluation
Α.	Use information technology to manage information, access on-line medical information; and support their own education	Clinical round - discussion	-Logbook
В.	Lead the learning of students and other health care professionals.	Clinical round - discussion	-Logbook

# **Interpersonal and Communication Skills**

ILOs	Methods of teaching/	Methods of
	learning	Evaluation
C. Elicit information using effective nonverbal, explanatory, questioning, and writing skills.	-Observation and supervision -Written and oral communication	Log book

# Professionalism

ILOs	Methods of teaching/ Learning	Methods of Evaluation
D – Perform Discussion section.	observation -Senior staff	Logbook
	experience	

# Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
E. Work effectively in relevant health care delivery settings and systems.	observation -Senior staff experience	Logbook

# 4. Course contents (topic s/modules/rotation Course Matrix

# Time Schedule: First part

Торіс	Covered ILOs			
	Knowledge	Intellectual	Practical skill	General Skills
Anatomy				
<ul> <li>Embryology of the larynx</li> <li>Function of the larynx</li> <li>Anatomy of the larynx</li> <li>Histoanatomy of the vocal folds</li> <li>Development of vocal fold structures</li> <li>Difference between larynx of the newborn and adult</li> <li>Muscles, blood and nerve supply of the larynx</li> <li>Laryngeal mutation</li> <li>Aerodynamic analysis of voice</li> <li>Anatomy of the Pharynx</li> <li>Anatomy of Lips and palate</li> <li>Neuroanatomy</li> </ul>	A,B	Α	Α	A-E
Physiology				
<ul> <li>Physiology of the Larynx:- Sphincteric function of the larynx Phonatory function</li> <li>Anatomical points of importance in vibratory patterns of the vocal folds</li> <li>Mechanism of vocal fold vibration</li> <li>Myoelastic aerodynamic mechanism of phonation</li> <li>Mechanics of laryngeal function</li> <li>Physiology of post. Glottis</li> <li>Correlates of voice production</li> <li>Physiology of palatal function</li> <li>Physiology of swallowing</li> <li>Dysphagia</li> <li>Neurophysiology:-</li> <li>Strata of communication</li> <li>Hierarchy of motor organization of speech</li> <li>Central organization of language in the brain</li> </ul>	А,В	Α	Α	A-E

Brain plasticity				
Phonetics				
<ul> <li>1- Articulatory phonetics: <ul> <li>Articulators</li> <li>Vowels</li> <li>Consonants (Plossives, Fricatives, affricates, glides, semivowels and nasals)</li> <li>Distinctive features</li> <li>Phonological processes</li> <li>Supra segmental features</li> </ul> </li> <li>2- Acoustic phonetics: <ul> <li>Vowels</li> <li>Formants (F1, F 2, lip rounding rules)</li> <li>Consonants (Plossives, Fricatives, affricates, glides, semivowels and</li> </ul> </li> </ul>	A,B	Α	Α	A-E
nasals) Linguistics				
1- Definitions 2- Language structure 3-Language and cognition 4- Language and thought 5- Theories of language acquisition 6- Phonology 7- Semantics 8- Syntax 9- Pragmatics 10- Language development *Phonological development * Semantic development * Syntactic development * Pragmatic development	A,B	Α	Α	A-E

# **5. Course Methods of teaching/learning:**

- -Didactic (lectures, seminars, tutorial)
- -Direct observation
- -journal club,
- Critically appraised topic,
- -Educational prescription
- Present a case (true or simulated) in a grand round
- Clinical rounds
- Senior staff experience
- Case log

- Written & oral communications
- Observation & supervision

6. Course Methods of teaching/learning: for students with poor achievements

Extra Didactic (lectures, seminars, tutorial)

- -Didactic (lectures, seminars, tutorial)
- -Direct observation
- -journal club,
- Critically appraised topic,
- -Educational prescription
- Present a case (true or simulated) in a grand round
- Clinical rounds
- Senior staff experience
- Case log
- Written & oral communications
- Observation & supervision

According to their needs

### 7. Course assessment methods:

i. Assessment tools:

1-oral examination

2-Written examination

ii. Time schedule: at first part

iii. Marks: 350 marks (140 for written exam+ 210 for oral exam).

### 8. List of references

i. Lectures notes

- ii. Essential books
- Principles of Experimental Phonetics Norman J. Lass 1996
- Phonology "Assessment and Intervention applications in

speech pathology" Robert J. Lowe 1994

- Aphasia and other acqurid neurogenic language disorders
   :Aguid for clinical excellence Brooke Hallowell secend
   edition2022
- Cleft palate and craniofacial condition: Acomprehensive guide to clinical management (Ann W.Kummer fourth edition2020)
- Cleft palate speech Mc Williams Morris Shelton 1984
- **Rehabilitative Audiology children and Adult** Jerome G. Alpiner and Patricin A. McCarthy 1987
- Stuttering and cluttering:frameworks for understanding and treatment.David Ward 2006
- Neural bases of speech, hearing, and language David P. Kuehn, Margarete L. Lemne, and John M. Baumgartner 1989

### iii. Recommended books

Contemporary linguistic analysis an introduction (O`Grady &Dobrovolsky,1987).

#### iv. Periodicals, Web sites, ... etc

- Journal of Voice
- Language and communication
- Americal Journal of Otolaryngology
- Journal of communication Disorders
- Journal of Fluency Disorders
- Journal of Memory and Language
- Research in Autism spectrum Disorders
- Hearing Research
- International Journal of Pediatric Otolaryngology

- Journal of second Language writing
- Journal of visual language and computing
- Learning and Individual Difference
- Learning and Instruction
- Learning and Motivation
- Reasearch in Developmental Disabilities
- Sleep Medicine

#### iv. Periodicals, Web sites, ... etc

- Folia Phoniatrica.
- Laryngoscope.
- Annals Of Otorhinolaryngology.
- Journal of Neurolinguistics.
- Journal of phonetics.
- Linguistics and Education.
- Language sciences.
- Brain and Language.
- Brain and Development.
- Brain and Cognition.

# 9. Signatures

Course Coordinator			
Unit 1 Coordinator:	Head of the Department:		
Date:	Date:		
Unit 2 Coordinator:	Head of the Department:		
Date:	Date:		
Unit 3 Coordinator:	Head of the Department:		
Date:	Date:		

### **Course 5 Phoniatrics 2**

**Name of department:** Otolaryngeal – Head and Neck Surgery (Phoniatrics Unit).

Faculty of medicine.

Assiut University.

### 2022/2023

- It is divided into 7 modules (units);
  - Module 1- language disorders&Rehablitation.
  - Module 2- Speech disorders&Rehablitation.
  - Module 3-Voice disorders& Rehablitation.
  - Module 4-Swallowing disorders& Rehabilitation.
  - Module 5: Learning disorders & rehabilitation.
  - Module 6 Neurological Diseases.
  - Module 7: Psychiatric disorders.

### I. Course data

- **4** Course Title: Phoniatrics2.
- Course code: PHO330B#
- Speciality: Phoniatrics disorders
- Number of CP: Total 147CP(100%); Didactics 24CP(16.4%), Practical 123 CP(83.6%).

It is divided into 7 modules (units);

- Module 1- language disorders&Rehablitation.
- Module 2- Speech disorders&Rehablitation.
- Module 3-Voice disorders& Rehablitation.
- Module 4-Swallowing disorders& Rehabilitation.
- Module 5: Learning disorders & rehabilitation.
- Module 6 Neurological Diseases.
- Module 7: Psychiatric disorders.
- Department (s) delivering the course: Phoniatrics Unit ENT DEPARTMENT
- Co ordinator (s):
  - Course coordinator: Prof. Dr Essam Mohamed Aref

- Assistant coordinator (s):prof. Dr. Eman Sayed Hassan
- Dr. Hanan Abdel Rashed
- Lote last reviewed 7-2022.
- Requirements (prerequisites) if any :NONE.
- Requirements from the students to achieve course ILOs are clarified in the joining log book.
- Weighting of each unit in specialized course is illustrated in the

Modules (units) Titles' list	% from	Level	Core	Credit point	ts
	total Marks	(Year)	Didactic	training	Total
Course 5: (Phoniatrics2); advanced Communicative disorders and rehabilitation <u>).</u>	100%	1,2,3,4	24	123	147
- Module 1- language disorders& Rehabilitation	31.6%	1,2,3,4	6	40.5	46.5
- Module 2- Speech disorders& Rehabilitation	31.6%	1,2,3,4	6	40.5	46.5
- Module 3-Voice disorders & Rehabilitation.	25.2%	1,2,3	6	31	37
- Module 4-Swallowing disorders & Rehabilitation.	7.6%	1,2,3	2	9	11
-Module 5: learning disorders and rehabilitation.	1%	3 or 4	1.5	-	1.5
- Module 6: Neurological diseases.	1% 1%	3 or 4 3 or 4	1.5 1	2 -	3.5 1
-Module 7: Psychiatric Disorders.					
Total No. of units =7	100%	4 years	24	123	147

table below;

# 2. Course Aims

2/1.Acquire the facts of basic sciences which are appropriate to Phoniatric disorders in clinical reasoning, diagnosis and management of Communicative disorders including : Language disorders& rehabilitation

- Speech disorders& rehabilitation
- Voice disorders& rehabilitation
- Swallowing disorders& rehabilitation
- Learning disorders & rehabilitation.

2/2. To make the candidate able to be familial with the diagnosis and management of common medical problems that may be encountered with phoniatric disorders and rehabilitation.

2/3.Acquire the principles of medical knowledge & skills of neurology & psychiatry correlating with management of communicative disorders.

# 3. Course intended learning outcomes (ILOs):

Unit (1-5) Language disorders assessment & rehabilitation,

Speech disorders& rehabilitation. Voice disorders&

rehabilitation, Swallowing disorders& rehabilitation and

Learning disorders & rehabilitation.

ILOs	Methods o	
	teaching/	Evaluation
	Learning	
<ul> <li>A. Explain update and evidence based etiology, clinical picture, diagnosis and management of the following common diseases and clinical conditions:</li> <li>Language disorders&amp; rehabilitation</li> <li>Speech disorders&amp; rehabilitation</li> <li>Voice disorders&amp; rehabilitation</li> </ul>	-Didactic (lectures, seminars, tutorial) -Case presentation	<ul> <li>Written and oral examination</li> <li>Log book</li> </ul>
<ul> <li>Swallowing disorders&amp; rehabilitation</li> <li>Learning disorders &amp; rehabilitation</li> </ul>		
<ul> <li>B. Illustrate the principles of (diagnostic, therapeutic, preventive tools)</li> <li>-Arabic language test</li> <li>- Illinois' test of psycholinguistic abilities</li> <li>-Psychometric test</li> <li>- Articulation test</li> <li>- Dysphasia test</li> <li>- Nasometry</li> <li>-Acoustic analysis</li> <li>-Aerodynamic studies</li> <li>-Indirect microlaryngoscopy</li> </ul>	-Didactic (lectures, seminars, tutorial) -Case presentation	- Written and oral examination - Log book

## A-Knowledge and understanding

- Rigid endoscopy	
-Flexible nasofibroscopy	
- Acoustic analysis and MDVP	
- Aerodynamic studies	
- Electroglottography	
-Preliminary visualizationof oro-pharyngo-laryngeal	
tract	
- Neck examination	
- Neurological examination	
-Bed side trials of feeding to test swallowing	
function	
- Videoendoscopy ( FEES) (FEESST)	
- Videokymography	
- Videofluroscopy	
<ul> <li>Ultrasound studies of oral cavity</li> </ul>	
- Scintigraphy	
- Imaging (High speed MRI, CT and MRI)	
- Formal testing of language, speech and cognitive	
abilities	
- Manometry	
- Manofluroscopy	
- EMG	
- Voice range profile	
- Pulse oximetry	
- Other recent diagnostic measures	
-Counseling	
-Medical treatment	
-language therapy	
-speech therapy	
-voice therapy	
-total laryngectomy rehabilitation	
-Behavior readjustment therapy	
-Intra oral prosthesis	
-Surgical techniques	
-Internal feeding methods	
U	

- Extirpation microlaryngophonosurgery -Office based vocal fold injection		
<ul> <li>C. illustrate briefly state of art of the following rare diseases and conditions</li> <li>1- Bilingualism</li> <li>2- Preventable and treatable mental retardation</li> <li>3- Language disorders in twins</li> <li>4- Neurological disorders of the larynx</li> <li>5- Endocrinopathis</li> <li>6- Status post laryngectomy</li> <li>7- Irritable Larynx Syndrome</li> <li>8- Paradoxical vocal fold movement and paroxysmal laryngospasm</li> <li>9- Microvascular lesion of the vocal folds</li> <li>10- Drooling in the developmentally disabled</li> <li>11- Vocal fold scarring</li> <li>12- Laryngeal sarcoidosis</li> <li>13- Laryngeal chondroma</li> </ul>	-Didactic (lectures, seminars, tutorial) -Case presentation	- Written and oral examination - Log book
D. Explain the facts and principles of the relevant basic and clinically supportive sciences related to phoniatrics	-Didactic (lectures, seminars, tutorial) -Case presentation	<ul> <li>Written and oral</li> <li>examination</li> <li>Log book</li> </ul>
E. Explain the facts and principles of the relevant basic and clinically supportive sciences related to phonatrics		
F. Describe the basic ethical and medicolegal principles revenant to the phoniatrics.		
G. Describe the basics of quality assurance to ensure good clinical care in phoniatrics.		
H. Explain the ethical and scientific principles of medical research		
<ol> <li>Explain the impact of common health problems in the field of phoniatrics on the society.</li> </ol>		

### **B-Intellectual outcomes**

D-Intellectual Outcomes			
ILOs	Methods of teaching/ learning	Methods of Evaluation	
<ul> <li>A. Design / present case in common problem related to phoniatrics.</li> <li>B. Apply the basic and clinically supportive sciences which are appropriate to the phoniatrics related conditions / problem / topics.</li> </ul>	-Clinical rounds Senior staff experience	-Logbook and Portfolios -Procedure and case presentation	
<ul> <li>C. Demonstrate an investigatory and analytic thinking "problem – solving "approaches to clinical situation related to phoniatrics.</li> <li>D. Plan research projects.</li> </ul>			
<ul><li>E. Write scientific papers.</li><li>F. Lead risk management activities as a part of</li></ul>			
<ul> <li>clinical governs.</li> <li>G. Plain quality improvement activities in the field of medical education and clinical practice in phoniatrics.</li> </ul>	Clinical rounds Senior staff	Logbook and Portfolios	
<ul> <li>H. Create / innovate plans, systems, and other issues for improvement of performance in phoniatrics.</li> <li>I. Present and defend his / her data in front of a</li> </ul>	experience	-Procedure and case presentation	
<ul> <li>J. Formulate management plans and alternative decisions in different situations in the field of Pulmonary Medicine &amp; Tuberculosis.</li> </ul>			

# C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Take history, examine and clinically diagnose different conditions related to phoniatrics.	-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching)	-OSCE -log book & portfolio -Clinical examination
<ul> <li>B. Order the following non invasive/invasive diagnostic procedures</li> <li>-Arabic language test</li> <li>Illinois' test of psycholinguistic abilities</li> <li>-Psychometric test</li> <li>Articulation test</li> <li>Dysphasia test</li> <li>Nasometry</li> <li>-Acoustic analysis</li> <li>-Aerodynamic studies</li> <li>-Indirect microlaryngoscopy</li> <li>-Rigid endoscopy</li> <li>-Flexible nasofibroscopy</li> <li>Acoustic analysis and MDVP</li> <li>Aerodynamic studies</li> <li>Electroglottography</li> <li>-Preliminary visualizationof oro-pharyngo- laryngeal tract</li> <li>Neck examination</li> </ul>	-Clinical round with senior staff Observation -Post graduate teaching	-Procedure presentation - Log book - Chick list

<ul> <li>Neurological examination</li> <li>Bed side trials of feeding to test swallowing function</li> <li><i>Videoendoscopy (FEES) (FEESST</i>)</li> <li>Videofluroscopy</li> <li>Videokymography</li> <li>Ultrasound studies of oral cavity</li> <li>Scintigraphy</li> <li>Imaging (High speed MRI, CT and MRI)</li> <li>Formal testing of language, speech and cognitive abilities</li> <li>Manometry</li> <li>Manofluroscopy</li> <li>EMG</li> <li>Pulse oximetry</li> <li>Other recent diagnostic measure</li> </ul>		
<ul> <li>C. Interpret the following non invasive/invasive diagnostic procedures</li> <li>Arabic language test</li> <li>Illinois' test of psycholinguistic abilities</li> <li>Psychometric test</li> <li>Articulation test</li> <li>Dysphasia test</li> <li>Nasometry</li> <li>Acoustic analysis</li> <li>Aerodynamic studies</li> <li><i>Indirect microlaryngoscopy</i></li> <li><i>Rigid endoscopy</i></li> <li><i>Flexible nasofibroscopy</i></li> <li><i>Aerodynamic studies</i></li> <li>Electroglottography</li> <li>Preliminary visualizationof oro-pharyngo- laryngeal tract</li> <li>Neck examination</li> </ul>	Clinical round with senior staff	Procedure presentation - Log book - Chick list

<ul> <li>Neurological examination</li> <li>Bed side trials of feeding to test swallowing function</li> <li><i>Videoendoscopy (FEES) (FEESST</i>)</li> <li>Videofluroscopy</li> <li>Videokymography</li> <li>Ultrasound studies of oral cavity</li> <li>Scintigraphy</li> <li>Imaging (High speed MRI, CT and MRI)</li> <li>Formal testing of language, speech and cognitive abilities</li> <li>Manometry</li> <li>Manofluroscopy</li> <li>EMG</li> <li>Pulse oximetry</li> <li>feedback control of speech</li> <li>Voice range profile VRP</li> <li>Tissue culture in the larynx</li> <li>Other recent diagnostic measures</li> </ul>		
<ul> <li>D. Perform the following non invasive/invasive diagnostic procedures</li> <li>-Arabic language test</li> <li>- Illinois' test of psycholinguistic abilities</li> <li>-Psychometric test</li> <li>- Articulation test</li> <li>- Dysphasia test</li> <li>- Nasometry</li> <li>-Acoustic analysis</li> <li>-Aerodynamic studies</li> <li>-Indirect microlaryngoscopy</li> <li>- Rigid endoscopy</li> <li>- Flexible nasofibroscopy</li> <li>- Acoustic analysis and MDVP</li> <li>- Aerodynamic studies</li> <li>- Electroglottography</li> </ul>	Clinical round with senior staff -Perform under supervision of senior staff	Procedure presentation - Log book - Chick list

<ul> <li>-Preliminary visualization of oro-pharyngo- laryngeal tract</li> <li>- Neck examination</li> <li>- Neurological examination</li> <li>- Formal testing of language, speech and cognitive abilities</li> <li>- EMG</li> </ul>		
E. Prescribe the following non invasive/invasive therapeutic procedures 1- 1-Counseling 2- Medical treatment 3- language therapy 4- speech therapy 5- voice therapy 6- total laryngectomy rehabilitation 7- Behavior readjustment therapy 8- Intra oral prosthesis 9- Surgical techniques 10- EMG 11- Internal feeding methods 12- Extirpation microlaryngophonosurgery 13- Office based laryngeal injection	Clinical round with senior staff -Perform under supervision of senior staff	Procedure presentation - Log book - Chick list
F. Perform the following non invasive/invasive therapeutic procedures 1-Counseling 2-Medical treatment 3-language therapy 4-speech therapy	Clinical round with senior staff	- Log book - Chick list

5-voice therapy		
6-total laryngectomy rehabilitation		
7-Behavior readjustment therapy		
8-Intra oral prosthesis		
9-Surgical techniques		
10- EMG		
11-Internal feeding methods		
12- Extirpation microlaryngophonosurgery		
G. Develop and carry out patient management plans for the following problems	Clinical round with senior staff	Log book- Chick list
<ul> <li>Language disorders&amp; rehabilitation</li> <li>Speech disorders&amp; rehabilitation</li> </ul>		
<ul> <li>Voice disorders&amp; rehabilitation</li> </ul>		
<ul> <li>Swallowing disorders&amp; rehabilitation</li> <li>Learning disorders &amp; rehabilitation</li> </ul>		
H. Counsel and educate patients and their family about		Log book- Chick list
<ul> <li>Language disorders&amp; rehabilitation</li> <li>Speech disorders&amp; rehabilitation</li> </ul>		
Voice disorders& rehabilitation		
<ul> <li>Swallowing disorders&amp; rehabilitation</li> <li>Learning disorders &amp; rehabilitation</li> </ul>		
I. Use information technology to support patient care decisions and patient education for Phoniatrics related conditions.		Log book- Chick list

<ul> <li>J. Provide health care services aimed at preventing the following conditions</li> <li>Language disorders&amp; rehabilitation</li> <li>Speech disorders&amp; rehabilitation</li> </ul>	Log book- Chick list
Voice disorders& rehabilitation	
<ul> <li>Swallowing disorders&amp; rehabilitation</li> <li>Learning disorders &amp; rehabilitation</li> </ul>	
K. Work with health care professionals, including those from other disciplines, to provide patient-focused care.	Log book- Chick list
L. Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.(Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive, timely and legible medical records)	

# **D-General Skills**

<b>Practice-Based</b>	Learning and	Improvement
Tractice Busea		mprovenient

ILOs	Methods of teaching/ learning	Methods of Evaluation		
A .Perform practice-based improvement activities using a systematic methodology in the common problems (plain and conduct audit cycles)	-Case log -Observation and supervision -Written & oral communication	-Observationpresentatiand supervision-Log book	-Observation presentation and supervision -Log boo	Procedure/case presentation -Log book and
B. Locate, appraises, and assimilates evidence from scientific studies related to patients' health problems.		Portfolios		
C. Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness				
<ul> <li>D. Use information technology to manage information, access on-line medical information; and support their own education</li> </ul>				
E. Lead the learning of students and other health care professionals.				

# Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F. Create and sustain a therapeutic and ethically sound relationship with patients	Clinical round Seminars Lectures Case presentation	Global rating Procedure/case presentation Log book Portfolios Chick list
G.Elicit information using effective nonverbal, explanatory, questioning, and writing skills.		
H.Fill the following reports:	Senior staff	Chick list

-Arabic language test	experience	
-Dysphasia test		
- Nasometry		
-Acoustic analysis		
-Aerodynamic studies		
-EGG -Video nasofiberoscopy -EMG5 <i>-Rigid endoscopy</i> - Articulation test		
I.Work effectively with others as a member or leader of a health care team e.g. in labor ward	Senior staff experience	Chick list

# Professionalism

ILOs	Methods of teaching/ Learning	Methods of Evaluation
J.Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest.	Observation Senior staff experience Case taking	<ol> <li>Objective structured clinical examination</li> <li>Patient survey</li> </ol>
<ul> <li>K. Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.</li> <li>L.Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities</li> </ul>		1. 3600 global rating

# **Systems-Based Practice**

ILOs	Methods of teaching/ learning	Methods of Evaluation
M. Work effectively in different health care delivery settings and systems.	observation Senior staff experience	1. 360o global rating
N. Practice cost-effective health care and resource allocation that does not compromise quality of care		1. Check list evaluation of live or recorded performance
O.Advocate for quality patient care and assist patients in dealing with system complexities		1. 360o global rating
P. Partner with health care managers and health care providers to assess, coordinate, and improve health care and predict how these activities can affect system performance		2. Patient survey

# Unit (6) Neurological Diseases

# A-Knowledge and understanding

ILOs	Methods of teaching/ learning	Methods of Evaluation
<ul> <li>A .Explain update and evidence based etiology, clinical picture, diagnosis and management of the following common diseases and clinical conditions:</li> <li>1- Cerebro vascular stroke</li> <li>2- Muscle diseases</li> <li>3- Motor neuron diseases</li> <li>4- Extrapyramidal syndromes</li> <li>5- Epilepsy</li> <li>6- Demylenating diseases</li> <li>7- Syringomyelia</li> <li>8- Peripheral neuritis</li> <li>9- Cerebellum and ataxias</li> <li>10- brain tumours</li> <li>11- Meningitis</li> <li>12- Enchiphalitis</li> <li>13- Neurosyphilis</li> </ul>	-Didactic (lectures, seminars, tutorial) -Case presentation	<ul> <li>Written and oral</li> <li>examination</li> <li>Log book</li> </ul>
<ul> <li>B.Mention the principles of the following tools <ol> <li>neurological examination</li> <li>C T &amp; MRI brain</li> <li>EEG <ol> <li>EMG</li> </ol> </li> <li>C.Mention briefly state of art of the following rare diseases and conditions <ol> <li>Herdiatory neuropathy or cerbellar disorders</li> </ol> </li> <li>D. Explain the facts and principles of the relevant basic and clinically supportive sciences related to neurology and phoniatrics.</li> </ol></li></ul>	-Didactic (lectures, seminars, tutorial) -Case presentation	<ul> <li>Written and oral examination</li> <li>Log book</li> </ul>
E.Explain the facts and principles of the relevant basic and clinically supportive sciences related to neurology 1. Anatomy of the brain & cranial nerves	-Didactic (lectures, seminars, tutorial) -Case presentation	<ul> <li>Written and oral</li> <li>examination</li> <li>Log book</li> </ul>

F.Describe the basic ethical and medicolegal principles	-Didactic	- Written and
revenant to the neurology.	(lectures,	oral
G.Describe the basics of quality assurance to ensure good	seminars,	examination
clinical care in neurology	tutorial)	- Log book
H.Explain the ethical and scientific principles of medical	-Case	
research	presentation	
I.Explain the impact of common health problems in the field		
of neurology on the society.		

# **B-Intellectual outcomes**

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Design / present case in common problem related to neurology	-Clinical rounds Senior staff experience	-Logbook and Portfolios -Procedure and case presentation
B.Apply the basic and clinically supportive sciences which are appropriate to the neurology related conditions / problem / topics.	experience	-Logbook and Portfolios -Procedure and case presentation
C.Demonstrate an investigatory and analytic thinking "problem – solving "approaches to clinical situation related to neurology		
D.Plan research projects. E.Write scientific papers.		
F.Lead risk management activities as a part of clinical governs.		
G.Plain quality improvement activities in the field of medical education and clinical practice in neurology and phoniatrics		
H.Create / innovate plans, systems, and other issues for improvement of performance in neurology.		
I.Present and defend his / her data in front of a panel of experts		

#### C-Practical skills (Patient Care)

ILOs	Methods of teaching/ learning	Methods of Evaluation
A.Take history, examine and clinically diagnose different conditions related to neurology and phoniatrics.	-Didactic; -Lectures -Clinical rounds -Seminars -Clinical rotations (service teaching	-OSCE -log book & portfolio -Clinical exam in internal medicine
<ul> <li>B. Order the following non invasive/invasive diagnostic procedures</li> <li>1- neurological examination</li> <li>2-C T &amp; MRI brain</li> <li>3-EEG</li> <li>4-EMG</li> </ul>	Clinical round with senior staff Observation Postgraduate teaching	-Procedure presentation - Log book - Chick list
CInterpret the following non invasive diagnostic procedures 1-C T & MRI brain 2-EEG 3-EMG	Clinical round with senior staff	-Procedure presentation - Log book - Chick list
D. Perform the following non invasive diagnostic procedures neurological examination		
<ul> <li>E. Prescribe the following non invasive/invasive therapeutic procedures.</li> <li>1- neurological examination</li> <li>2-C T &amp; MRI brain</li> <li>3-EEG</li> <li>4-EMG</li> </ul>		

<ul> <li>F. Perform the following non invasive/invasive therapeutic procedures</li> <li>a. rehabilitation of dysarthria</li> <li>b. rehabilitation of dysphasia</li> </ul>	Clinical round with senior staff -Perform under supervision of senior staff	Procedure presentation - Log book - Chick list
<ul> <li>G. Develop patient management plans for the following problems</li> <li>1-Cerebro vascular stroke</li> <li>2- Muscle diseases</li> <li>3- Motor neuron diseases</li> <li>4- Extrapyramidal syndromes</li> <li>5- Epilepsy</li> <li>6- Demylenating diseases</li> <li>7- Syringomyelia</li> <li>8- Peripheral neuritis</li> <li>9- Cerebellum and ataxias</li> <li>10- brain tumours</li> <li>11- Meningitis</li> <li>12- Enchiphalitis</li> <li>13- Neurosyphilis</li> </ul>	Clinical round with senior staff -Perform under supervision of senior staff	Procedure presentation - Log book - Chick list
<ul> <li>H. Develop and carry out patient management plans for the following problems</li> <li>1- Cerebro vascular stroke</li> <li>2- Muscle diseases</li> <li>3- Motor neuron diseases</li> <li>4- Extrapyramidal syndromes</li> <li>5- Epilepsy</li> <li>6- Demylenating diseases</li> <li>7- Syringomyelia</li> <li>8- Peripheral neuritis</li> <li>9- Cerebellum and ataxias</li> <li>10- brain tumours</li> <li>11- Meningitis</li> <li>12- Enchiphalitis</li> <li>13- Neurosyphilis</li> </ul>	Clinical round with senior staff	

I. Counsel and educate patients and their family about 1-dysphasia 2-dysartheria	
3-BDMH J .Use information technology to support patient care decisions and patient education for the neurological related phoniatrics.conditions.	
<ul> <li>K. Provide health care services aimed at preventing the following conditions</li> <li>1- Cerebro vascular stroke</li> <li>2- Muscle diseases</li> <li>3- Motor neuron diseases</li> <li>4- Extrapyramidal syndromes</li> <li>5- Epilepsy</li> <li>6- Demylenating diseases</li> <li>7- Syringomyelia</li> <li>8- Peripheral neuritis</li> <li>9- Cerebellum and ataxias</li> <li>10- brain tumours</li> <li>11- Meningitis</li> <li>12- Enchiphalitis</li> <li>13- Neurosyphilis</li> </ul>	
L. Work with health care professionals, including those from other disciplines, to provide patient-focused care .	

#### **D-General Skills**

#### Practice-Based Learning and Improvement

ILOs	Methods of teaching/ learning	Methods of Evaluation
A. Perform practice-based improvement activities using a systematic methodology in the common problems (plain and conduct audit cycles)	-Case log -Observation and supervision -Written & oral	Procedure/case presentation -Log book and Portfolios
B.Locate, appraises, and assimilates evidence	communication	

from scientific studies related to patients' health problems.		
C. Apply knowledge of study designs and statistical methods to the appraisal of clinical studies and other information on diagnostic and therapeutic effectiveness		
D. Use information technology to manage information, access on-line medical information; and support their own education		
E. Lead the learning of students and other health care professionals.	Clinical rounds Senior staff experience	

#### Interpersonal and Communication Skills

ILOs	Methods of teaching/ learning	Methods of Evaluation
F.Create and sustain a therapeutic and ethically sound relationship with patients	Clinical round Seminars Lectures Case presentation	Global rating Procedure/case presentation Log book Portfolios Chick list
<ul> <li>G. Perform the following oral communications: counseling of patient and families :</li> <li>1-dysphasia</li> </ul>		
2-dysartheria 3-BDMH 4-Mental retardation	Contract (f	
<ul> <li>H. Fill the following reports:</li> <li>Dysphasia test</li> </ul>	Senior staff experience	Chick list
<ol> <li>Work effectively with others as a member or leader of a health care team</li> </ol>		

#### Professionalism

ILOs		Methods of teaching/ Learning	Methods of Evaluation
J.	Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society that supersedes self-interest.	Observation Senior staff experience Case taking	<ol> <li>Objective structured clinical examination</li> <li>Patient survey</li> </ol>
К.	Demonstrate a commitment to ethical principles pertaining to provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.		1. 360o global rating
L.	Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities		

#### Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation	
M. Work effectively in different health care delivery settings and systems.	Observation Senior staff experience	1. 360o global rating	
N. Practice cost-effective health care and resource allocation that does not compromise quality of care		1. Check list evaluation of live or recorded performance	
O. Advocate for quality patient care and assist patients in dealing with system complexities		1. 360o global rating	
P. Partner with health care managers and health care providers to assess, coordinate, and improve health care and predict how these activities can affect system performance		2. Patient survey	

#### **Unit 7: Psychiatry Disorders** A-Knowledge and understanding **ILOs** Methods of **Methods** teaching/ of Evaluation learning Lectures Log book A. Explain update and evidence based etiology, clinical picture, diagnosis and management of the following common diseases and clinical conditions: - Symptomatology of psychiatric disorders **Anxiety disorders** -Generalized Anxiety disorders -Phobic disorders • - Panic disorders. Obsessive compulsive disorders. -Post -traumatic stress disorders. • - Social anxiety disorders **Dissociative disorders**. Somatoform disorders -somatization disorders. -Conversion disorders. • Hypochondriasis. • Body dysmorphic disorders. -somatoform pain disorders. -Mood disorders. • -Schizophrenia. **Child Psychiatry** • Autistic disorders. • Conduct disorders. • Attention deficit hyperactivity disorders. • Mental subnormality. -Psychiatric speech disorders in children and adolescent -Psychometry -Consultation liaison psychiatry. Mention the Β. principles of (diagnostic/therapeutic/preventive tools) 1-History taking 2-counseling C. Mention briefly state of art of the following rare

diseases and conditions related to	
communicative disorders.	
D. Explain the facts and principles of the relevant	
basic and clinically supportive sciences related	
to psychiatry and phoniatrics disorders	
E. Explain the facts and principles of the relevant	
basic and clinically supportive sciences related	
to psychiatry and phoniatrics disorders.	
F. Describe the basic ethical and medicolegal principles	
revenant to the psychiatry and phoniatrics	
disorders.	
G. Describe the basics of quality assurance to ensure good	
clinical care in psychiatry and phoniatrics	
disorders.	
H. Explain the ethical and scientific principles of medical	
research	
I. Explain the impact of common health problems in the	
field of psychiatry and phoniatrics disorders on the	
society.	

#### **B-Intellectual outcomes**

teaching/ learning	Evaluation
Lectures	Written exam Log book
Lectures	Written exam Log book
	Lectures

education and clinical practice in his speciality.	
H. Create / innovate plans, systems, and other issues for	
improvement of performance in his practice.	
I. Present and defend his / her data in front of a panel of	
experts	

#### C-Practical skills (Patient Care) Credit points=0 CP

#### **D-General Skills**

#### **Practice-Based Learning and Improvement**

ILOs	Methods of teaching/ learning	Methods of Evaluation
A-Use information technology to manage information, access on-line medical information; and support their own education	Clinical round - discussion	-Logbook
B-Lead the learning of students and other health care professionals.	Clinical round - discussion	-Logbook

#### **Interpersonal and Communication Skills**

ILOs	Methods of teaching/	Methods of
	learning	Evaluation
C- Elicit information using effective nonverbal, explanatory, questioning, and writing skills.	-Observation and supervision -Written and oral communication	Log book

#### Professionalism

ILOs	Methods of teaching/ Learning	Methods of Evaluation
D – Perform Discussion section.	observation -Senior staff	Logbook
	experience	

#### Systems-Based Practice

ILOs	Methods of teaching/ learning	Methods of Evaluation
E. Work effectively in relevant health care	observation	Logbook
delivery settings and systems.	-Senior staff experience	

#### 4. Course contents (topic s/modules/rotation Course Matrix

#### Time Schedule: Second part

Торіс	Covered ILOs				
	Knowledge	Intellectual	Practical skill	General Skills	
Торіс		Covered	l ILOs		
	Knowledge	Intellectual	Practical skill	General Skills	
Unit 1-Language disorders & rehabilitation	A-I	A-J	A-L	A-P	
<ul> <li>1- Delayed language development         <ul> <li>A-Hearing impairment</li> <li>b- Attention deficit hyperactivity disorders</li> <li>c- Mental retardation</li> <li>D-Autism</li> <li>e- Idiopathic</li> <li>f- Environmental deprivation</li> </ul> </li> <li>2- Dysphasia         <ul> <li>A-perceptive type</li> <li>B-Expressive type</li> <li>c- Mixed type</li> </ul> </li> </ul>	A-I	A-J	A-L	A-P	
Unit 2-speech disorders & rehabilitation	A-I	A-J	A-L	A-P	
<ul> <li>1-Stuttering <ul> <li>Stuttering</li> <li>Recent trends in treatment of</li> </ul> </li> <li>stuttering <ul> <li>2-Nasality</li> <li>a-Open nasality</li> <li>b-Closed nasality</li> <li>c- Mixed nasality</li> </ul> </li> <li>3- Dysarthria <ul> <li>a. Spastic dysarthria</li> <li>b. Flaccid dysarthria</li> <li>c. Extrapyramidal dysarthria</li> <li>i. Hypokinetic</li> </ul> </li> </ul>	A-I	A-J	A-L	A-P	

Hyperkinetic				
d. Cerebellar dysarthria				
4- Dyslalia				
Unit 3-voice disorders &	A-I	A-J	A-L	A-P
	A-1	A-J	A-L	A-1
rehabilitation				
1- Organic voice disorder	A-I	A-J	A-L	A-P
A- Congenital malformation				
B- Inflammatory causes				
C- Traumatic conditions				
D- Laryngeal allergy				
E- Laryngeal tumours:				
F- Neurological disorders of the				
larynx				
G- Endocrinopathis				
H- Status post laryngectomy				
2- Non- organic (functional) voice				
disorders				
A- Habitual voice disorders:				
1- Hyperfunctionl childhood				
dysphonia				
2- Hyperfunctionl dysphonia				
3- Mutational voice disorders				
<ul><li>4- Hypofunctionl dysphonia</li><li>5- Phonasthenia</li></ul>				
6- Ventricular dysphonia 7- Habitual aphonia				
B- Psychogenic voice disorders:				
1- Psychogenic dysphonia				
2- Psychogenic aphonia				
3- Minimal associated pathological				
lesions:				
1- Vocal fold nodules				
2- Vocal fold polyp				
3- Vocal fold cyst				
4- Reinek's edema				
5- Granulomas				
4- Medication and voice				
5- Problems of aging voice				
6- tumor markers in laryngeal cancer				
7-Prevention of communicative				
disorders				
Unit 1_ swallowing	A-I	A-J	A-L	A-P
Unit 4- swallowing	F <b>\-1</b>	A-J		A-f
disorders & rehabilitation				
<ul> <li>Protocol for assessment of dysphagia</li> <li>I- Preliminary diagnostic procedures:</li> </ul>	A-I	A-J	A-L	A-P
- History taking				
- Auditory perceptual				
assessment of speech				

			•	
and language of the				
patient				
- Preliminary				
visualizationof oro-				
pharyngo-laryngeal tract				
<ul> <li>Neck examination</li> </ul>				
- Neurological				
examination				
<ul> <li>Bed side trials of feeding</li> </ul>				
to test swallowing				
function				
II-Clinical diagnostic aids (Imaging				
studies of oro-pharyngeal rejoin)				
<ul> <li>Videoendoscopy (FEES) (FEESST)</li> </ul>				
- Videofluroscopy				
<ul> <li>Ultrasound studies of oral cavity</li> </ul>				
- Scintigraphy				
<ul> <li>Imaging (High speed MRI, CT and MRI)</li> </ul>				
<ul> <li>Formal testing of language, speech and</li> </ul>				
cognitive abilities				
III-Additional instrumental measures				
a) Manometry				
b) Manofluroscopy				
c) EMG				
d) Pulse oximetry				
e) Other recent diagnostic measures				
- Treatment of oro-pharyngeal dysphagia				
a) Behavior readjustment therapy				
b) Intra oral prosthesis				
c) Surgical techniques				
d) EMG				
e) Internal feeding methods				
- Effect of aging on swallowing				
- Swallowing and feeding disorders in children	A T		Α.Τ.	A D
5-Learning disorders	A-I	A-J	A-L	A-P
&rehabilitation				
Definition.				
<ul> <li>Incidence and sex ratio.</li> </ul>				
<ul> <li>Etiology.</li> </ul>				
Neurobiological background				
<ul> <li>a- Neuroanatomical deficits</li> </ul>				
<ul> <li>b- Neurophysiological deficits</li> </ul>				
1-The phonological deficits theory and				
phonological awareness				
II- The visual theory				
III- The cerebellar theory				
IV- Crossed cerebral theory				
<ul> <li>V- Central auditory dysfunction.</li> </ul>				
<u>Classification</u>				
-Language- based learning disabilities.				
- Non-verbal learning disability.				
-Learning disabilities that affect executive				
functions.				
		•		

Clinical manifestation		
-Manifestations of dyslexia.		
- Manifestations of dysgraphia.		
- Manifestations of dyscalculia .		
<ul> <li>- Manifestations of attention and memory</li> </ul>		
Disorders		
-Manifestations of some of the		
Underlying Deficits.		
<ul> <li>Assessment</li> </ul>		
<ul> <li>Management</li> </ul>		
_		

#### Unit 6 Neurological diseases.

Торіс	Covered ILOs				
	Knowledge	Intellectual	Practical skill	General Skills	
1- Cerebro vascular stroke	A-I	A-I	A-L	A-P	
2- Muscle diseases	A-I	A,B,C	A-L	A,B,G,H,I	
3- Motor neuron diseases	A-I	A,B,C	A-L	A,B,G,H,I	
4- Extrapyramidal syndromes	A-I	A,B,C	A-L	A,B,G,H,I	
5- Epilepsy	A-I	A,B,C	A-L	A,B,G,H,I	
6- Demylenating diseases	A-I	A,B,C	A-L	A,B,G,H,I	
7- Syringomyelia	A-I	A,B,C	A-L	A,B,G,H,I	
8- Peripheral neuritis	A-I	A,B,C	A-L	A,B,G,H,I	
9- Cerebellum and ataxias	A-I	A,B,C	A-L	A,B,G,H,I	
10- brain tumours	A-I	A,B,C	A-L	A,B,G,H,I	
11- Meningitis	A-I	A,B,C	A-L	A,B,G,H,I	
12- Enchiphalitis	A-I	A,B,C	A-L	A,B,G,H,I	
13- anatomy of the brain &cranial nerves	A-I	A,B,C	A-L	A,B,G,H,I	

#### Unit 7 : Psychiatric disorders.

Topic		Covered	ILOs	
1 I	Knowledge		Practical	General
	0		skill	Skills
Unit 7: Psychiatric disorders.	A-I	A-I	-	A-E
Symptomatology of psychiatric				
disorders				
Anxiety disorders				
Generalized Anxiety				
disorders				
-Phobic disorders				
• - Panic disorders.				
- Obsessive compulsive				
disorders.				
• -Post -traumatic stress				
disorders.				
<ul> <li>- Social anxiety disorders</li> </ul>				
Dissociative disorders.				
Somatoform disorders				
<ul> <li>-somatization disorders.</li> </ul>				
<ul> <li>-Conversion disorders.</li> </ul>				
<ul> <li>Hypochondriasis.</li> </ul>				
<ul> <li>Body dysmorphic disorders.</li> </ul>				
<ul> <li>-somatoform pain disorders.</li> </ul>				
<ul> <li>-Mood disorders.</li> </ul>				
<ul> <li>-Schizophrenia.</li> </ul>				
<u>Child Psychiatry</u>				
Autistic disorders.				
Conduct disorders.				
Attention deficit				
hyperactivity disorders.				
Mental subnormality.				
-Psychiatric speech disorders in				
children and adolescent				
-Psychometry				
-Consultation liaison psychiatry.				

#### **5. Course Methods of teaching/learning:**

1-Didactic (lectures, seminars, tutorial)

2- out patient

3-case presentation

4-Direct observation

5-journal club,

6-Critically appraised topic,

7-Educational prescription

8-Present a case (true or simulated) in a grand round

9-Clinical rounds

10-Senior staff experience

11-Case log

12-Written & oral communications

13-Observation & supervision

## 6. Course Methods of teaching/learning: for students with poor achievements

Extra Didactic (lectures, seminars, tutorial)

1-Didactic (lectures, seminars, tutorial)

2- out patient

3-case presentation

4-Direct observation

5-journal club,

6-Critically appraised topic,

7-Educational prescription

8-Present a case (true or simulated) in a grand round

9-Clinical rounds

10-Senior staff experience

11-Case log

12-Written & oral communications

13-Observation & supervision.

according to their needs

#### 7. Course assessment methods:

- i. Assessment tools:
  - 1-oral examination
  - 2-Written examination
  - **3-Objective structure clinical examination (OSCE)**
  - **4-Portfolios**
  - **5-Procedure/case Log book**
  - 6-Simulation
  - 7-Record review (report)
  - 8-Check list evaluation.
- ii. Time schedule: at the end of second part
- iii. Marks: 1200 mark(480 marks foe written+360 marks for oral+ 360 marks for clinical exam)>

#### 8. List of references

i. Lectures notes

- ii. Essential books
- Principles of Experimental Phonetics Norman J. Lass 1996
- Speech Science Primer Lawrece J. Raphael 2006
- The hand book of genetic communicative disorders Sanford E Garlic 2001
- Motor Speech Disorders Joseh R 2005 reedition 2015
- Phonology "Assessment and Intervention applications in speech pathology" Robert J. Lowe 1994
- Aphasia and other acqurid neurogenic language disorders :Aguid for clinical excellence Brooke Hallowell secend edition2022
- Cleft palate and craniofacial condition: Acomprehensive guide to clinical management (Ann W.Kummer fourth edition2020)
- Evidence –Based Laryngology (david E Rosow and Chandrea M.Ivey.2021).
- Office-Based Laryngeal surgery (Abdul-Latif Hamdan, Rebort Thayer nd Mary JHawkshaw2022).
- Phoniatric 1(fundementals voice disorders, disorders of language and hearing)2020
- Dysphagia clinical managment in adult and children (Michael a Crary.2016).

- Self-therapy for the stutterer (Malcolm Fraser .eleventh edition2010)
- Motor Speech Disorders Joseh R 2005,2<sup>nd</sup> edition.
- Motor Speech Disorders: Substrates, Differential Diagnosis, and Management ,2015, Mosby.
- Research design in speech pathology and audiology Franklin H. Silverman 1977
- Cleft palate speech Mc Williams Morris Shelton 1984
- **Rehabilitative Audiology children and Adult** Jerome G. Alpiner and Patricin A. McCarthy 1987
- Speech motor dynamics in Stuttering Peters/ Hulstijn 1987
- Neural bases of speech, hearing, and language David P. Kuehn, Margarete L. Lemne, and John M. Baumgartner 1989
- Appraisal and diagnosis of speech and language disorders Peterson & Marquardt 1981
- Counseling in speech-language pathology and audiology Jane Scheuerle 1992
- Microcomputers in speech, language and hearing Jack F. Curtis 1987
- Clinical neurology notes of staff members 1<sup>st</sup> edition, 2017-2018.
- Kaplan and Sadoack in clinical psychiatry, 2021 iii. Recommended books
- Contemporary linguistic analysis an introduction (O`Grady &Dobrovolsky,1987).
   iv. Periodicals, Web sites, ... etc
  - Journal of Voice
  - Language and communication
  - Americal Journal of Otolaryngology
  - Journal of communication Disorders
  - Journal of Fluency Disorders
  - Journal of Memory and Language
  - Research in Autism spectrum Disorders
  - Hearing Research
  - International Journal of Pediatric Otolaryngology
  - Journal of second Language writing
  - Journal of visual language and computing
  - Learning and Individual Difference
  - Learning and Instruction
  - Learning and Motivation

- Reasearch in Developmental Disabilities
- Sleep Medicine

iv. Periodicals, Web sites, ... etc

- Folia Phoniatrica.
- Laryngoscope.
- Annals Of Otorhinolaryngology.
- Journal of Neurolinguistics.
- Journal of phonetics.
- Linguistics and Education.
- Language sciences.
- Brain and Language.
- Brain and Development.
- Brain and Cognition.

#### 9. Signatures

Course Coordinator				
Unit 1-5 Coordinator:	Head of the Department:			
Date:	Date:			
Unit 6 Coordinator:	Head of the Department:			
Date:	Date:			
Unit 7 Coordinator:	Head of the Department:			
Date:	Date:			

### ANNEX 2 Program Academic Reference Standards (ARS)

1- Graduate attributes for medical doctorate in phoniatric disorders

## The Graduate (after residence training and medical doctorate years of study) must:

- Demonstrate competency and mastery of basics, methods and tools of scientific research and clinical audit in *phoniatric disorders*.
- Have continuous ability to add knowledge to Phoniatric disorders through research and publication.
- **3-** Appraise and utilise relevant scientific knowledge to continuously update and improve clinical practice.
- 4- Acquire excellent level of medical knowledge in the basic biomedical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care and scientific research.
- 5- Function as a leader of a team to provide patient care that is appropriate, effective and compassionate for dealing with health problems and health promotion.
- **6-** Identify and create solutions for health problems in Phoniatric disorders.
- 7- Acquire an in depth understanding of common areas of Phoniatric disorders, from basic clinical care to evidence based clinical application, and possession of required skills to manage independently all problems in these areas.

- 8- Demonstrate leadership competencies including interpersonal and communication skills that ensure effective information exchange with individual patients and their families and teamwork with other health professions, the scientific community and the public.
- **9-** Function as teacher in relation to colleagues, medical students and other health professions.
- **10-** Master decision making capabilities in different situations related to Phoniatric disorders.
- 11- Show leadership responsiveness to the larger context of the health care system, including e.g. the organisation of health care, partnership with health care providers and managers, practice of cost-effective health care, health economics, and resource allocations.
- 12- Demonstrate in depth awareness of public health and health policy issues including independent ability to improve health care, and identify and carryout systembased improvement of care.
- **13-** Show model attitudes and professionalism.
- 14- Demonstrate commitment for lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages and in Phoniatric disorders or one of its subspecialties.
- **15-** Use recent technologies to improve his practice in Phoniatric disorders.
- **16-** Share in updating and improving clinical practice in Phoniatric disorders.

## 2- Competency based Standards for medical doctorate in Phoniatric disorders

#### 22.1- Knowledge and understanding

## By the end of the program, the graduate should demonstrate satisfactory knowledge and understanding of

- **2-1-A-** Established, updated and evidence- based theories, basics and developments of Phoniatric disorders and relevant sciences.
- **2-1-B-** Basics, methods and ethics of medical research.
- **2-1-C-** Ethical and medicolegal principles of medical practice related to Phoniatric disorders.
- **2-1-D-** Principles and measurements of quality in Phoniatric disorders .
- **2-1-E-** Principles and efforts for maintainace and I mprovements of public health.

#### 2- Intellectual skills

## By the end of the program, the graduate should be able to demonstrate the following

- **2-2-A-** Application of basic and other relevant science to solve Phoniatric disorders related Problems.
- **2-2-B-** Problem solving based on available data.
- **2-2-C-** Involvement in research studies related to Phoniatric disorders.
- **2-2-D-** Writing scientific papers.
- **2-2-E-** Risk evaluation in the related clinical practice.
- **2-2-F-** Planning for performance improvement in Phoniatric disorders.
- 2-2-G- Creation and innovation in Phoniatric disorders .
- **2-2-H-** Evidence based discussion.
- **2-2-I-** Decision making in different situations related to Phoniatric disorders.

#### 2.3- Clinical skills

#### By the end of the program, the graduate should be able to **4** Competency-based outcomes for Patient Care:-

- 2-3-A- MD students must be able to provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health extensive level means in depth understanding and from basic science to evidence – based clinical application and possession of skills to manage independently all problems in Phoniatric disorders.
- **2-3-B-** Master patient care skills relevant to Phoniatric disorders for patients with all diagnoses and procedures.
- **2-3-C-** Write and evaluate reports for situations related to the Phoniatric disorders.

#### 2.4- General skills

#### By the end of the program, the graduate should be able to Competency-based outcomes for Practice-based Learning and Improvement

- 2-4-A-Master practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management
- **2-4-B-** Use competently all information sources and technology to improve his practice.
- **2-4-C-** Master skills of teaching and evaluating others.
  - **4** Competency-based objectives for Interpersonal and Communication Skills
- **2-4-D-** Master interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and other health professionals.

#### Competency-based objectives for Professionalism

2-4-E-Master Professionalism behavior, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and sensitivity to a diverse patient population.

#### **4** Competency-based objectives for Systems-based Practice:

- **2-4-F**-Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively use system resources to provide care that is of optimal value.
- **2-4-G-** Participate in improvement of the education system.
- **2-4-H-** Demonstrate skills of leading scientific meetings including time management
- **2-4-O-** Demonstrate skills of self and continuous learning.

## Annex 3, Methods of teaching/learning

#### Interpersonal Professionalis Practice-Systems-Patient Medical knowledge based and based care m communicati learning/ practice Improveme on skills nt Didactic Х Х Х Х Х (lectures, seminars, tutorial) journal club, Х Х Х Educational Х Х Х Х Х Х prescription Х Х Present a Х Х Χ case (true or simulated) in a grand round Observation Х Х Х Х Х and supervision conferences Х Х Х Х Х Х Х Written Х Х Х assignments Х Oral Х Х Х Х Х assignments

#### Annex 3, Methods of teaching/learning

#### Teaching methods for knowledge

- Didactic (lectures, seminars, tutorial)
- journal club
- Critically appraised topic
- Educational prescription (a structured technique for following up on clinical questions that arise during rounds and other venues).
- Present a case (true or simulated) in a grand round
- Others

#### Teaching methods for patient care

- Observation and supervision /Completed tasks procedure/case logs
- On-the-job" training without structured teaching is not sufficient for this skill (checklists).
- Simulation is increasingly used as an effective method for skill/ teamwork training.

#### Teaching methods for other skills

- Written communication (e.g., orders, progress note, transfer note, discharge summary, operative reports, and diagnostic reports).
- Oral communication (e.g., presentations, transfer of care, interactions with patients, families, colleagues, members of the health care team) and/or non verbal skills (e.g., listening, team skills)
- Professionalism, including medical ethics, may be included as a theme throughout the program curriculum that includes both didactic and experiential components (e.g., may be integrated into already existing small group discussions of vignettes or case studies and role plays, computer-based modules) and may be modeled by the faculty in clinical practice and discussed with the resident as issues arise during their clinical practice.

# Annex 4, Assessment methods

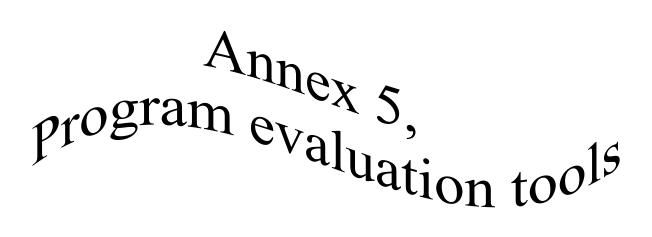
#### Annex 4, ILOs evaluation methods for MD students.

Method	Practical	К	Intellectual		Gener	al skills	
	skills						
	Patient care	К	I	Practice-based learning/ Improvement	Interpersonal and communication skills	Professionalism	Systems-based practice
Record review	X	Х	x		x	X	x
Checklist	x				Х		
Global rating	Х	Х	Х	Х	Х	Х	Х
Simulations	Х	Х	Х	Х	Х	X	
Portfolios	X	Х	Х	Х	х		
Standardized oral examination	X	Х	Х	Х	Х		Х
Written examination	X	Х	Х	Х			Х
Procedure/ case log	X	Х					
OSCE	x	х	X	х	X	x	x

#### Annex 4, Glossary of MD students assessment methods

- Record Review Abstraction of information from patient records, such as medications or tests ordered and comparison of findings against accepted patient care standards.
- Chart Stimulated Recall Uses the MD doctor's patient records in an oral examination to assess clinical decisionmaking.
- Mini clinical evaluation: Evaluation of Live/Recorded Performance (single event) – A single resident interaction with a patient is evaluated using a checklist. The encounter may be videotaped for later evaluation.
- Standardized Patients (SP) Simulated patients are trained to respond in a manner similar to real patients. The standardized patient can be trained to rate MD doctor's performance on checklists and provide feedback for history taking, physical examination, and communication skills. Physicians may also rate the MD doctor's performance.
- Objective Structured Clinical Examination (OSCE) A series of stations with standardized tasks for the MD doctors to perform. Standardized patients and other assessment methods often are combined in an OSCE. An observer or the standardized patient may evaluate the MD doctors.
- Procedure or Case Logs MD doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.
- PSQs Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by MD doctors.

- Case /problems assess use of knowledge in diagnosing or treating patients or evaluate procedural skills.
- Models: are simulations using mannequins or various anatomic structures to assess procedural skills and interpret clinical findings. Both are useful to assess practice performance and provide constructive feedback.
- 360 Global Rating Evaluations MD doctors, faculty, nurses, clerks, and other clinical staff evaluate MD doctors from different perspectives using similar rating forms.
- Portfolios A portfolio is a set of project reports that are prepared by the MD doctors to document projects completed during the MD study years. For each type of project standards of performance are set. Example projects are summarizing the research literature for selecting a treatment option, implementing a quality improvement program, revising a medical student clerkship elective, and creating a computer program to track patient care and outcomes.
- Examination MCQ A standardized examination using multiple-choice questions (MCQ). The in-training examination and written board examinations are examples.
- Examination Oral Uses structured realistic cases and patient case protocols in an oral examination to assess clinical decision-making.
- Procedure or Case Logs MD doctors prepare summaries of clinical experiences including clinical data. Logs are useful to document educational experiences and deficiencies.
- PSQs Patients fill out Patient Survey questionnaires (PSQs) evaluating the quality of care provided by MD doctors.



By whom	Method	sample
Quality Assurance	Reports	#1
Unit	Field visits	
External Evaluator	Reports	#2
(s):According to	Field visits	
department council		
External Examiner		
(s): According to		
department council		
Stakeholders	Reports	#5
	Field visits	
	questionnaires	
Senior students	questionnaires	#12
Alumni	questionnaires	#

مصفوفة توافق المعايير القومية القياسية العامة لبرامج الدكتوراه مع المعايير الأكاديمية المعتمدة من كلية الطب 🗌 جامعة أسيوط لدرجة الدكتوراه في أمراض التخاطب

#### I- General Academic Reference Standards (GARS) versus Program ARS

#### 1- Graduate attributes

Faculty ARS	NAQAAE General ARS for	
	Postgraduate Programs	
<ol> <li>Demonstrate competency and mastery of basics, methods and tools of scientific research and clinical audit in Phoniatric disorders.</li> </ol>	1-إتقان أساسيات و منهجيات البحث العلمي	
2- Have continuous ability to add knowledge new developments to Phoniatric disorders through research and publication.	2−العمل المستمر علي الإضافة للمعارف في مجال التخصص	
3- Appraise and utilise scientific knowledge to continuously update and improve clinical practice and relevant basic sciences.	3-تطبيق المنهج التحليلي والناقد للمعارف في مجال التخصص و المجالات ذات العلاقة	
4- Acquire excellent level of medical knowledge in the basic biomedical, clinical, behavioural and clinical sciences, medical ethics and medical jurisprudence and apply such knowledge in patient care and scientific	4-دمج المعارف المتخصصة مع المعارف ذات العلاقة مستنبطا و مطورا للعلاقات البينية بينها	
<ul> <li>5- Function as a leader of a team to provide patient care that is appropriate, compassionate for dealing effective and with health Problems and health promotion.</li> <li>7- Acquire an in depth understanding of common areas of speciality, from basic clinical care to evidence based clinical application, and possession of skills to manage independently all problems in these areas.</li> </ul>	5-إظهار وعيا عميقا بالمشاكل الجارية و النظريات الحديثة في مجال التخصص	
6- Identify and create solutions for health problems in Phoniatric disorders.	6-تحديد المشكلات المهنية و إيجاد حلولا مبتكرة لحلها	
5- Function as a leader of a team to provide patient care that is appropriate, effective and compassionate for dealing	7-إتقان نطاقا واسعا من المهارات المهنية في مجال التخصص	

with health problems and health	
promotion.	
7- Acquire an in depth understanding of	
common areas of Phoniatric disorders,	
from basic clinical care to evidence based	
clinical application, and possession of	
skills to manage independently all	
problems in these areas.	
8 - Share in updating and improving clinical	8- التوجه نحو تطوير طرق و أدوات و
practice in Phoniatric disorders.	
- Function as teacher in relation to colleagues,	أساليب جديدة للمزاولة المهنية
medical students and other health	
professions.	
9- Use recent technologies to improve his	
practice in Phoniatric disorders.	9–استخدام الوسائل التكنولوجية المناسبة بما
	يخدم ممارسته المهنية
8- Demonstrate leadership competencies	10-التواصل بفاعلية و قيادة فريق عمل في
including interpersonal and communication	
skills that ensure effective information	سياقات مهنية مختلفة
exchange with individual patients and their	
families and teamwork with other health	
professions, the scientific community and the	
public.	
5- Function as a leader of a team to	
provide patient care that is appropriate,	
effective and compassionate for dealing	
with health problems and health	
promotion.	
10- Master decision making capabilities in	11-اتخاذ القرار في ظل المعلومات المتاحة
different situations related to Phoniatric	
disorders.	
11- Show leadership responsiveness to the	12-توظيف الموارد المتاحة بكفاءة و تنميتها
larger context of the health care system,	
including e.g. the organisation of health	والعمل على إيجاد موارد جديدة
care, partnership with health care	
providers and managers, practice of cost-	
effective health care, health economics,	
and resource allocations.	
12- Demonstrate in depth awareness of public	him 11, a marth 7, and 1, a marth 12
health and health policy issues including	13-الوعي بدوره في تنمية المجتمع والحفاظ
nearth and nearth policy issues including	

independent ability to improve health care, and identify and carryout system-based improvement of care.	على البيئة
13- Show model attitudes and professionalism.	14-التصرف بما يعكس الالتزام بالنزاهة و المصداقية و قواعد المهنة
<ul> <li>14- Demonstrate commitment for lifelong learning and maintenance of competence and ability for continuous medical education and learning in subsequent stages and in Phoniatric disorders or one of its subspecialties.</li> <li>15- Use recent technologies to improve his practice in Phoniatric disorders.</li> </ul>	15⊣لالتزام بالتنمية الذاتية المستمرة و نقل علمه و خبراته للآخرين

#### 2- Academic standards

Faculty ARS	NAQAAE General ARS for
	Postgraduate Programs
2.1. A- Established, updated and evidence- based theories, basics and developments of Phoniatric disorders and relevant sciences.	1-2-أ- النظريات و الأساسيات والحديث من المعارف في مجال التخصص والمجالات ذات العلاقة
2.1. B- Basic, methods and ethics of medical research.	1-2-ب -أساسيات و منهجيات و أخلاقيات البحث العلمي و أدواته المختلفة
2.1. C- Ethical and medicologal principles of medical practice related to Phoniatric disorders.	2-1-ج- المبادئ الأخلاقية و القانونية للممارسة المهنية في مجال التخصص
2.1. D- Principles and measurements of quality in Phoniatric disorders.	1-2-د مبادئ و أساسيات الجودة في الممارسة المهنية في مجال التخصص
2.1. E- Principles and efforts for maintains and improvements of public health.	1-2-هـ - المعارف المتعلقة بآثار ممارسته المهنية على البيئة وطرق تنمية البيئة وصيانتها
2.2. A- Application of basic and other relevant science to solve Phoniatric disorders related problems.	2-2-أ -تحليل و تقييم المعلومات في مجال التخصص و القياس عليها و الاستنباط منها
2.2.B- Problem solving based on available data.	2-2-ب -حل المشاكل المتخصصة استنادا علي المعطيات المتاحة
2.2.C- Involvement in research studies related to Phoniatric disorders	2-2-ج -إجراء دراسات بحثية تضيف إلى المعارف
2.2. D- Writing scientific papers.	2-2-د- صياغة أوراق علمية
2.2. E- Risk evaluation in the related clinical practice	2–2—ه تقييم المخاطر في الممارسات المهنية
2.2.F- Planning for performance improvement in Phoniatric disorders	2–2–و التخطيط لتطوير الأداء في مجال التخصص

2-2-G- Creation and innovation in the Phoniatric disorders.	2-2-ز- الابتكار /الإبداع
2.2. H- Evidence – based discussion.	2-2-ح- الحوار والنقاش المبني علي البراهين والأدلة
2.2.I- Discussion making in different situations related to Phoniatric disorders.	2–2–ط -اتخاذ القرارات المهنية في سياقات مهنية مختلفة
<ul> <li>2.3. A- MD students must be able to provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health extensive level means in depth understanding and from basic science to evidence – based clinical application and possession of skills to manage independently all problems in Phoniatric disorders.</li> <li>2.3. B- Master patient care skills relevant to Phoniatric disorders or patients with all diagnoses and procedures.</li> </ul>	2-3-أ -إتقان المهارات المهنية الأساسية و الحديثة في مجال التخصص
2.3. C- Write and evaluate reports for situations related to the field of Phoniatric disorders.	2–3–ب– كتابة و تقييم التقارير المهنية.
2.4.A-Master practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management	2–3–ج -تقييم و تطوير الطرق و الأدوات القائمة في مجال التخصص
2.4.B- Use competently all information sources and technology to improve his practice.	2−3−د - استخدام الوسائل التكنولوجية بما يخدم الممارسة المهنية
<ul> <li>2.4.A-Master practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management</li> <li>2.4.G- Participate in improvement of the education system.</li> </ul>	2-3-ه -التخطيط لتطوير الممارسة المهنية وتنمية أداء الآخرين

### II-Program ARS versus program ILOs

# Comparison between ARS- ILOS for medical doctorate

(ARS)	(ILOs)
<u>2-1- Knowledge and understanding</u>	<u>2-1- Knowledge and understanding</u>
2-1-A- Established, updated and evidence-based Theories, Basics and developments of Phoniatric disorders and relevant sciences.	<ul> <li>2-1-A- Demonstrate in-depth knowledge and understanding of theories, basics and updated biomedical, clinical epidemiological and socio behavioral science relevant to his speciality as well as the evidence – based application of this knowledge to patient care.</li> </ul>
<b>2-1-B</b> Basic, methods and ethics of medical research.	2-1-B- Explain basics, methodology, tools and ethics of scientific medical, clinical research.
<b>2-1-C-</b> Ethical and medicologal principles of medical practice related to Phoniatric disorders field.	<b>2-1-C-</b> Mention ethical, medico logical principles and bylaws relevant to his practice in the field of Phoniatric disorders.
<b>2-1-D-</b> Principles and measurements of quality in the Phoniatric disorders.	2-1-D- Mention principles and measurements of quality assurance and quality improvement in medical education and in clinical practice of Phoniatric disorders.
2-1-E-Principles and efforts for maintains and improvements of public health.	<ul> <li>2-1-E- Mention health care system, public health and health policy, issues relevant to this speciality and principles and methods of system – based improvement of patient care in common health problems of the field of Phoniatric disorders.</li> </ul>
<u>2-2- Intellectual skills</u> :	<u>2-2- Intellectual skills:</u>
2-2-A-Application of basic and other	2-2-A- Apply the basic and clinically supportive

relevant science to solve Phoniatric disorders. related problems. <b>2-2-B-</b> Problem solving based on available data.	<ul> <li>sciences which are appropriate to Phoniatric disorders related conditions / problem / topics.</li> <li>2-2-B- Demonstrate an investigatory and analytic thinking "problem – solving "approaches to clinical situation related to Phoniatric disorders.</li> </ul>
<b>2-2-C-</b> Involvement in research studies related to the Phoniatric disorders .	<b>2-2-C-</b> Plain research projects.
<b>2-2-D</b> Writing scientific papers.	<b>2-2-D-</b> Write scientific paper.
<b>2-2-E-</b> Risk evaluation in the related clinical practice.	<b>2-2-E-</b> Participate in clinical risk management as a part of clinical governance.
<b>2-2-F-</b> Planning for performance improvement in the Phoniatric disorders field.	<b>2-2-F-</b> Plan for quality improvement in the field of medical education and clinical practice in his speciality.
2-2-G-Creation and innovation in the speciality field.	<b>2-2-G-</b> Create / innovate plans, systems, and other issues for improvement of performance in his practice.
<b>2-2-H</b> -Evidence – based discussion.	<b>2-2-H-</b> Present and defend his / her data in front of a panel of experts.
<b>2-2-I-</b> Decision making in different situations related to Phoniatric disorders fields.	<b>2-2-I-</b> Formulate management plans and alternative decisions in different situations in the field of the Phoniatric disorders

continuous (ARS)	continuous (ILOS)
<u>2-3- Clinical skills:</u>	2/3/1/Practical skills (Patient care :)
<ul> <li>2-3-A- MD students must be able to provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health extensive level means in depth understanding and from basic science to evidence – based clinical application and possession of skills to manage independently all problems in his field of practice.</li> <li>2-3-B- Master patient care skills relevant to Phoniatric disorders for patients with all diagnoses and procedures.</li> </ul>	<ul> <li>2-3-1-A- Provide extensive level of patient care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health. <i>p.s.</i> Extensive level means in-depth understanding from basic science to evidence – based clinical application and possession of skills to manage independently all problems in field of practice.</li> <li>2-3-1-B- Provide extensive level of patient care for patients with all common diagnoses and for uncomplicated procedures related to Phoniatric disorders</li> <li>2-3-1-C- Provide extensive level of patient care for non-routine, complicated patients and under increasingly difficult circumstances, while demonstrating compassionate, appropriate and effective care.</li> </ul>
	2-3-1-D- Perform diagnostic and therapeutic procedures considered essential in the field of Phoniatric disorders
	<ul> <li>2-3-1-E- Handles unexpected complications, while demonstrating compassion and sensitivity to patient needs and concerns.</li> <li>2-3-1-F- Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients and their families in the</li> </ul>

Phoniatric disorders related situations. <b>2-3-1-G</b> - Gather essential and accurate information about patients of the Phoniatric disorders related conditions.
2-3-1-H Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to- date scientific evidence and clinical judgment for the Phoniatric disorders related conditions.
2-3-1-I- Develop and carry out patient management plans for Phoniatric disorders related conditions.
2-3-1-J- Counsel and educate patients and their families about Phoniatric disorders related conditions.
<ul> <li>2-3-1-K- Use information technology to support patient care decisions and patient education in all Phoniatric disorders related clinical situations.</li> </ul>
<b>2-3-1-L-</b> Perform competently all medical and invasive procedures considered essential for the Phoniatric disorders related conditions / area of practices.
<ul> <li>2-3-1-M- Provide health care services aimed at preventing the Phoniatric disorders related health problems.</li> </ul>
<b>2-3-1-N-</b> Lead health care professionals, including those from other disciplines, to provide patient-focused care in Phoniatric disorders related conditions.

2-3-C- Write and evaluate reports for situations related to the field Phoniatric disorders.	2-3-1-O- Write competently all forms of patient charts and sheets including reports evaluating these charts and sheets.( Write and evaluate a consultation note, Inform patients of a diagnosis and therapeutic plan, completing and evaluating comprehensive timely and legible medical records).
<u>2-4- General skills</u>	<u>2/3/2 General skills</u>
<b>2-4-A-</b> Master practice-based learning and improvement skills that involves investigation and evaluation of their own patient care, appraisal and assimilation of scientific evidence, improvements in patient care and risk management	<b>2-3-2-A-</b> Demonstrate the competency of continuous evaluation of different types of care provision to patients in the different area of Phoniatric disorders
	<b>2-3-2-B-</b> Appraise scientific evidence.
	<ul> <li>2-3-2-C- Continuously improve patient care based on constant self-evaluation and <u>life-long</u> <u>learning.</u></li> <li>2-3-2-D. Participate in clinical audit and research projects.</li> </ul>
	<b>2-3-2-E-</b> Practice skills of evidence-based Medicine (EBM).
	2-3-2-G- Design logbooks.
	<ul> <li>2-3-2-H- Design clinical guidelines and standard protocols of management.</li> <li>2-3-2-I- Appraise evidence from scientific studies related to the patients' health problems.</li> </ul>

<b>2-4-B-</b> Use competently all information source and technology to improve his practice.	<ul> <li>2-3-2-J- Apply knowledge of study designs and statistical methods to the appraisal of clinical studies.</li> <li>2-3-2-K- Use information technology to manage information, access on- line</li> </ul>
	medical information; for the important topics.
<b>2-4-C-</b> Master skills of teaching and evalu others.	2-3-2-F- Educate and evaluate students, residents and other health professionals.
<b>2-4-D-</b> Master interpersonal and communicat Skills that result in effective information exchange and teaming with patients, their families, and other health professionals.	<ul> <li>2-3-2-L- Master interpersonal and communication skills that result in the effective <u>exchange of information and collaboration</u> with patients, their families, and health professionals, including:-</li> <li><u>Present</u> a case.</li> </ul>
	<ul> <li><u>Write</u> a consultation note.</li> </ul>
	<ul> <li>Inform patients of a diagnosis and therapeutic plan Completing and maintaining comprehensive.</li> <li>Timely and legible <u>medical records.</u></li> <li>Teamwork skills.</li> </ul>
	2-3-2-M- Create and sustain a therapeutic and ethically sound relationship with patients.
	<ul><li>2-3-2-N- Elicit and provide information using effective nonverbal, explanatory, questioning, and writing skills.</li></ul>
	2-3-2-O- Work effectively with others as a member or leader of a health care team or other professional group.
<b>2-4-E-</b> Master Professionalism behavior, as manifested through a commitment to carrying out professional responsibilities, adherence to ethical principles, and	<b>2-3-2-P-</b> Demonstrate respect, compassion, and integrity; a responsiveness to the needs of patients and society.

sensitivity to a diverse patient population.	<ul> <li>2-3-2-Q- Demonstrate a commitment to ethical principles including provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices.</li> <li>2-3-2-R- Demonstrate sensitivity and responsiveness to patients' culture, age, gender, and disabilities.</li> </ul>
<b>2-4-F-</b> Demonstrate an awareness of and responsiveness to the larger context and system of health care and the ability to effectively use system resources to provide care that is of optimal value.	2-3-2-S- Work effectively in health care delivery settings and systems related to Phoniatric disorders including good administrative and time management.
<b>2-4-G</b> - Participate in improvement of the education system.	<b>2-3-2-T-</b> Practice cost-effective health care and resource allocation that does not compromise quality of care.
	2-3-2-U- Advocate for quality patient care and assist patients in dealing with system complexities.
	2-3-2-V- Design, monitor and evaluate specification of under and post graduate courses and programs.
<b>2-4-H-</b> Demonstrate skills of leading scientific meetings including time management	<ul> <li>2-3-2-W- Act as a chair man for scientific meetings including time management</li> <li>2-3-2-S- Work effectively in health care delivery settings and systems related to Phoniatric disorders including good administrative and time management.</li> </ul>
2-4-O- Demonstrate skills of self and continuous learning.	From A –H.

Course	Program covered ILOs						
	2/1/A	2/1/B	2/1/C	2/1/D	2/1/E		
Course 1 : Medical statistics		$\checkmark$					
course 2 : Research methodology		$\checkmark$					
Course 3: Medicolegal Aspets and Ethics in Medical Practice and Scientific Research.			~				
Course 4; Phoniatrics 1			$\checkmark$				
Course 5: Phoniatrics 2(Advanced Communicative disorders and rehabilitation)	✓	~	~	~	✓		

# III-Program matrix Knowledge and understanding

#### Intellectual

Course	Program covered ILOs								
	2/2/A	2/2/B	2/2/C	2/2/D	2/2/E	2/2/F	2/2/G	2/2/H	2/2/1
Course 1 : Medical statistics			~	~				~	
course 2 : Research methodology			~	✓				√	
Course 3: Medicolegal Aspets and Ethics in Medical Practice and Scientific Research.								~	
Course 4; Phoniatrics 1								~	
Course 5: Phoniatrics 2(Advanced Communicative disorders and rehabilitation)	~	~	~	~	~	~	~	~	~

# Practical Skills (Patient Care)

Course			P	Program co	overed ILO	S		
	2/3/1/ A	2/3/1/B	2/3/1/C	2/3/1/ D	2/3/1/E	2/3/1/F	2/3/1/ G	2/3/1/ H
Course 1 : Medical statistics								
course 2 : Research methodology								
Course 3 : Medicolegal Aspets and Ethics in Medical Practice and Scientific Research.				~				~
Course 4; Phoniatrics 1								
Course 5: Phoniatrics 2(Advanced Communicative disorders and rehabilitation)	V	~	~	~	~	~	V	~

# Practical Skills (Patient care)

Course	Program covered ILOs						
	2/3/1/I	2/3/1/J	2/3/1/ K	2/3/1/L	2/3/1/ M	2/3/1/ N	2/3/1/0
Course 1 : Medical statistics							
course 2 : Research methodology							
Course 3: Medicolegal Aspets and Ethics in Medical Practice and Scientific Research.							
Course 4; Phoniatrics 1							
Course 5: Phoniatrics 2(Advanced Communicative disorders and rehabilitation)	~	~	~	~	✓	~	~

#### **General Skills**

Course	Program covered ILOs							
	2/3/2/ A	2/3/2/ B	2/3/2/ C	2/3/2/ D	2/3/2/ E	2/3/2/ F	2/3/2/ G	2/3/2/ H
Course 1 : Medical statistics		~						
course 2 : Research methodology		~		~	~			
Course 3 : Medicolegal Aspets and Ethics in Medical Practice and Scientific Research.								
Course 4; Phoniatrics 1								
Course 5: Phoniatrics 2(Advanced Communicative disorders and rehabilitation)	~	~	~	~	~	~	~	~

#### **General skills**

Course	Program covered ILOs							
	2/3/2/ I	2/3/2/ J	2/3/2/ K	2/3/2/ L	2/3/2/ M	2/3/2/ N	2/3/2/ O	2/3/2/ P
Course 1 : Medical statistics	~	~	~					
course 2 : Research methodology	~	~						
Course 3: Medicolegal Aspets and Ethics in Medical Practice and Scientific Research.				~				
Course 4; Phoniatrics 1				$\checkmark$				
Course 5: Phoniatrics 2(Advanced Communicative disorders and rehabilitation)	~	~	~	✓	V	~	~	~

#### **General Skills**

Course	Program covered ILOS						
	2/3/2/Q	2/3/2/R	2/3/2/S	2/3/2/T	2/3/2/U	2/3/2/V	2/3/2/W
Course 1 : Medical statistics							
course 2 : Research methodology							
Course 3 : Medicolegal Aspets and Ethics in Medical Practice and Scientific Research.							
Course 4; Phoniatrics 1							
Course 5: Phoniatrics 2(Advanced Communicative disorders and rehabilitation)	~	~	~	~	~	~	~

# Annex 7, Additional information:

# Example: Unit information

Four days/ week 1 Phoniatric out patients' clinics (new patients and follow up)
Weekly Surgical intervention (Extirpation microlaryngophonosurgery) (3 beds)
Six rooms for therapy
One room for Psychometry
Three rooms for indirect video laryngoscpy, Computerized voice and speech analysis
Scientific Library (PhoniatricText Books and periodicals), MD, MSc thesis, and video tapes)
Seminar room with data show

# Staff members

Head of theUnit: prof.Dr. Eman Sayed Hassan Staff members Prof. Essam Mohamed Aref Prof. Aly ibraheem Prof. Eman Sayed Dr. Reham Abdel Wakel

Dr. Hanan Abdel Rashed

# **Opportunities within the department**

-One Phoniatric out patients' clinics

- Six rooms for therapy
- One room for Psychometry
- Three rooms for indirect video laryngoscpy, Computerized voice and speech analysis

- Scientific Library (PhoniatricText Books and periodicals), MD,

MSc thesis, and video tapes)

- Seminar room with data show

# Department quality control insurance for completing the program

- **4** Evaluation by theUnit head and stuff members.
- ♣ Regular assessments.
- **4** Log book monitoring.
- **4** Recent equipments.