



## إعتماد توصيف مقررات برنامج الدكتوراه فى السمعيات

نقر نحن الموقعون على هذا أدناه أن توصيف وثيقة البرنامج التعليمى لدرجة الدكتوراه فى السمعيات والمقررات الدراسية المكونة له قد تم وضعها بمعرفة الأقسام المعنية

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## Peer Revision

Reviewers	University	Date of Revision
- Prof. Dawlat Salem	Cairo	10/12/2011
- Prof. Ahmad K. Mansur	Mansura	28/11/2011

# Program Specification of Medical Doctorate Degree of Audiology

Sohag University

Faculty of Medicine

## A. Basic Information

1. Program Title: MD in Audiology.
2. Program Type: Single
3. Faculty: Faculty of Medicine
4. Department: Otorhinolaryngology (Audiology Unit)
5. Coordinator: Dr. Mohamed Abdel- Ghaffar Abdel- Rahman
6. Assistant coordinator: Salwa Mourad
7. External Evaluator: Prof. Dr. Somiea Tawfeek
8. Last date of program specifications approval: Faculty council No. "250",  
decree No. "1378" dated 28/12/2013.

## B. Professional Information

### 1. Program Aims:

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mystery of the practice of Audiology specialty and necessary to provide further training and practice in the field of Audiology through providing:

1. Recent scientific knowledge essential for the mystery of practice of Audiology according to the international standards.
2. Skills necessary for proper diagnosis and management of patients in the field of Audiology including diagnostic, problem solving and decision making skills.
3. Ethical principles related to the practice in this specialty.
4. Active participation in community needs assessment and problems identification.
5. 5-Maintenance of learning abilities necessary for continuous medical education.
6. Upgrading research interest and abilities.

### 2. Attributes of the postgraduate:

1. Efficient in carrying out the basics and advances in methodologies of scientific research.
2. The continuous working to add new knowledge in the field of audiology.
3. Applying the analytical course and critical appraisal of the knowledge in his specialty and related fields.
4. Merging the audiologic knowledge with the other related knowledge with conclusion and developing the relationships in between them.
5. Showing a deep awareness with the ongoing problems, theories, and advanced sciences in the specialty of audiology.

6. Determination of the professional problems in the specialty of audiology and creating solutions for them.
7. Efficient in carrying out the professional skills in his specialty.
8. Using advanced suitable technologies which serves his practice.
9. Efficient communication and leadership of team work in his specialty.
10. Decision making through the available information.
11. Using the available resources efficiently and working to find new resources.
12. Awareness with his role in the development of the society and preserve environment.
13. Behaving in a way which reflects his credibility, accountability, and responsibility.
14. Keeping continuous self development and transfer his experiences and knowledge to others.

### **3. Intended Learning Outcomes (ILOs)**

#### **a) Knowledge and Understanding:**

By the end of the study of Doctoral program in Audiology the Graduate should be able to:

- a1. Mention the recent advances in the normal structure and function of the auditory system on the macro and micro level.
- a2. Mention the recent advances in the normal structure and function of the balance system on the macro and micro level.
- a3. Enumerate recent advances in the normal growth and development of the auditory system.
- a4. Enumerate recent advances in the normal growth and development of the vestibular system.
- a5. List the recent advances in the abnormal structure, function, growth and development of the auditory system.
- a6. List the recent advances in the abnormal structure, function, growth and development of the balance system.
- a7. Mention theories of hearing.
- a8. Define the recent advances in nature and analysis of sounds.
- a9. List acoustics of different sounds.
- a10. Mention the electronics of different audiological and vestibular procedures.
- a11. Enumerate recent advances in natural history of hearing and balance disorders.
- a12. List recent advances in the causation of hearing and balance disorders and their pathogenesis.
- a13. List the clinical picture and differential diagnosis of hearing and balance disorders.
- a14. Enumerate recent advances in the common diagnostic and laboratory techniques necessary to establish diagnosis of hearing and balance disorders
- a15. Mention recent advances in the various therapeutic methods/alternatives used for hearing and balance disorders.
- a16. Describe recent advances in the component, types advantages, disadvantages, of hearing aids.
- a17. Describe recent advances in the component, type's advantages, disadvantages, of cochlear implant.
- a18. Define recent advances in rehabilitation of auditory disorders.
- a19. Define recent advances in rehabilitation of vestibular disorders.

- a20. Mention the different risk factors of the cerebrovascular stroke.
- a21. Illustrate the structure and function of the peripheral nervous system & the clinical syndromes most commonly associated with lesions in the system.
- a22. Trace the types of brain tumors.
- a23. Enumerate clinical picture of M.S
- a24. Define the investigations of the anatomy, and functional neurophysiology.
- a25. Mention the spectrum of clinical symptomatology related to common Internal medicine disorders.
- a26. Mention the relation between psychiatric symptoms/signs and Audiological disorders.
- a27. Mention the basic diagnostic criteria in psychiatric disorders related to Audiology.
- a28. Mention the common interventional therapeutic methods in handling psychiatric disorders in his patients.
- a29. Define the sources of data and methods of collection
- a30. Describe five sampling techniques and list at least three advantages of sampling
- a31. List types of data, construct tables and graphs
- a32. Define measures of central tendency and measures of dispersion
- a33. Describe the normal curves and its uses
- a34. Enumerate tests of significance and the inferences obtained from such tests.
- a35. Define terms of research methodology
- a36. Describe the spectrum of research methodology
- a37. Explain the strategies and design of researches
- a38. Describe the sampling methods
- a39. List at least four types of study designs
- a40. Describe the study design, uses, and limitations
- a41. Define causation and association
- a42. Describe bias and confounding
- a43. Explain evidence based Medicine
- a44. Define different samples sizes
- a45. Define the screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests
- a46. Explain the usefulness of screening tests, and calculate sensitivity, specificity, and predictive values.
- a47. Mention natural history of otological disorders.
- a48. Mention the causation of otological disorders and their pathogenesis.
- a49. List the clinical picture and differential diagnosis of otological disorders.
- a50. Enumerate the common diagnostic and laboratory techniques necessary to establish diagnosis of otological disorders
- a51. List the various therapeutic methods/alternatives used for otological disorders.
- a52. Mention principles, methodologies, tools and ethics of scientific research in the field of Audiology.
- a53. Define the principles and fundamentals of ethics and legal aspects of professional practice in the field of Audiology.
- a54. Trace the principles and fundamentals of quality of professional practice in the field of Audiology.
- a55. Describe the knowledge of the impact of professional practice on the environment and the methods of environmental development and maintenance.

a56. Describe the relationship between the environmental potentials and their effects on the central nervous system.

**b) Intellectual Skills**

By the end of the study of Doctoral program in Audiology the Graduate should be able to:

- b1. Interpret data acquired through history taking to reach a provisional diagnosis for hearing and balance disorders.
- b2. Interpret data acquired through history taking to reach a provisional diagnosis for otological disorders.
- b3. Analyze and predict cases associated with neurological abnormalities.
- b4. Formulate different ways in the pathogenesis of similar neurological conditions with similar clinical pictures.
- b5. Conclude the final diagnosis of different neurological cases.
- b6. Interpret the most important symptoms and signs of the most common neurological disorders
- b7. Interpret the most important symptoms and signs of the most common medical disorders.
- b8. Measure intensities of different sounds.
- b9. Compare anatomical data related to hearing and balance with anatomical specimens.
- b10. Select from different diagnostic alternatives the ones that help reaching a final diagnosis for hearing and balance disorders.
- b11. Analyze symptoms & signs of psychiatric abnormalities and interpret its meaning to the patient and most likely possible diagnosis.
- b12. Conduct research studies that add to knowledge.
- b13. Formulate scientific papers in the area of Audiology.
- b14. Assess risks in professional practices in the field of Audiology.
- b15. Plan to improve performance in the field of Audiology.
- b16. Plan for management of individual patients presenting with the most common medical disorders.
- b17. Identify hearing and balance disorders and find solutions.
- b18. Formulate nontraditional solutions to hearing and balance disorders.
- b19. Criticize Professional decision-making in different professional contexts.
- b20. Mange Scientific discussion based on scientific evidences and proofs.
- b21. Apply research methods to different community health problems
- b22. Identify and collect data variables impacting health and disease
- b23. Apply appropriate research strategies for use
- b24. Select and use appropriate research methods
- b25. Activate and mobilize the community toward evidence based medicine
- b26. Criticize researches related to Audiology.

**c) Professional and Practical Skills**

By the end of the study of Doctoral program in Audiology the Graduate should be able to:

- c1. Master the basic and modern professional clinical skills in the area of Audiology.
- c2. Perform otological evaluation.
- c3. Perform the complete neurological examination.
- c4. Conduct a proper general examination and identify normal and major abnormal physical signs.

- c5. Conduct proper regional examination of the thorax and abdomen by inspection, palpation, percussion and auscultation.
- c6. Integrate the patient's symptomatology, historic data, abnormal physical signs and investigations into a comprehensive differential diagnosis of internal medicine.
- c7. Identify adequate logistics for further neurological assessment and management.
- c8. Write and evaluate medical reports.
- c9. Perform a comprehensive medical sheet including history and physical examination.
- c10. Evaluate and develop methods and tools existing in the area of Audiology.
- c11. Perform basic and advanced audiological evaluation.
- c12. Perform basic and advanced vestibular evaluation.
- c13. Design the appropriate supportive investigations relevant to a neurologic patient and adequately interpret the results.
- c14. Get acquainted with special therapeutic and interventional techniques related to neurology.
- c15. Perform adequate ECG recordings of common conditions as ventricular hypertrophy, myocardial infarction, common arrhythmias, etc.
- c16. Train junior staff through continuous medical education programs.
- c17. Design new methods, tools and ways of professional practice.
- c18. perform good reading of X-ray, CT and ultrasonic images of common diseases.
- c19. perform a competent mini- mental state evaluation and scoring.
- c20. Perform a research proposal for community diagnosis
- c21. Design questionnaires.
- c22. Conduct researches
- c23. Diagnose bias and confounding factors
- c24. Detect association and causation

**d) General and Transferable skills**

By the end of the study of Doctoral program in Audiology the Graduate should be able to:

- d1. Present reports in seminars effectively.
- d2. write structural reports or essay in neurology in accordance with the standard scientific guidelines.
- d3. write structural reports in internal medicine in accordance with the standard scientific guidelines.
- d4. prepare & present a small talk about any psychiatric/non-psychiatric topic.
- d5. Use appropriate computer program packages.
- d6. Use standard computer programs for statistical analysis effectively.
- d7. Utilize computers in conducting researches.
- d8. Manage a group of data entry
- d9. Analyze and interpret data
- d10. Teach others and evaluate their performance.
- d11. Assess himself and identify personal learning needs.
- d12. Use different sources for information and knowledge.
- d13. Work coherently and successfully as a part of a team and team's leadership.
- d14. Manage scientific meetings according to the available time.

#### 4. Academic Standards:

Sohag Faculty of medicine adopted the general National Academic Reference Standards (NARS) provided by the national authority for quality assurance and accreditation of education (NAQAAE) for postgraduate programs. This was approved by the Faculty Council decree No.6854, in its session No.177 Dated: 18/5/2009. Based on these NARS; Academic Reference Standards (ARS) were suggested for this program. These ARS were revised by external evaluator and approved by the Faculty Council decree No. 7528, in its session No.191, dated: 15/3/2010. The adoption of NARS and the suggested ARS were approved by University council degree No 587, in its session No.60. Dated 26-12-2011

#### 5. Curriculum Structure and Contents

5.a- Program duration 7 semesters (3.5 years).

5.b- Program structure

5.b.i- No. of hours per week:

Subject	hours /week		
	Lectures	Practical	Clinical
<b>First Part</b>			
Minors :			
Research Methodology	2	2	
Bio Statistics & Computer	2	2	
Primary Medical Report	1	2	
Acoustics & Psychoacoustics	2		
Electronics & Electro acoustics	2		
Anatomy and embryology	1		
Physiology	2		
<b>Second Part:</b>			
Audiology , Audiological medicine , Management and treatment	4		6
E.N.T	1		2
Psychiatry	1		2
Internal medicine	1		2

code	Item	No	%	
b.i	Total credit hours	Compulsory	90	100
		Elective	0	0
		Optional	0	0
b.iii	credit hours of basic sciences courses	7	7.8 %	
b.iv	credit hours of courses of social sciences and humanities	0	0	
b.v	credit hours of specialized courses:	52	57.8 %	
b.vi	credit hours of other course	8	8.9 %	
b.vii	Practical/Field Training	8	8.9 %	
b.viii	Program Levels (in credit-hours system):			
	Level 1: 1 <sup>st</sup> part	15	16.7 %	
	Level 2: 2 <sup>nd</sup> Part	52	57.8 %	
	Level 3: Thesis	15	16.7 %	

**6. Program Courses : 11 compulsory**

**Semester...1.....**

**First part:**

**a. Compulsory**

Course Title	Total No. of hours	No. of hours /week			Program ILOs Covered (By No.)
		Lect.	Lab.	Exer	
A) Advanced medical studies:					
1- Biostatistics + Computer	3	2	1		a.29, a.30, a.31, a.32, a.33, a.34, b.12, b.13, b.14, b.19, b.23, b.26, c.22, c.23, c.24, d.5, d.6, d.7, d.8, d.9
2- Research Methodology	3	3			a.29, a.30, a.35, a.36, a.37, a.38, a.39, a.40, a.41, a.42, a.43, a.44, a.45, a.46, a.52, b.12, b.13, b.14, b.20, b.21, b.22, b.23, b.24, b.25, b.26, c.17, c.20, c.21, c.22, c.23, c.24, d.7, d.12
3- Primary Medical Report	2	2			a.52, a.53, b.20, c.8, d.1
B) Basic medical studies:					
1- Acoustics & Psychoacoustics	2	2			a.7, a.8, a.9, b.8, c.1, c.11, d.5
2-Electronics & Electro acoustic	2	2			a.9, a.10, b.8, c.1, c.11, d.5
3-Anatomy and embryology	1				a.1, a.2, a.3, a.4, b.9, c.5, d.12
4-Physiology	2				a.1, a.2, a.7, b.6, b.7, c.3,

## 6.2 – Second part:

### a. Compulsory

Course Title	Total No. of hours	No. of hours /week			Program ILOs Covered (By No.)
		Lect.	Lab.	Exer.	
1-Audiology, Audiological medicine , Management & treatment	4	3.5		0.5	a.5, a.6, a.11, a.12, a.13, a.14, a.15, a.16, a.17, a.18, a.19, a.52, a.53, a.54, a.55, b.1, b.9, b.10, b.11, b.12, b.13, b.14, b.15, b.17, b.18, b.19, b.20, b.26, c.1, c.8, c.10, c.11, c.12, d.1, d.5, d.10, d.11, d.12, d.13, d.14
2-ENT	1	0.5		0.5	a.5, a.6, a.47, a.48, a.49, a.50, a.51, a.55, b.2, c.2, d.1
3-Psychiatry	1	0.5		0.5	a.26, a.27, a.28, b.11, c.19, d.1, d.4
4-Internal medicine.	1	0.5		0.5	a.20, a.21, a.22, a.23, a.24, a.25, a.56, b.3, b.4, b.5, b.6, b.7, b.16, c.3, c.4, c.5, c.6, c.7, c.9, c.13, c.14, c.15, c.16, c.18, d.1, d.2, d.3

## 7. Program Admission Requirements

### I- General Requirements.

- Candidate should have either MBBch degree from any Egyptian Faculty of Medicine or Equivalent Degree from Medical Schools abroad approved by the ministry of high Education.
- Candidate should know how to speak & write English well
- Candidate should have computer skills.
- Follow postgraduate bylaw Regulatory rules of Sohag Faculty of Medicine approved by the ministerial decree No. (44), dated 6/1/2010.

### II- Specific Requirements

- Master degree in Audiology with at least "Good Rank".

## 8. Regulations for Progression and Program Completion

Duration of program is 90 credit hours ( $\geq 7$  semesters  $\geq 3.5$  years), starting from registration till acceptance of the thesis; divided to:

### First Part: (15 Credit hours $\geq 6$ months $\geq 1$ semester):

- Program-related basic science, Research Methodology, Ethics & medical reports, Biostatistics and computer.

- At least six months after registration should pass before the student can ask for examination in the 1<sup>st</sup> part.
- Two sets of exams: 1st in October — 2nd in April after fulfillment of the credit hours.
- At least 60% of the written exam and 60% of the total oral and practical/clinical is needed to pass in each course.
- For the student to pass the first part exam, a score of at least 60% (Level D) in each course is needed.
- Those who fail in one course need to re-exam it only.
- GPA of  $\geq 1.3$  is needed to pass this level (semester).

**Second Part: ( 52Credit hours  $\geq$ 24 months= 4 semesters):**

- Program related specialized science of Audiology courses. At least 24 months after passing the 1<sup>st</sup> part should pass before the student can ask for examination in the 2<sup>nd</sup> part.
- Fulfillment of the requirements in each course as described in the template and registered in the log book (8 Credit hours; with obtaining  $\geq 75\%$  of its mark) is a prerequisite for candidates to be assessed and undertake part 1 and part 2 examinations; the credit hours of the logbook are calculated as following:
  - Each Cr. Hr.= 60 working Hrs.
  - Logbook= 8 Cr. Hr. X 60 working Hrs = 480 Working Hrs.
  - Collection of working Hrs. is as following:

Activity		Hrs
Grand rounds	اجتماع علمى موسع	6
Training courses	دورات تدريبية	12/ day
Conference attendance	حضور مؤتمرات علمية داخلي	12/day
	خارجة	18/day
Thesis discussion	حضور مناقشات رسائل	6
Workshops	حضور ورش عمل	12/day
Journal club	ندوة الدوريات الحديثة	6
Seminars	لقاء علمى موسع	6
Morbidity and Mortality conference	ندوة تحليل المخاطر المرضية أو الوفاة	6
Self education program	برنامج التعليم الذاتى	6

- Two sets of exams: 1st in October - 2nd in April.
- At least 60% of the written exam is needed to be admitted to the oral and practical exams.
- 4 times of oral and practical exams are allowed before the student has to re-attend the written exam.

**Third Part (Thesis) (15 Credit hours =24-48 months=4-8 semester):**

- Documentation of the subject should not be delayed for  $> 1.5$  years after registration.

- Could start after registration and should be completed, defended and accepted after passing the 2nd part final examination, after passing of at least 24 months after documentation of the subject of the thesis and after publishing of at least one paper from the thesis in a specialized peer-reviewed journal.
- Accepting the thesis is enough to pass this part.

## 9. Methods of student assessments:

Method of assessment	weight	The assessed ILOs
1-Research assignment		- General transferable skills, intellectual skills
2-Written Exams: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	50%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills
3-OSCE/ OSPE	50%	-Practical skills, intellectual skills, general transferable skills
4-Structured Oral Exams		- Knowledge, Intellectual skills, General transferable skills

### **Assessment schedule:**

#### Part I:

- Biostatistics & Computer: Written Exam (2 hours) + Structured oral Exam+ OSPE
- Research Methodology: Written Exam (2 hours) + structured oral Exam+ OSPE
- Primary medical reports: Written Exam (2 hour) + Structured oral Exam+ OSPE
- Electronics & Electro acoustic, Acoustics & Psychoacoustics: Written Exam (2 hour) + Structured oral Exam
- Medical Physiology: Written Exam (2 hour) + Structured oral Exam
- Anatomy: Written Exam (2 hours) + structured oral Exam

#### Part II:

- Five Written Exams (3 hours for each): two for Audiology, Audiological medicine, one for Management & treatment, one for Psychiatry, Internal medicine and one for ENT + OSCE for each + Structured oral Exam for each.

## 10. Evaluation of Program

Evaluator	Tool	Sample
1- Senior students	Questionnaire	2
2- Alumni	Questionnaire	2
3- Stakeholders ( Employers)	Questionnaire	25
4-External Evaluator(s) (External Examiner(s))	Report	1
5- Other	----	-----

# Course Specifications for Applied Biostatistics with computer use for Audiology Doctoral Degree

Sohag University

Faculty of Medicine

1. Program on which the course is given: MD degree in Audiology.
2. Minor element of program.
3. Department offering the program: Otolaryngology department.
4. Department offering the course: Community Medicine and public Health Department.
5. Academic year / Level: 1st part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

## A. Basic Information

**Title:** Course Specifications of Applied biostatistics with computer use for Audiology Doctoral Degree.

**Code:** COM 0524 -300.

Title	Lecture	Practical	Total	Credit
Applied Biostatistics	30	30	60	3

## B. Professional Information

### 1. Overall Aims of Course

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mystery of the practice of biostatistics specialty and necessary to provide further training and practice in the field of Audiology through providing recent scientific knowledge essential for the mystery of practice of biostatistics according to the international standards

### 2. Intended Learning Outcomes of Courses (ILOs)

#### a) **Knowledge and understanding:**

**By the end of the course, the student should be able to:**

- a1. Define different programs of analysis of data and statistical packages
- a2. Define the recent advances of sources of data and methods of collection.
- a3. Summarize data, construct tables and graphs
- a4. Calculate measures of central tendency and measures of dispersion
- a5. Describe the normal curves and its uses
- a6. Illustrate selected tests of significance and the inferences obtained from such tests
- a7. Illustrate selected tests of significance for parametric and non parametric inferences
- a8. Identify factor analysis and discrimination analysis

#### b) **Intellectual Skills**

**By the end of the course, the student should be able to:**

- b1. Identify and collect data variables impacting health and disease
- b2. Interpret data acquired through researches using different statistical tests



Assessment 4      Computer search assignment performance throughout e course  
**Weighting of Assessments**

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

**Formative only assessments: attendance and absenteeism and Computer search assignments performance.**

## **6. List of References**

### **6.1- Essential Books (Text Books)**

1-Maxy-Rosenau Public health and preventive medicine, ( Prentice – Hall International Inc by Robert Wallace 14<sup>th</sup> edition 1998)

### **6.2- Recommended Books**

1- Dimensions of Community Health, Boston Burr Ridge Dubuque mary clark (3<sup>rd</sup> edition 2000).

2- Textbook of Community Medicine: Preventive and Social Medicine by Lal Adarsh Pankaj Sunder (2010)

3- Lecture Notes: Epidemiology and Public Health Medicine by Richard D. T. Farmer and Ross Lawrenson (5th edition , 2004)

### **6.3- Periodicals, Web Sites, ... etc**

1-American Journal of Epidemiology

2-British Journal of Epidemiology and Community Health

3- WWW. CDC and WHO sites

## **7. Facilities Required for Teaching and Learning:**

1. Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory). Comfortable disks, good source of aeration, bathrooms, good illumination and safety and security tools.
2. Teaching tools: including screens, computers including CD, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printers.
3. Computer program: for designing and evaluating MCQs.

**Course Coordinator:** Dr/Ahmed Fathy Hamed

**Head of Department:** Prof/Eman Abd El-Baset Mohammed

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013

# Course Specifications of Research Methodology for Audiology Doctoral Degree

Sohag University

Faculty of Medicine

1. Program on which the course is given: MD degree in Audiology.
2. Minor element of program.
3. Department offering the program: Otolaryngology Department.
4. Department offering the course: Community Medicine and public Health Department.
5. Academic year / Level: 1st part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

## A. Basic Information

Title: Research methodology For Audiology Doctoral Degree.

Code: COM 0524 -300

Title	Lecture	Practical	Total	Credit
Research Methods	30	30	60	3

## B. Professional Information

### 1. Overall Aims of Course

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mystery of the practice of Research methodology specialty and necessary to provide further training and practice in the field of Audiology through providing:

- 1- Recent scientific knowledge essential for the mystery of practice of Research methodology according to the international standards.
- 2- Active participation in community needs assessment and problems identification.
- 3- Maintenance of learning abilities necessary for continuous medical education.
- 4- Upgrading research interest and abilities.

### 2. Intended Learning Outcomes of Courses (ILOs)

#### a) Knowledge and understanding:

By the end of the course, the student should be able to:

- a1. Define the recent advances of screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests.
- a2. Explain the usefulness of screening tests, and calculate sensitivity, specificity, and predictive values.
- a3. Describe the study design, uses, and limitations.
- a4. Describe the recent advances of principles, methodologies, tools and ethics of scientific research.
- a5. Explain the strategies and design of researches.
- a6. Describe bias and confounding.

- a7. Describe sampling techniques and list advantages of sampling
- a8. Identify principles of evidence based medicine.

**b) Intellectual Skills**

By the end of the course, the student should be able to:

- b1. Conduct research studies that add to knowledge.
- b2. Formulate scientific papers in the area of Audiology.
- b3. Innovate and create researches to find solutions to prevalent problems in the field of Audiology
- b4. Criticize researches related to Audiology.

**c) Professional and Practical Skills:**

By the end of the course, the student should be able to:

- c1. Master the basic and modern professional skills in conducting researches in the area of Audiology.
- c2. Design new methods, tools and ways of conducting researches. .

**d) General and Transferable Skills:**

By the end of the course, the student should be able to:

- d1. Use of different sources for information and knowledge to serve research.
- d2. Work coherently and successfully as a part of a team and team's leadership in conducting researches and field studies.

**3. Contents**

Topic	No. of hours	Lecture	Tutorial/ Practical
Details of epidemiological studies (case control, cohort and cross sectional )	10	5	5
Clinical trials, Quasi experimental study	10	5	5
Bias and errors	10	5	5
Setting a hypothesis	10	5	5
Recent advances in screening	4	2	2
Evidence – based Medicine: Concept and examples Applicability Scientific writing: A protocol A curriculum	6	3	3
Setting an objective Critical thinking	6	3	3
Formulation of papers	4	2	2
<b>Total</b>	<b>60</b>	<b>30</b>	<b>30</b>
<b>Credit hours</b>	<b>3</b>	<b>1</b>	<b>2</b>

**4. Teaching and Learning Methods**

- 4.1- Lectures.
- 4.2- Computer search assignments

## 5. Student Assessment Methods

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 Computer search assignment	-General transferable skills, intellectual skills

### Assessment Schedule

Assessment 1	Final written exam	Week: 24
Assessment 2	Final Structured Oral Exam	Week:24
Assessment 3	Attendance and absenteeism throughout the course	
Assessment 4	Computer search assignment performance throughout the course	

### Weighting of Assessments

Final-term written examination	50	%
Final Structured Oral Exam	50	%
Total	100	%

**Any formative only assessments** Attendance and absenteeism throughout the course

Computer search assignment performance throughout the course

## 6. List of References

### 6.1- Essential Books (Text Books)

1- Mayo Clinic Preventive Medicine and Public Health Board Review (Mayo Clinic Scientific Press) by Prathibha Varkey MD MPH MHPE (1st edition , 2010)

### 6.2- Recommended Books

1- Introduction to Community Health by James F. McKenzie, Robert R. Pinger and Jerome E. Kotecki (6th edition , 2007).

2- Textbook of Community Medicine: Preventive and Social Medicine by Lal Adarsh Pankaj Sunder (2010)

3- Epidemiology For Public Health Practice by Robert H. Friis and Thomas Sellers (4th edition , 2010)

### 6.3- Periodicals, Web Sites, ... etc

1-American Journal of Epidemiology

2-British Journal of Epidemiology and Community Health

3- WWW. CDC and WHO sites

**7. Facilities Required for Teaching and Learning:**

1. Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory). Comfortable desks, good source of aeration, bathrooms, good illumination and safety and security tools.
2. Teaching tools: including screens, computers including CD, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printers.

**Course Coordinator:** Dr/Ahmed Fathy Hamed

**Head of Department:** Prof/Eman Abd El-Baset Mohammed

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013

## Course Specifications of Primary Medical Reports for MD degree Audiology

Sohag University

Faculty of Medicine

1. Program on which the course is given: MD degree in Audiology.
2. Minor element of program.
3. Department offering the program: Otolaryngology Department.
4. Department offering the course: Forensic medicine & toxicology Department.
5. Academic year / Level: 1<sup>st</sup> part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

### A. Basic Information

**Title:** Course Specifications of primary medical report for Audiology Doctoral Degree

**Code:** FOR 0524 -300

Title	Lecture	Practical	Total	Credit
Primary Medical Report	15	30	45	2

### B. Professional Information

#### 1. Overall Aims of Course

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the practice of primary medical report specialty and necessary to provide further training and practice in the field of Audiology through providing:

- 1- Recent scientific knowledge essential for the practice of primary medical report according to the international standards.
- 2- Ethical principles related to the practice in this specialty.
- 3- Active participation in community needs assessment and problems identification.
- 4- Maintenance of learning abilities necessary for continuous medical education.
- 5- Upgrading research interest and abilities.

#### 2. Intended Learning Outcomes of Courses (ILOs)

##### a) **Knowledge and understanding:**

By the end of the course, the student should be able to:

- a1. Mention principles, methodologies, tools and ethics of scientific research in the field of Audiology.
- a2. Describe the principles and fundamentals of ethics and legal aspects of professional practice in the field of Audiology.

##### b) **Intellectual Skills**

By the end of the course, the student should be able to:

- b1. Manage Scientific discussion based on scientific evidences and proofs.

##### c) **Professional and Practical Skills:**

By the end of the course, the student should be able to:

- c1. Write and evaluate medical reports.

##### d) **General and Transferable Skills:**

By the end of the course, the student should be able to:  
d1. Present reports in seminars effectively.

### 3. Contents

<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>Practical</b>
The pathology of wounds, chest and abdominal injuries, self inflicted injury	6	2	4
The systemic effect of trauma& Permanent infirmity	4.5	1.5	3
Head and spinal injuries	4.5	1.5	3
The medicolegal aspects of firearm injuries	4.5	1.5	3
Burn and scold	4.5	1.5	3
How to write a medicolegal report& How to write death certificate	4.5	1.5	3
The medicolegal aspect of deaths associated with surgical procedures and toxicological sampling	3	1	2
Obligation of physicians (towards patients, colleagues, community)	3	1	2
Consent, and professional secrecy	3	1	2
Types of malpractice, and items of medical responsibility	3	1	2
Medicolegal aspects of organ transplantation, intersex states, euthanasia, assisted reproduction techniques	1.5	0.5	1
ethical considerations of medical research involving human subjects	3	1	2
<b>Total hours</b>	<b>45</b>	<b>15</b>	<b>30</b>
<b>Total credit</b>	<b>2</b>	<b>1</b>	<b>1</b>

### 4. Teaching and Learning Methods

4.1 Lectures.

4.2 assignments

## 5. Student Assessment Methods:

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.3-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.6 search assignment	-General transferable skills, intellectual skills

### Assessment Schedule

Assessment 1	Written Exams Short essay	Week: 24
Assessment 2	Structured Oral Exam	Week: 24
Assessment 3	attendance & absenteeism throughout the course	

### Weighting of Assessments

Written Examination	50 %
Structured Oral Exams	50 %
Formative only assessments: simple research assignment, attendance & absenteeism	

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Total	100%
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## 6. List of References

### 6.1-Essential Books:

- Simpson's Forensic Medicine (Richard Jones, Steven Karch and John Manlove 13rd edition,2011)
- Medical ethics. by Alastair Campbell, Grant Gillett and Gareth Jones (4<sup>th</sup> edition , 2005)

### 6.2- Periodicals and websites:

- Forensic Science International,
- Egyptian Journals of Forensic Medicine and Clinical Toxicology,
- International Journals of Forensic Medicine and Clinical Toxicology

Web sites : [www.sciencedirect.com](http://www.sciencedirect.com)

## 7. Facilities Required for Teaching and Learning:

1. Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory). Comfortable desks, good source of aeration, bathrooms, good illumination and safety and security tools.
2. Teaching tools: including screens, computers including CD, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printers.

**Course Coordinator:** Dr. Soheir Ali Mohamed

**Head of Department:** Dr. Maha Abdel Hamed Hilal

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013

## Course Specifications of Acoustics & Psychoacoustics and Electronics & Electro acoustic for Audiology Doctoral Degree

**Sohag University**

**Faculty of Medicine**

1. Program on which the course is given: MD degree in Audiology.
2. Minor element of program.
3. Department offering the program: Otolaryngology Department.
4. Department offering the course: Otolaryngology Department.
5. Academic year / Level: 1<sup>st</sup> part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

### **A. Basic Information**

**Title:** Course Specifications of Acoustics & Psychoacoustics and Electronics & Electro acoustic for Audiology Doctoral Degree.

**Code:** ENT-AUD 0524 -300

Title	Lecture	Practical	Total	credit
Acoustics & Psychoacoustics	<b>30</b>	--	<b>30</b>	<b>2</b>
Electronics & Electro acoustic	<b>30</b>	--	<b>30</b>	<b>2</b>

### **B. Professional Information**

#### **1. Overall Aims of Course:**

##### **Acoustics & Psychoacoustics module**

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mystery of the practice of Acoustic specialty and necessary to provide further training and practice in the field of Audiology through providing:

1. Recent scientific knowledge essential for the mystery of practice of Acoustic according to the international standards.
2. Ethical principles related to the practice in this specialty.
3. Active participation in community needs assessment and problems identification.
4. Maintenance of learning abilities necessary for continuous medical education.
5. Upgrading research interest and abilities.

##### **Electronics & Electro acoustic Module**

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mystery of the practice of Electronics specialty and necessary to provide further training and practice in the field of Audiology through providing:

- 1- Recent scientific knowledge essential for the mystery of practice of Electronics according to the international standards.
- 2- Ethical principles related to the practice in this specialty.
- 3- Maintenance of learning abilities necessary for continuous medical education.
- 4- Upgrading research interest and abilities.

#### **2. Intended Learning Outcomes of Courses (ILOs)**

### Acoustics & Psychoacoustics module

**a) Knowledge and understanding:**

By the end of the course, the student should be able to:

- a1. List theories of hearing.
- a2. Describe nature and analysis of sounds.
- a3. List acoustics of different sounds.

**b) Intellectual Skills**

By the end of the course, the student should be able to:

- b1. Interpret data acquired through history taking to reach a provisional diagnosis for hearing and balance disorders.

**c) Professional and Practical Skills:**

By the end of the course, the student should be able to:

- c1. Mention the basic and modern professional clinical skills in the area of Audiology.
- c2. Perform basic and advanced audiological evaluation.

**d) General and Transferable Skills:**

By the end of the course, the student should be able to:

- d1. Use appropriate computer program packages.

### Electronics & Electro acoustic Module

**a) Knowledge and understanding:**

By the end of the course, the student should be able to:

- a1. List acoustics of different sounds.
- a2. List the electronics of different audiological and vestibular procedures.

**b) Intellectual Skills**

By the end of the course, the student should be able to:

- b1. Measure intensities of different sounds.

**c) Professional and Practical Skills:**

By the end of the course, the student should be able to:

- c1. Mention the basic and modern professional clinical skills in the area of Audiology.
- c2. Perform basic and advanced audiological evaluation.

**d) General and Transferable Skills:**

By the end of the course, the student should be able to:

- d1. Use appropriate computer program packages.

**3. Contents:**

### Acoustics & Psychoacoustics module

Topic	No. of hours	Lecture	Tutorial/ Practical
A) Physical concepts.			
1. Fundamental physical properties.	1	1	
2. Force.	1	1	
3. Work, energy & power.	1	1	
4. Simple harmonic motion.	1	1	
5. Free vibration.	1	1	
6. Forced vibration.	1	1	

B) Acoustics:			
1. The disturbance caused sound.	1	1	
2. Fundamental properties of sound.	1	1	
3. Sound wave phenomena.			
4. Sound field.	1	1	
5. Resonance.	1	1	
	1	1	
C) Measurements of sounds:			
1. Root mean square.	1	1	
2. Decibel notation.	1	1	
3. Deciben equation.	1	1	
4. Octave notation.	1	1	
5. Measurement of complex sounds.	1	1	
6. Spectrum analysis.			
7. Distortion.	1	1	
	0.5	0.5	
D) Introduction to psychoacoustics:			
1. The concept of threshold.			
2. The auditory response area.	1	1	
3. Measurement of hearing.	1	1	
4. Differential sensitivity.	1	1	
5. Loudness.	2	2	
6. The power law.	1	1	
7. Pitch.	1	1	
8. Perception of complex sounds.	0.5	0.5	
9. Masking.	1	1	
10. Frequency resolving power of the auditory system.	1	1	
11. Temporal aspects of hearing.	1	1	
12. Binaural hearing.	1	1	
<b>Total</b>	<b>30</b>	<b>30</b>	<b>0</b>
<b>credit</b>	<b>2</b>	<b>2</b>	<b>0</b>

### Electronics & Electro acoustic Module

Topic	No. of hours	Lecture	Tutorial/ Practical
1-Instrumentation of Audiometry:			
• Air conduction.	2	2	
• Bone conduction.	2	2	
• Speech audiometry.	1	1	
2- Instrumentation of tympanometry:	5	5	
3- Instrumentation of auditory evoked potentials:			
• Electro-cochleography.	1	1	
• Auditory brainstem response.	2	2	
• Middle latency response.	1	1	
• Event related potentials.	1	1	
4- Instrumentation of Otoacoustic Emissions.	5	5	

5-Hearing aid:			
• Components.	3	3	
• Electro-acoustic characteristics.	2	2	
6-Cochlear implant:			
• Technology.	5	5	
<b>Total</b>	<b>30</b>	<b>30</b>	
<b>credit</b>	<b>2</b>	<b>2</b>	

#### 4. Teaching and Learning Methods

4.1 Lectures.

4.2 Assignments.

4.3 Attending and participating in scientific conferences, workshops and thesis discussion to acquire the general and transferable skills needed.

#### 5. Student Assessment Methods:

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 assignment	-General transferable skills, intellectual skills

#### Assessment Schedule

Assessment 1... Research assignment (1)	Week: 7-9
Assessment 1... Research assignment (2)	Week: 15-17
Assessment 2.a.... Written Exams Short essay	Week: 22-24
Assessment 2.b... Written Exams MCQs	Week 22-24
Assessment 4 ...Structured Oral Exam	Week 24

#### Weighting of Assessments

Final written Examination	50 %
Final Structured Oral Exam	50 %
Formative only assessments: simple research assignment	

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Total	100%
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#### 6. List of References

##### 6.1- Essential Books (Text Books):

Bases of hearing science (June D Durrant 3<sup>rd</sup> edition 1995).

##### 6.2- Recommended Books:

Fundamental of hearing ( William A Yost, 5<sup>th</sup> edition ,2006).

##### 6.3- Periodicals, Website,.....etc.

- Audiology online
- ASHA
- ANSI

- American Journal of Audiology

**7. Facilities Required for Teaching and Learning:**

1. Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory). Comfortable desks, good source of aeration, bathrooms, good illumination and safety and security tools.
2. Teaching tools: including screens, computers including CD, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printers.
3. Computer program: for designing and evaluating MCQs.

**Course Coordinator**

**Acoustics & Psychoacoustics module:** Dr. Mohamed Abdil-Ghaffar

**Electronics & Electro acoustic Module:** Dr. Mostafa Yousief Ilhagagy

**Head of Department:** Prof. Dr. Mohamed Abdel-Kader

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013

## Course Specifications of Human Anatomy & Embryology for Audiology Doctoral Degree

Sohag University

Faculty of Medicine

1. Program on which the course is given: MD degree in Audiology.
2. Minor element of program.
3. Department offering the program: Otolaryngology Department.
4. Department offering the course: Human Anatomy & Embryology Department.
5. Academic year / Level: 1<sup>st</sup> part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

### A. Basic Information

**Title:** Course Specifications of Anatomy& embryology for Audiology Doctoral Degree

**Code:** ANA 0524 -300

Title	Lecture	Practical	Total	credit
Anatomy& embryology	15	--	15	1

### B. Professional Information

#### 1. Overall Aims of Course

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mystery of the practice of Anatomy specialty and necessary to provide further training and practice in the field of Audiology through providing:

- 1- Recent scientific knowledge essential for the mystery of practice of Anatomy according to the international standards.
- 2- Maintenance of learning abilities necessary for continuous medical education.
- 3- Upgrading research interest and abilities.

#### 2. Intended Learning Outcomes of Courses (ILOs)

##### a) **Knowledge and understanding:**

By the end of the course, the student should be able to:

- a1. Mention the recent advances in the normal structure and function of the auditory system on the macro and micro level.
- a2. Mention the recent advances in the normal structure and function of the balance system on the macro and micro level.
- a3. List recent advances in the normal growth and development of the auditory system.
- a4. List recent advances in the normal growth and development of the vestibular system.

**b) Intellectual Skills**

By the end of the course, the student should be able to:

- b1. Compare anatomical data related to hearing and balance with anatomical specimens.

**c) Professional and Practical Skills:**

By the end of the course, the student should be able to:

- c2. Conduct proper regional examination of the thorax and abdomen by inspection, palpation, percussion and auscultation.

**d) General and Transferable Skills:**

By the end of the course, the student should be able to:

- d1. Use different sources for information and knowledge.

**3. Contents:**

Topic	No. of hours	Lecture	Practical
Embryology of the ear.	2	2	-
Anatomy of the external ear.	1	1	-
Anatomy of the tympanic membrane.	1	1	-
Anatomy of the middle ear.	2	2	-
Structures communicating with the tympanic cavity.	2	2	-
Anatomy of the inner ear.	3	3	-
Anatomy of the vestibulo-cochlear nerve.	2	2	-
Anatomy of the facial nerve.	2	2	-
<b>Total</b>	<b>15</b>	<b>15</b>	-
<b>credit</b>	<b>1</b>	<b>1</b>	-

**4. Teaching and Learning Methods**

4.1 Lectures.

4.2 Assignments.

**5. Student Assessment Methods:**

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 search assignment	-General transferable skills, intellectual skills

**Assessment Schedule**

Assessment 1	Research assignment	Week:10-12
Assessment 2	Written Exams Short essay	Week:22-24
Assessment 6	Structured Oral Exams	Week:24
Assessment 7 of attendance & absenteeism throughout the course		

## **Weighting of Assessments**

Final written Examination	50 %
Final Structured Oral Exams	50 %
Formative only assessments: simple research assignment, attendance & absenteeism	
<hr/>	
Total	100%

## **6. List of References**

### **6.1- Essential Books (Text Books)**

Gray's Anatomy (Henry Gray, 39<sup>th</sup> edition , 2011)

### **6.2- Recommended Books:**

A colored Atlas of Human anatomy and Embryology (Larry R.Cochard1<sup>st</sup> edition 2002).

### **6.3- Periodicals, Web Sites, ... etc**

Innerbody.com

Google.com

## **7. Facilities Required for Teaching and Learning:**

1. Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory). Comfortable desks, good source of aeration, bathrooms, good illumination and safety and security tools.
2. Teaching tools: including screens, computers including CD, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printers.

**Course Coordinator:** Dr. Salwa Ewaas.

**Head of Department:** Dr. Mohamed A. Eldsoky.

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013

## Course Specifications of Medical Physiology for Audiology Doctoral Degree

Sohag University

Faculty of Medicine

1. Program on which the course is given: MD degree in Audiology.
2. Minor element of program.
3. Department offering the program: Otolaryngology Department.
4. Department offering the course: Medical Physiology Department.
5. Academic year / Level: 1st part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

### A. basic information

Title: Course Specifications of Medical Physiology for Audiology Doctor Degree.

Code: PHY 0524 -300

Title	Lecture	Practical	Total	Credit
Physiology	30	--	30	2

### B. Professional Information

#### 1. Overall Aims of Course

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mystery of the practice of physiology specialty and necessary to provide further training and practice in the field of Audiology through providing:

- 1- Recent scientific knowledge essential for the mystery of practice of physiology according to the international standards.
- 2- Maintenance of learning abilities necessary for continuous medical education.
- 3- Upgrading research interest and abilities.

#### 2. Intended Learning Outcomes of Courses (ILOs)

##### a) Knowledge and understanding:

By the end of the course, the student should be able to:

- a1. Mention the recent advances in the normal structure and function of the auditory system on the macro and micro level.
- a2. Mention the recent advances in the normal structure and function of the balance system on the macro and micro level.
- a3. List theories of hearing.

##### b) Intellectual skills:

By the end of the course, the student should be able to:

- b1. Interpret the most important symptoms and signs of the most common neurological disorders
- b2. Interpret the most important symptoms and signs of the most common medical disorders.

**c) Professional and Practical Skills:**

By the end of the course, the student should be able to:

c1. Perform the complete neurological examination.

**d) General and Transferable Skills:**

By the end of the course, the student should be able to:

**3. Contents**

Topic	No. of hours	Lecture	Tutorial/ Practical
A) Physiology of Hearing: 1. Functions of the outer ear. 2. Functions of the middle ear: - The impedance transformer action of the middle ear. - Influence of the middle ear muscles [The acoustic reflex]. - Mechanisms of bone conduction. 3. Functions of the cochlea. 4. Cochlear fluids. 5. Cochlear mechanics. 6. Cochlear hair cells. 7. Functions of the auditory nerve.	12	12	
B) Physiology of the Vestibular System: 1. Labyrinthine fluids. 2. Orientation & functions of the vestibular system. 3. Vestibulo-ocular reflexes. 4. Vestibulo-spinal reflexes. 5. Vestibulo-colic reflexes. 6. Nystagmus.	13	13	
C) Physiology of the Speech.	5	5	
<b>Total</b>	<b>30</b>	<b>30</b>	
<b>Total credit hour</b>	<b>2</b>	<b>2</b>	

**4. Teaching and Learning Methods**

4.1 Lectures.

4.2 Assignments.

**5. Student Assessment Methods:**

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.3-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.4 search assignment	-General transferable skills, intellectual skills

### Assessment Schedule

Assessment 1	Research assignment	Week: 10-12
Assessment 2	Written Exam	Week: 22-24
Assessment 3	Structured Oral Exam	Week 24
Assessment 4	of attendance & absenteeism throughout the course	

### Weighting of Assessments

Final written Exam	50 %
Final Structured Oral Exam	50 %
Formative only assessments: simple research assignment, attendance & absenteeism	

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Total	100%
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### 6. List of References

#### 6.1- Essential Books (Text Books)

Glyton AC, Hall JE textbook of medical physiology, 11<sup>th</sup> ed. Saunders 2006

#### 6.2- Recommended Books:

Gillian Pocock, Christopher D. Richards Human physiology the bases of medicine Oxford texts 1999-2001

#### 6.3- Periodicals, Web Sites, ... etc

American journal of physiology.

### 7. Facilities Required for Teaching and Learning:

1. Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory). Comfortable desks, good source of aeration, bathrooms, good illumination and safety and security tools.
2. Teaching tools: including screens, computers including CD, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printers.

**Course Coordinator:** Dr. Hoda Mostafa

**Head of Department:** Dr. Ahmed Moustafa

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013

## Course Specifications of Audiology for Audiology Doctoral Degree

**Sohag University**

**Faculty of Medicine**

1. Program on which the course is given: MD degree in Audiology.
2. Major element of program.
3. Department offering the program: Otolaryngology Department.
4. Department offering the course: Otolaryngology Department.
5. Academic year / Level: 2<sup>nd</sup> part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

### **A. Basic Information**

**Title:** Course Specifications of Audiology for Audiology Doctoral Degree

**Code:** ENT- AUD 0524 -300

<b>Module</b>	<b>Lectures</b>	<b>Clinical</b>	<b>Total hours</b>	<b>credit</b>
Audiology	240	360	600	28

### **B. Professional Information**

#### **1. Overall Aims of Course**

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mystery of the practice of Audiology specialty and necessary to provide further training and practice in the field of Audiology through providing:

- 1- Recent scientific knowledge essential for the mystery of practice of Audiology according to the international standards.
- 2- Skills necessary for proper diagnosis and management of patients in the field of Audiology including diagnostic, problem solving and decision making skills.
- 3- Ethical principles related to the practice in this specialty.
- 4- Active participation in community needs assessment and problems identification.
- 5- Maintenance of learning abilities necessary for continuous medical education.
- 6- Upgrading research interest and abilities.

#### **2. Intended Learning Outcomes of Course (ILOs)**

##### **a) Knowledge and Understanding:**

By the end of the study of Doctoral program in Audiology the Graduate should be able to:

- a1. Mention the recent advances in the normal structure and function of the auditory system on the macro and micro level.
- a2. Mention the recent advances in the normal structure and function of the balance system on the macro and micro level.
- a3. Mention recent advances in the normal growth and development of the auditory system.

- a4. Mention recent advances in the normal growth and development of the vestibular system.
- a5. Mention the recent advances in the abnormal structure, function, growth and development of the auditory system.
- a6. List the recent advances in the abnormal structure, function, growth and development of the balance system.
- a7. Mention theories of hearing.
- a8. Describe the recent advances in nature and analysis of sounds.
- a9. Mention acoustics of different sounds.
- a10. Describe the electronics of different audiological and vestibular procedures.
- a11. Describe recent advances in natural history of hearing and balance disorders.
- a12. Describe recent advances in the causation of hearing and balance disorders and their pathogenesis.
- a13. Mention the clinical picture and differential diagnosis of hearing and balance disorders.
- a14. Enumerate recent advances in the common diagnostic and laboratory techniques necessary to establish diagnosis of hearing and balance disorders
- a15. Describe recent advances in the various therapeutic methods/alternatives used for hearing and balance disorders.
- a16. Describe recent advances in the component, types advantages, disadvantages, of hearing aids.
- a17. Describe recent advances in the component, types advantages, disadvantages, of cochlear implant.
- a18. Define recent advances in rehabilitation of auditory disorders.
- a19. Define recent advances in rehabilitation of vestibular disorders.
- a20. Mention the different risk factors of the cerebrovascular stroke.
- a21. Illustrate the structure and function of the peripheral nervous system & the clinical syndromes most commonly associated with lesions in the system.
- a22. Trace the types of brain tumors.
- a23. Describe clinical picture of M.S
- a24. Describe the investigations of the anatomy, and functional neurophysiology.
- a25. Mention the spectrum of clinical symptomatology related to common Internal medicine disorders.
- a26. Mention the relation between psychiatric symptoms/signs and Audiological disorders.
- a27. Mention the basic diagnostic criteria in psychiatric disorders related to Audiology.
- a28. Mention the common interventional therapeutic methods in handling psychiatric disorders in his patients.
- a29. Define the sources of data and methods of collection
- a30. Describe five sampling techniques and list at least three advantages of sampling
- a31. Mention types of data, construct tables and graphs
- a32. Describe measures of central tendency and measures of dispersion
- a33. Describe the normal curves and its uses

- a34. Mention tests of significance and the inferences obtained from such tests.
- a35. Define terms of research methodology
- a36. Describe the spectrum of research methodology
- a37. Explain the strategies and design of researches
- a38. Describe the sampling methods
- a39. Mention at least four types of study designs
- a40. Describe the study design, uses, and limitations
- a41. Define causation and association
- a42. Describe bias and confounding
- a43. Explain evidence based Medicine
- a44. Define different samples sizes
- a45. Define the screening tests pertinent to selected diseases and the at-risk approach in the application of screening tests
- a46. Explain the usefulness of screening tests, and calculate sensitivity, specificity, and predictive values.
- a47. Mention natural history of otological disorders.
- a48. Enumerate the causation of otological disorders and their pathogenesis.
- a49. Mention the clinical picture and differential diagnosis of otological disorders.
- a50. Enumerate the common diagnostic and laboratory techniques necessary to establish diagnosis of otological disorders
- a51. Mention the various therapeutic methods/alternatives used for otological disorders.
- a52. Mention principles, methodologies, tools and ethics of scientific research in the field of Audiology.
- a53. Mention The principles and fundamentals of ethics and legal aspects of professional practice in the field of Audiology.
- a54. Trace The principles and fundamentals of quality of professional practice in the field of Audiology.
- a55. Describe The knowledge of the impact of professional practice on the environment and the methods of environmental development and maintenance.
- a56. Describe the relationship between the environmental potentials and their effects on the central nervous system.

**b) Intellectual Skills**

By the end of the study of Doctoral program in Audiology the Graduate should be able to:

- b1. Interpret data acquired through history taking to reach a provisional diagnosis for hearing and balance disorders.
- b2. Interpret data acquired through history taking to reach a provisional diagnosis for otological disorders.
- b3. Analyze and predict cases associated with neurological abnormalities.
- b4. Formulate different ways in the pathogenesis of similar neurological conditions with similar clinical pictures.
- b5. Conclude the final diagnosis of different neurological cases.
- b6. Interpret the most important symptoms and signs of the most common neurological disorders
- b7. Interpret the most important symptoms and signs of the most common medical disorders.

- b8. Measure intensities of different sounds.
- b9. Compare anatomical data related to hearing and balance with anatomical specimens.
- b10. Select from different diagnostic alternatives the ones that help reaching a final diagnosis for hearing and balance disorders.
- b11. Analyze symptoms & signs of psychiatric abnormalities and interpret its meaning to the patient and most likely possible diagnosis.
- b12. Conduct research studies that add to knowledge.
- b13. Formulate scientific papers in the area of Audiology.
- b14. Assess risks in professional practices in the field of Audiology.
- b15. Plan to improve performance in the field of Audiology.
- b16. Plan for management of individual patients presenting with the most common medical disorders.
- b17. Train junior staff through continuous medical education programs.
- b18. Identify hearing and balance disorders and find solutions.
- b19. Formulate nontraditional solutions to hearing and balance disorders.
- b20. Criticize Professional decision-making in different professional contexts.
- b21. Manage Scientific discussion based on scientific evidences and proofs.

**c) Professional and Practical Skills**

By the end of the study of Doctoral program in Audiology the Graduate should be able to:

- c1. Master the basic and modern professional clinical skills in the area of Audiology.
- c2. Perform otological evaluation.
- c3. Perform the complete neurological examination.
- c4. Conduct a proper general examination and identify normal and major abnormal physical signs.
- c5. Conduct proper regional examination of the thorax and abdomen by inspection, palpation, percussion and auscultation.
- c6. Integrate the patient's symptomatology, historic data, abnormal physical signs and investigations into a comprehensive differential diagnosis of internal medicine.
- c7. Identify adequate logistics for further neurological assessment and management.
- c8. Write and evaluate medical reports.
- c9. Perform a comprehensive medical sheet including history and physical examination.
- c10. Evaluate and develop methods and tools existing in the area of Audiology.
- c11. Perform basic and advanced audiological evaluation.
- c12. Perform basic and advanced vestibular evaluation.
- c13. Design the appropriate supportive investigations relevant to a neurologic patient and adequately interpret the results.
- c14. Get acquainted with special therapeutic and interventional techniques related to neurology.
- c15. Perform adequate ECG recordings of common conditions as ventricular hypertrophy, myocardial infarction, common arrhythmias, etc.
- c16. Train junior staff through continuous medical education programs.
- c17. Design new methods, tools and ways of professional practice.

- c18. perform good reading of X-ray, CT and ultrasonic images of common diseases.
- c19. perform a competent mini- mental state evaluation and scoring.
- c20. Perform a research proposal for community diagnosis
- c21. Design questionnaires.
- c22. Conduct researches
- c23. Diagnose bias and confounding factors
- c24. Detect association and causation

**d) General and Transferable skills**

By the end of the study of Doctoral program in Audiology the Graduate should be able to:

- d1. Present reports in seminars effectively.
- d2. write structural reports or essay in neurology in accordance with the standard scientific guidelines.
- d3. write structural reports in internal medicine in accordance with the standard scientific guidelines.
- d4. prepare & present a small talk about any psychiatric/non-psychiatric topic.
- d5. Use appropriate computer program packages.
- d6. Use standard computer programs for statistical analysis effectively.
- d7. Utilize computers in conducting researches.
- d8. Manage a group of data entry
- d9. Analyze and interpret data
- d10. Teach others and evaluate their performance.
- d11. Assess himself and identify personal learning needs.
- d12. Use different sources for information and knowledge.
- d13. Work coherently and successfully as a part of a team and team's leadership.
- d14. Manage scientific meetings according to the available time.

**3. Contents:**

<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>Tutorial/ Practical</b>
1. Pure tone evaluation, Speech audiometry & Clinical masking.	60	20	40
2. Acoustic immitance measures, Tympanometry & Acoustic reflexes.	60	20	40
3. Detection & assessment of hearing loss in infants and children.	40	20	20
4. Central auditory processing disorders.	40	20	20
5. Auditory evoked potentials.	60	20	40
6. Otoacoustic emissions.	20	10	10

7. Psychiatric disorders relating to hearing loss.	20	10	10
8. Hearing loss in elderly.	20	10	10
9. Hearing aids.	60	20	40
10. Cochlear implant.	60	20	40
11. Evaluation and management of balance disorders.	40	20	20
12. Pseudohypacusis.	15	10	5
13. Noise induced hearing loss.	15	5	10
14. Ototoxicity.	15	5	10
15. Tinnitus	15	5	10
16. Auditory neuropathy	15	5	10
17. Retrochochlear lesion	10	5	5
18. Rehabilitation of hearing loss in adult and children.	15	5	10
19. Rehabilitation of vestibular disorders	20	10	10
<b>Total</b>	<b>600</b>	<b>240</b>	<b>360</b>
<b>Total credit hours</b>	<b>28</b>	<b>16</b>	<b>12</b>

#### **4. Teaching and Learning Methods**

- 4.1 Lectures.
- 4.2 Clinical lessons.
- 4.3 Assignments.
- 4.4 Attending and participating in scientific conferences, workshops and thesis discussion to acquire the general and transferable skills needed.

#### **5. Student Assessment Methods:**

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2- Log book	- General transferable skills
5.3-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.5-OSCE	-Practical skills, intellectual skills General transferable skills
5.6 assignment	-General transferable skills, intellectual skills

## Assessment Schedule

Assessment 1... Research assignment (1)	Week: 20-24
Assessment 1... Research assignment (2)	Week: 44-48
Assessment 1... Research (3)	Week: 54.....
Assessment 2.a.... Written Exams Short essay	Week: 96-98
Assessment 2.b... Written Exams Commentary	Week: 96-98
Assessment 2.c. Written Exams Problem solving	Week: 96-98
Assessment 4..... OSCE	Week 98-100
Assessment 6 ...Structured Oral Exams	Week 98-100
Assessment 7 ...Logbook	Week 85-88

## Weighting of Assessments

Final Written Examination separate exam

*Passing in the written exam is a condition to attend the following exams:*

Final oral Exam 50 %

Final OSCE 50 %

Formative only assessments: simple research assignment, logbook.

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Total	100%
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## 6. List of References

### 6.1- Essential Books (Text Books)

- Hand book of clinical Audiology (by Katz J., 6<sup>th</sup> edition, 2009).
- Introduction to Audiology (by Martin F., 11<sup>th</sup> edition, 2011).

### 6.2- Recommended Books

- Clinical Applications of the Auditory Brainstem Response (Singular Audiology Textbook) by Linda J. Hood (1st edition , 1998)
- Cochlear Implants: Auditory Protheses and Electric Hearing (v. 20) by Fan-Gang Zeng and Richard R. Fay (2010)
- Hearing aids (Dillon,2001).

### 6.3- Periodicals, Website, etc.

- Audiology online
- ASHA
- ANSI
- American Journal of Audiology

## 7. Facilities Required for Teaching and Learning:

1-Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory). Comfortable disks, good source of aeration, bathrooms, good illumination and safety and security tools.

2-Teaching tools: including screens, computers including CD, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printers.

**Course Coordinator:** Dr. Mohamed Abdel-Ghaffar

**Head of Department:** Prof. Dr. Mohamed Abdel-Kader Ahmad

**Date:** 18/12/2011, **Revised:**1/9/2012, **Revised:**1/12/2013

## Course Specifications of Psychiatry & Internal Medicine for Audiology Doctoral Degree

**Sohag University**

**Faculty of Medicine**

1. Program on which the course is given: MD degree in Audiology.
2. Major element of program.
3. Department offering the program: Otolaryngology Department.
4. Department offering the course: Neurology and psychiatry Department & Internal Medicine Department.
5. Academic year / Level: 2<sup>nd</sup> part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

### **A. Basic Information**

**Title:** Course Specifications of Psychiatry & Internal Medicine for Audiology Doctoral Degree

**Code:** PSY 0524 -300, MED 0524 -300

Module	Lectures	Clinical	Total hours	credit
Psychiatry	60	120	180	8
Internal Medicine	60	120	180	8

### **B. Professional Information**

#### **1. Overall Aims of Course**

##### **Psychiatry module:**

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mystery of the practice of Psychiatry specialty and necessary to provide further training and practice in the field of Audiology through providing:

1. Recent scientific knowledge essential for the mystery of practice of Psychiatry according to the international standards.
2. Skills necessary for proper diagnosis and management of patients in the field of Psychiatry including diagnostic, problem solving and decision making skills.
3. Ethical principles related to the practice in this specialty.
4. Active participation in community needs assessment and problems identification.
5. Maintenance of learning abilities necessary for continuous medical education.
6. Upgrading research interest and abilities.

##### **Internal Medicine module:**

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mystery of the practice of Internal medicine specialty and necessary to provide further training and practice in the field of Audiology through providing:

1. Recent scientific knowledge essential for the mystery of practice of Internal medicine according to the international standards.
2. Skills necessary for proper diagnosis and management of patients in the field of Internal medicine including diagnostic, problem solving and decision making skills.
3. Ethical principles related to the practice in this specialty.
4. Active participation in community needs assessment and problems identification.
5. 5-Maintenance of learning abilities necessary for continuous medical education.
6. Upgrading research interest and abilities.

## **2. Intended Learning Outcomes of Course (ILOs)**

### **Psychiatry module:**

#### **a) Knowledge and Understanding:**

By the end of the course the graduate should be able to:

- a1. Mention the relation between psychiatric symptoms/signs and Audiological disorders.
- a2. Mention the basic diagnostic criteria in psychiatric disorders related to Audiology.
- a3. Mention the common interventional therapeutic methods in handling psychiatric disorders in his patients.

#### **b) Intellectual Skills:**

By the end of the course the graduate should be able to:

- b1. analyze symptoms & signs of psychiatric abnormalities and interpret its meaning to the patient and most likely possible diagnosis.

#### **c) Professional and Practical Skills:**

By the end of the course the graduate should be able to:

- c1. Perform a competent mini- mental state evaluation and scoring.

#### **d) General and Transferable Skills:**

By the end of the course the graduate should be able to:

- d1. Present reports in seminars effectively.
- d2. prepare & present a small talk about any psychiatric/non-psychiatric topic.

### **Internal Medicine module:**

#### **a) Knowledge and Understanding:**

By the end of the course the graduate should be able to:

- a1. Mention the different risk factors of the cerebrovascular stroke.
- a2. Illustrate the structure and function of the peripheral nervous system & the clinical syndromes most commonly associated with lesions in the system.
- a3. Trace the types of brain tumors.
- a4. Mention clinical picture of M.S
- a5. Know the investigations of the anatomy, and functional neurophysiology.
- a6. Understand the spectrum of clinical symptomatology related to common Internal medicine disorders.
- a7. Describe the relationship between the environmental potentials and their effects on the central nervous system.

#### **b) Intellectual Skills:**

By the end of the course the graduate should be able to:

- b1. Analyze and predict cases associated with neurological abnormalities.
- b2. Formulate different ways in the pathogenesis of similar neurological conditions with similar clinical pictures.
- b3. Conclude the final diagnosis of different neurological cases.
- b4. Mention the different risk factors of the cerebrovascular stroke.
- b5. Interpret the most important symptoms and signs of the most common medical disorders.
- b6. Plan for management of individual patients presenting with the most common medical disorders.

**c) Professional and Practical Skills:**

By the end of the course the graduate should be able to:

- c1. Perform the complete neurological examination.
- c2. Conduct a proper general examination and identify normal and major abnormal physical signs.
- c3. Conduct proper regional examination of the thorax and abdomen by inspection, palpation, percussion and auscultation.
- c4. Integrate the patient's symptomatology, historic data, abnormal physical signs and investigations into a comprehensive differential diagnosis of internal medicine.
- c5. Identify adequate logistics for further neurological assessment and management.
- c6. Perform a comprehensive medical sheet including history and physical examination.
- c7. Design the appropriate supportive investigations relevant to a neurologic patient and adequately interpret the results.
- c8. Get acquainted with special therapeutic and interventional techniques related to neurology.
- c9. Perform adequate ECG recordings of common conditions as ventricular hypertrophy, myocardial infarction, common arrhythmias, etc.
- c10. Train junior staff through continuous medical education programs.
- c11. Perform good reading of X-ray, CT and ultrasonic images of common diseases.

**d) General and Transferable Skills:**

By the end of the course the graduate should be able to:

- d1. Present reports in seminars effectively.
- d2. write structural reports or essay in neurology in accordance with the standard scientific guidelines.
- d3. write structural reports in internal medicine in accordance with the standard scientific guidelines.

**3. Contents:**

**Psychiatry module:**

<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>Tutorial/ Practical</b>
<u>General Psychology</u> Physician–Patient Relationship Professional Ethics and Boundaries	30	25	5
<u>Psychiatric interview</u>	20	15	5

<u>Childhood psychiatry</u> Mental retardation Learning disorders Communication disorders Pervasive developmental disorders Attention deficit hyperactivity disorders Disruptive behavior disorders Tic disorders	40	30	10
<u>Mood disorders</u> Depressive disorders	30	25	5
<u>Somatoform disorders</u>	40	25	15
<u>Factitious disorder</u>	20	10	10
<b>Total</b>	<b>180</b>	<b>120</b>	<b>60</b>
<b>Total credit hours</b>	<b>8</b>	<b>6</b>	<b>2</b>

**Internal medicine module:**

<b>Topic</b>	<b>No. of hours</b>	<b>Lecture</b>	<b>Tutorial/ Practical</b>
1. <u>Neurology:</u> Cerebro-vascular stroke. Migraine. Multiple Sclerosis. CNS Infections (encephalitis and meningitis). Brain tumors. Peripheral Neuropathies	60	40	20
2. <u>Endocrinology:</u> Hypothalamic disorders. Pituitary disorders; <u>Anterior pituitary</u> Adenomas. Hyperfunctioning and hypofunctioning <u>Posterior pituitary:</u> Diabetes insipidus Thyroid disorders: Hyperthyroidism Hypothyroidism Goitre Thyroid malignancy Parathyroid disorders Hyperparathyroidism Hypoparathyroidism Diabetes Mellitus and its related disorders	60	40	20
3. <u>Hypertension:</u> Primary hypertension. Secondary hypertension. Complications of hypertension. Hypertensive emergencies	60	40	20
<b>Total</b>	<b>180</b>	<b>120</b>	<b>60</b>
<b>Total credit hours</b>	<b>8</b>	<b>6</b>	<b>2</b>

#### 4. Teaching and Learning Methods

- 4.1 Lectures.
- 4.2 Clinical lessons.
- 4.3 Assignments.
- 4.4 Attending and participating in scientific conferences, workshops and thesis discussion to acquire the general and transferable skills needed.

#### 5. Student Assessment Methods:

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2- Log book	- General transferable skills
5.3-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.5-OSCE	-Practical skills, intellectual skills General transferable skills
5.6 assignment	-General transferable skills, intellectual skills

#### Assessment Schedule

Assessment 1... Research assignment (1)	Week: 20-24
Assessment 1... Research assignment (2)	Week: 44-48
Assessment 1... Research (3)	Week: 54.....
Assessment 2.a.... Written Exams Short essay	Week: 96-98
Assessment 2.b... Written Exams Commentary	Week: 96-98
Assessment 2.c. Written Exams Problem solving	Week: 96-98
Assessment 4..... OSCE	Week 98-100
Assessment 6 ...Structured Oral Exams	Week 98-100
Assessment 7 ...Logbook	Week 85-88

#### Weighting of Assessments

Final Written Examination separate exam  
Passing in the written exam is a condition to attend the following exams:  
Final oral Exam 50 %  
Final OSCE 50 %  
Formative only assessments: simple research assignment, logbook.

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Total	100%
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#### 6. List of References

##### Psychiatry module:

##### 6.1- Essential Books (Text Books)

1. Kaplan & Sadock's Comprehensive Textbook of Psychiatry  
Edition: 9th edition (2009)  
Pages: 4884 pages
2. New Oxford Textbook of Psychiatry  
Source: Oxford University Press (OUP)  
Edition: 2nd  
Year: 2009  
Pages: 1952

### **6.2- Recommended Books**

3. Diagnostic and Statistical Manual of Mental Disorders DSM-IV-TR  
Fourth  
Edition (Text Revision)  
Paperback: 943 pages  
Publisher: American Psychiatric Publishing, Inc.; 4th edition (June 2000)
4. The ICD-10 Classification of Mental and Behavioural Disorders:  
Diagnostic  
Criteria for Research  
Paperback: 261 pages  
Publisher: World Health Organization (November 1993)
5. The Maudsley Prescribing Guidelines, Tenth Edition  
Paperback: 544 pages  
Publisher: Informa Healthcare; 10 edition (October 30, 2009)
6. Lishman's Organic Psychiatry  
Hardcover: 948 pages  
Publisher: Wiley-Blackwell; 4 edition (August 10, 2009)
7. Companion to Psychiatric Studies (MRCPsy Study Guides)  
Paperback: 864 pages  
Publisher: Churchill Livingstone; 8 edition (September 1, 2010)

### **6.3- Periodicals, Web Sites, ... etc**

- a. Archives of General Psychiatry  
<http://archpsyc.ama-assn.org/>
- b. Journal of the American Psychiatric Association (APA).  
<http://ajp.psychiatryonline.org/>
- c. Schizophrenia Bulletin  
<http://schizophreniabulletin.oxfordjournals.org/>
- d. The British Journal of Psychiatry  
<http://bjp.rcpsych.org/>
- e. Journal of Clinical Psychiatry  
<http://www.psychiatrist.com/default2.asp>
- f. The Journal of Child Psychology and Psychiatry  
<http://www.wiley.com/bw/journal.asp?ref=0021-9630>
- g. Molecular Psychiatry  
<http://www.nature.com/mp/index.html>

## websites

- <http://www.psychiatrist.com/>
- <http://www.ncbi.nlm.nih.gov/pubmed/>
- [www: all about psych.com](http://www.allaboutpsych.com)

## Internal medicine module:

### 6.1- Essential Books (Text Books):

- a. Kumar and Clarke Textbook of Medicine; Parveen Kumar and Richard Clark; Blackwell Science; 14th edition, 2007
- b. Hutchison's Clinical Methods; Robert Hutchison; Harry Rainy; 21st edition; 2003
- c. Brain's Disease of The Nervous System.

### 6.2- Recommended Books

1. Cecil Textbook of Medicine; McGraw Hill; 16th edition, 2007.
2. Harrison's Textbook of Medicine, McGraw Hill, 2005.
3. Adams & Victor's, Principle of Clinical Neurology.
4. Neurology in clinical practice.
5. Clinical Neurology.
6. Manual of neurologic therapeutics.
7. Merret's Neurology.

### 6.3- Periodicals, Web Sites, ... etc

- <http://www.google.com>
- <http://www.ncbi.nlm.gov.com>
- <http://www.freemedicaljournals.com>

## 7. Facilities Required for Teaching and Learning:

1-Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory). Comfortable desks, good source of aeration, bathrooms, good illumination and safety and security tools.

2-Teaching tools: including screens, computers including CD, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printers.

## Course Coordinator:

**Psychiatry module:** Prof. Dr. Hemid Mostafa Azab

**Internal medicine module:** Lecturer. Mervat Mohamed Ahmed Attia

## Head of Department:

**Psychiatry module:** Prof. Dr. Ghareb Fawy Mohamed

**Internal medicine module:** Prof. Hasan Shehata

**Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013**

## Course Specifications of Otolaryngology for Audiology Doctoral Degree

Sohag University

Faculty of Medicine

1. Program on which the course is given: MD degree in Audiology.
2. Major element of program.
3. Department offering the program: Otolaryngology Department.
4. Department offering the course: Otolaryngology Department.
5. Academic year / Level: 2<sup>nd</sup> part.
6. Date of specification approval: Faculty council No. "250", decree No. "1378" dated 28/12/2013

### A. Basic Information

**Title:** Course Specifications of Audiology Otolaryngology, for Audiology Doctoral Degree

**Code:** ENT 0524 -300

Module	Lectures	Clinical	Total hours	credit
Otolaryngology	60	120	180	8

### B. Professional Information

#### 1. Overall Aims of Course

#### Otolaryngology module:

The aim of this program is to provide the postgraduate student with the advanced medical knowledge and skills essential for the mystery of the practice of Otolaryngology specialty and necessary to provide further training and practice in the field of Audiology through providing:

1. Recent scientific knowledge essential for the mystery of practice of Otolaryngology according to the international standards.
2. Skills necessary for proper diagnosis and management of patients in the field of Otolaryngology including diagnostic, problem solving and decision making skills.
3. Ethical principles related to the practice in this specialty.
4. Active participation in community needs assessment and problems identification.
5. 5-Maintenance of learning abilities necessary for continuous medical education.
6. Upgrading research interest and abilities.

#### 2. Intended Learning Outcomes of Course (ILOs)

##### a) **Knowledge and Understanding:**

By the end of the course, the student should be able to:

- a1. List the recent advances in the abnormal structure, function, growth and development of the auditory system.
  - a2. List the recent advances in the abnormal structure, function, growth and development of the balance system.
  - a3. Mention natural history of otological disorders.
  - a4. Mention the causation of otological disorders and their pathogenesis.
  - a5. List the clinical picture and differential diagnosis of otological disorders.
  - a6. Enumerate the common diagnostic and laboratory techniques necessary to establish diagnosis of otological disorders
  - a7. Mention the various therapeutic methods/alternatives used for otological disorders.
  - a8. Describe The knowledge of the impact of professional practice on the environment and the methods of environmental development and maintenance.
- b) Intellectual Skills:**  
By the end of the course, the student should be able to:
- b1. Interpret data acquired through history taking to reach a provisional diagnosis for otological disorders.
- c) Professional and Practical Skills:**  
By the end of the course, the student should be able to:
- c1. Perform otological evaluation
  - c2. Perform surgical skills related to the speciality.
- d) General and Transferable Skills**  
By the end of the course, the student should be able to:
- d1. Present reports in seminars effectively.

### 3. Contents:

Topic	No. of hours	Lecture	Tutorial/ Practical
1. Congenital diseases of the ear	15	10	5
2. Ear trauma.	15	10	5
3. Inflammatory diseases of the external ear.	15	10	5
4. Ear foreign body & wax.	15	10	5
5. Acute inflammation of the middle ear	20	15	5
6. Chronic inflammation of the middle ear.	20	15	5
7. Complications of middle ear infection.	15	10	5
8. Otosclerosis.	20	10	10
9. Meniere's disease.	15	10	5
10. Otalgia.	15	10	5
11. Facial nerve paralysis.	15	10	5
<b>Total</b>	<b>180</b>	<b>120</b>	<b>60</b>

<b>Total credit hours</b>	<b>8</b>	<b>6</b>	<b>2</b>
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#### 4. Teaching and Learning Methods

- 4.1 Lectures.
- 4.2 Clinical lessons.
- 4.3 Assignments.
- 4.4 Attending and participating in scientific conferences, workshops and thesis discussion to acquire the general and transferable skills needed.

#### 5. Student Assessment Methods:

Method of assessment	The assessed ILOs
5.1- Observation of attendance and absenteeism.	- General transferable skills, intellectual skills
5.2- Log book	- General transferable skills
5.3-Written Exam: -Short essay: 40% -structured questions: 25% -MCQs: 20% -Commentary, Problem solving: 15%	- Knowledge - Knowledge - Knowledge, intellectual skills - Intellectual skills, General transferable skills,
5.4-Structured Oral Exam	- Knowledge, Intellectual skills, General transferable skills
5.5-OSCE	-Practical skills, intellectual skills General transferable skills
5.6 assignment	-General transferable skills, intellectual skills

#### **Assessment Schedule**

Assessment 1 ... Research assignment (1)	Week: 20-24
Assessment 1 ... Research assignment (2)	Week: 44-48
Assessment 1 ... Research (3)	Week: 54.....
Assessment 2.a.... Written Exams Short essay	Week: 96-98
Assessment 2.b... Written Exams Commentary	Week: 96-98
Assessment 2.c. Written Exams Problem solving	Week: 96-98
Assessment 4..... OSCE	Week 98-100
Assessment 6 ...Structured Oral Exams	Week 98-100
Assessment 7 ...Logbook	Week 85-88

#### **Weighting of Assessments**

Final Written Examination separate exam  
*Passing in the written exam is a condition to attend the following exams:*  
 Final oral Exam 50 %  
 Final OSCE 50 %  
 Formative only assessments: simple research assignment, logbook.

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Total 100%

#### 6. List of References

##### 6.1- Essential Books (Text Books)

- Scott Brawn (2006)

**6.2- Recommended Books:** Kaming

**6.3- Periodicals, Website, etc.**

- American Journal of Otolaryngolgy.
- Pubmed

**7. Facilities Required for Teaching and Learning:**

1-Adequate infrastructure: including teaching places (teaching class, teaching halls, teaching laboratory). Comfortable disks, good source of aeration, bathrooms, good illumination and safety and security tools.

2-Teaching tools: including screens, computers including CD, data show, projectors, flip charts, white boards, video player, digital video camera, scanner, copier, color and laser printers.

**Course Coordinator:** Prof. Dr. Ramadan Hashem

**Head of Department:** Prof. Dr. Mohamed Abdel-Kader Ahmad

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