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. "317", decree No. "1533" dated 17/12/2018.

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-Maintinance 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.

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. "317", decree No. "1533" dated 17/12/2018.

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-Maintinance 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 cession 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 cession No.191, dated: 15/3/2010. The adoption of NARS and the suggested ARS were approved by University council degree No 587, in its cession 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:

	hours /week		
Subject	**Lectures**	**Practical**	**Clinical**
First Part			
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		
Second Part:			
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: 1st part Level 2: 2nd Part Level 3: Thesis		 15 52 15	 16.7 % 57.8 % 16.7 %

6. <u>Program</u> 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 (≥7 semesters ≥3.5 years), starting from registration till acceptance of the thesis; divided to:

First Part: (15 Credit hours ≥6 months ≥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 1st 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 ≥1.3 is needed to pass this level (semester).

Second Part: (52Credit hours ≥24 months= 4 semesters):

- Program related specialized science of Audiology courses. At least 24 months after passing the 1st part should pass before the student can ask for examination in the 2nd part.
- Fulfillment of the requirements in each course as described in the template and registered in the log book (8 Credit hours; with obtaining ≥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**	**٦**
Training courses	**دورات تدريبية**	**12/ day**
Conference attendance	**حضور مؤتمرات علمية** **داخلى** **خارجة**	 **١٢/day** **18/day**
Thesis discussion	**حضور مناقشات رسائل**	**٦**
Workshops	**حضور ورش عمل**	**١٢/day**
Journal club	**ندوة الدوريات الحديثة**	**٦**
Seminars	**لقاء علمى موسع**	**٦**
Morbidity and Mortality conference	**ندوة تحليل المخاطر المرضية أوالوفاة**	**٦**
Self education program	**برنامج التعليم الذاتى**	**٦**

- 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. "317", decree No. "1533" dated 17/12/2018

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

c) Professional and Practical Skills:

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

c1. Perform recent advanced technological methods in collection, analysis and interpretation of data and in management of prevalent problems in the area of Audiology

d) General and Transferable Skills:

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

d1. Use appropriate computer program packages.

d2. Use of different sources for information and knowledge about biostatistics.

3. Contents

Topic	No. of hours	Lecture	Tutorial/ Practical
Recent advances in collection, analysis and interpretation of data	7	5	2
-Details of Tests of significance: Proportion test	5	3	2
Chi-square test	5	3	2
Student T test	5	3	2
Paired T test	5	3	2
-Correlation	٦	3	3
-Regression	6	3	3
-ANOVA test	6	3	3
-Discrimination analysis	5	2	3
Factor analysis	5	1	4
- parametric and non parametric tests	٥	1	4
Total	**60**	**30**	**30**
credit	**3**	**2**	**1**

4. Teaching and Learning Methods

4.1- Lectures

4.2- Practical sessions

4.3- Computer search assignments

4.4- Computer application

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 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, 2008.,Robert Wallace, publisher McGraw-Hill Medical; 15 edition.

6.2- Recommended Books

1- Dimensions of Community Based projects in Health Care, 2018. Arxer, Steven L., Murphy, John W.; 1st edition.

2- Parks Text Book of Preventive & Social Medicine. 2017., K. Park. BanarsidasBhanot Publishers; 23 edition.

3- Clinical Epidemiology: The Essentials, 2013, Robert F., Suzanne W. Fletcher, Grant S., publisher Lippincott Williams & Wilkins; 5 edition.

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/**Foad Metry Atya**

Head of Department: Prof/ Ahmed Fathy Hamed

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

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. "317", decree No. "1533" dated 17/12/2018

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
Total	**60**	**30**	**30**
Credit hours	**3**	**1**	**2**

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 1Final written exam Week: 24
Assessment 2Final 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-Maxy-Rosenau Public health and preventive medicine, 2008.,Robert Wallace, publisher McGraw-Hill Medical; 15 edition.

6.2- Recommended Books

1- Dimensions of Community Based projects in Health Care, 2018. Arxer, Steven L., Murphy, John W.; 1st edition.

2- Parks Text Book of Preventive & Social Medicine. 2017., K. Park. BanarsidasBhanot Publishers; 23 edition.

3- Clinical Epidemiology: The Essentials, 2013, Robert F., Suzanne W. Fletcher, Grant S., publisher Lippincott Williams & Wilkins; 5 edition.

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.

Course Coordinator: Dr/Foad Metry Atya

Head of Department: Prof/ Ahmed Fathy Hamed

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

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: 1st part.
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

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 mystery of 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 mystery of 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. Mange 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

Topic	No. of hours	Lecture	Practical
The pathology of wounds, chest and abdominal injuries, self inflicted injury	6	2	٤
The systemic effect of trauma& Permanent infirmity	٤.٥	1.5	٣
Head and spinal injuries	٤.٥	1.5	٣
The medicolegal aspects of firearm injuries	٤.٥	1.5	٣
Burn and scold	٤.٥	1.5	٣
How to write a medicolegal report& How to write death certificate	٤.٥	1.5	٣
The medicolegal aspect of deaths associated with surgical procedures and toxicological sampling	٣	١	٢
Obligation of physicians (towards patients, colleagues, community)	٣	١	٢
Consent, and professional secrecy	٣	1	٢
Types of malpractice, and items of medical responsibility	٣	1	٢
Medicolegal aspects of organ transplantation, intersex states, euthanasia, assisted reproduction techniques	١.٥	٠.5	١
ethical considerations of medical research involving human subjects	3	1	٢
Total hours	**45**	**15**	**٣٠**
Total credit	**2**	**1**	**١**

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

Total 100%

6. List of References

Essential books

Simpson's Forensic Medicine, 13th Edition, by Jason Payne-James, RichardJones,Steven B Karch,John Manlove. published by Hodder& Stoughton Ltd (2011).

Goldfrank'sToxicologic Emergencies, (9th ed.) by Lewis S. Nelson, Robert S. Hoffman, Mary Ann Howland, Neal A Lewin, Lewis R. Goldfrank, Neal E. Flomenbaum. Published by McGraw-Hill (2011)

Emergency Toxicology,Peter Viccellio,(2nded.) Published by Lippincott Williams & Wilkins (1998)

Recommended books

Medical ethics.(1997)Robert M Veatch. 2nd edition.Jones & Bartlett publishers

Periodicals and websites……etc.

Egyptian journals of forensic medicine and clinical toxicology
International journals of forensic medicine and clinical toxicology
www.sciencedirect.com
https://emedicine.medscape.com
https://www.ncbi.nlm.nih.gov/pmc/

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. Soheir Ali Mohamed

Head of Department: Dr. Soheir Ali Mohamed

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

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: 1st part.
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

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	**30**	**--**	**30**	**2**
Electronics & Electro acoustic	**30**	**--**	**30**	**2**

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

Electronics & Electro acoustic Module

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

4- Instrumentation of Otoacoustic Emissions.	5	5	
5-Hearing aid: • Components. • Electro-acoustic characteristics.	 3 2	 3 2	
6-Cochlear implant: • Technology.	 5	 5	
Total	**30**	**30**	
credit	**2**	**2**	

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

Total 100%

6. List of References

6.1- Essential Books (Text Books):

Bases of hearing science (June D Durrant 2nd edition 2012).

6.2- Recommended Books:

Fundamental of hearing (William A Yost, 5th edition ,2006).

6.3- Periodicals, Website,……etc.

- Audiology online
- ASHA

- ANSI
- American Journal of Audiology

7. <u>Facilities Required for Teaching and Learning:</u>

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

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, Revised:1/12/2018

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: 1st part.
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

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	-
Total	**15**	**15**	**-**
credit	**1**	**1**	**-**

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	
Total	100%

6. List of References

6.1- Essential Books (Text Books)

- Fitzgerald M.J.T. (2016): The anatomical basis of medicine and surgery. By Standing s., ELIS H., Healy J. C., Johnson D. and Williams A. Gray's Anatomy. Elsevier; London, New York. Sydney. Toronto.

6.2- Recommended Books

- Stevens A. and Lowe J. S. (2015): Human histology; 5th edition; edited by Elsevier Mosby
- Colored Atlas of anatomy.
- Martini F. H., Timmons M. J. and McKinley M.P. (2015): Human anatomy; 10 edition.
- Tortora G. J. and Nielson M.T. (2016): Principles of human anatomy 14 edition; Edited by John Wiley and Sons ; United states.
- McMinn R.M.H. (2017): Lasts anatomy regional and applied chapter 7; 14 edition, edited by Longman group UK.

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 Al- Badry**.**

Head of Department: Dr. Mohamed Al- Badry**.**

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

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. "317", decree No. "1533" dated 17/12/2018

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	
Total	**30**	**30**	
Total credit hour	**2**	**2**	

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

Total	100%

6. List of References

6.1- Essential Books (Text Books)

Glyton AC, Hall JE textbook of medical physiology, 11th 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 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. Ahmed Moustafa

Head of Department: Dr. Hoda Mostafa

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018

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: 2nd part.
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

Title: Course Specifications of Audiology for Audiology Doctoral Degree
Code: OTO- AUD 0524 -300

Module	Lectures	Clinical	Total hours	credit
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 ofotological 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. Mange 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:

Topic	No. of hours	Lecture	Tutorial/ Practical
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. Ototoxicicity.	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
Total	**600**	**240**	**360**
Total credit hours	**28**	**16**	**12**

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.

Total	100%

6. List of References

6.1- Essential Books (Text Books)

- Hand book of clinical Audiology (2015).
- Introduction to Audiology (by Martin F., 11th 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 Prostheses and Electric Hearing (v. 20) by Fan-Gang Zeng and Richard R. Fay (2010)
- Hearing aids (Dillon,2015).

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, Revised:1/12/2018

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: 2nd part.
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

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-Maintinance 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:

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

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

Internal medicine module:

Topic	No. of hours	Lecture	Tutorial/ Practical
1. Neurology: Cerebro-vascular stroke. Migraine. Multiple Sclerosis. CNS Infections (encephalitis and meningitis). Brain tumors. Peripheral Neuropathies	60	40	20
2. Endocrinology: Hypothalmic disorders. Pitutary disorders; Anterior pituitary Adenomas. Hyperfunctioninng and hypofunctioninng Posterior pituitary: Diabetes insipidus Thyroid disorders: Hyperthyrodism Hypothyrodism Goitre Thyroid malignancy Parathyroid disorders Hyperparathyrodism Hypoparathyrodism Diabetes Mellitus and its related disorders	60	40	20
3. Hypertension: Primary hypertension. Secondary hypertension. Complications of hypertension. Hypertensive emergencies	60	40	20
Total	**180**	**120**	**60**
Total credit hours	**8**	**6**	**2**

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.

Total	100%

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

Internal medicine module:

6.1- Essential Books (Text Books):

a. Kumar and Clarke Textbook of Medicine; Parveen Kumar and Richard Clark; Blackwell Science; 9th edition, 2018
b. -Hutchison's Clinical Methods; Robert Hutchison; Harry Rainy; 24st edition;2018
c. Brain 's Disease of The Nervous System.

6.2- Recommended Books

1. Goldman-Cecil Textbook of Medicine;25th edition, 2018.
2. - Harrisson'sprincipales of internalmedicine,20th edition, 2018.
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 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:

Psychiatry module: Prof. Dr. Hemid Mostafa Azab
Internal medicine module: Dr. Mohamed Hussein Ahmed El-Sayed El- Rashidy

Head of Department:

Psychiatry module: Prof. Dr. Ghareb Fawy Mohamed
Internal medicine module: Prof. Usama Ahmed Arafa

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised: 1/12/2018

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: 2nd part.
6. Date of specification approval: Faculty council No. "317", decree No. "1533" dated 17/12/2018

A. Basic Information

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

Code: OTO 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-Maintinance 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 ofotological 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. <u>Contents:</u>

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
Total	**180**	**120**	**60**

Total credit hours	**8**	**6**	**2**

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.

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

Date: 18/12/2011, Revised:1/9/2012, Revised:1/12/2013, Revised:1/12/2018