Program and Courses

Specifications for MD Phoniatrics

CODE : MD10C-ENT

Department of Otorhinolaryngology
Faculty of Medicine
Menoufia University
2010-2011
## Contents of MD Phoniatrics

<table>
<thead>
<tr>
<th>Item</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program specification of MD degree in Phoniatrics</td>
<td>MD Degree</td>
</tr>
<tr>
<td><strong>A-Administrative Information</strong></td>
<td></td>
</tr>
<tr>
<td><strong>B- Professional Information:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Overall aims of the program.</td>
<td></td>
</tr>
<tr>
<td>2. Intended Learning Outcomes (ILOs) for program</td>
<td></td>
</tr>
<tr>
<td>3. Academic Standards.</td>
<td></td>
</tr>
<tr>
<td>4. Curriculum Structure and Contents</td>
<td></td>
</tr>
<tr>
<td>5. Courses contributing to the program:</td>
<td></td>
</tr>
<tr>
<td>6. Program – Course ILOs Matrix.</td>
<td></td>
</tr>
<tr>
<td>7. Program admission requirements</td>
<td></td>
</tr>
<tr>
<td>8. Regulations for progression and Program completion.</td>
<td></td>
</tr>
<tr>
<td>9. Evaluation of program intended learning outcomes</td>
<td></td>
</tr>
</tbody>
</table>

| 1st Part Courses:                                                    |      |
| - Anatomy for Phoniatrics (ENT831)                                   |      |
| - Pathology for Phoniatrics (ENT832)                                 |      |
| - Physiology for Phoniatrics (ENT833)                                |      |

| 2nd part Courses:                                                    |      |
| - Phonetics (ENT834)                                                  |      |
| - Neuropsychiatry for Phonetics (ENT835)                              |      |
| - Otorhinolaryngology for Phonetics (ENT836)                          |      |
| - Optional course (ENT837)                                           |      |

Annex1: Academic Reference Standards of MD Phoniatrics
Annex2: Comparison between ARS and ILOs of M.D. Program
Annex 3: Program – Course ILOs Matrix
Program Specification for MD Phoniatics

Menoufia University

Faculty of Medicine.

A- Administrative Information:

1. Program Title: MD Degree of Phoniatics
2. Award / degree: MD degree of phonetics
3. Program type: multiple.
4. Departments responsible: Anatomy – Pathology – Physiology – Neuropsychiatry - Otorhinolaryngology
5. Coordinator: Prof. Dr. Adel Tharwat
7. Date of most recent approval of program specification by the faculty council: 2010

B- Professional Information:

1- Program Aims:

To ensure that the candidates for having M.D. degree, have enough knowledge regarding basic science, otorhinolaryngology and Phonetics to be our future consultants.

2- Intended Learning Outcomes (ILOs) for programme

a - Knowledge and Understanding:

By the end of this Program the candidate should be able to:

a1- Identify Basic Anatomy, pathology and physiology needed for understanding the etiology and pathogenesis of Phonetic disorders:
a2 – Define Diseases of neuropsychiatry which play a role in the pathogenesis of Phonetics disorders.

a3 - Recognize Diagnosis and management of ENT disorders with Phonetics relation.

a4 - Recognize Diagnosis and management of special Phonetics disorders.

a5 - Define Basis of special fields of ENT including plastic surgery of ear and nose and throat.

a6 – Name Basis of audiology which has an essential effect on the science of Phonetics

b-Intellectual Skills:

By the end of this Program the candidate should be able to:

b1- Distinguish special anatomical landmarks of head and neck especially, larynx, nose, palate & tongue.

b2- Interpret special symptoms and signs of common and rare Phonetics disorders.

b3 – Report detailed signs on stroboscopy and their significance.

b4- Analyze, and evaluate relevant medical information to reach a diagnosis.

b5- Solve related medical problem depending upon data analysis.

b6- Design, conduct a research plan in the area of specialty

b7- Argue, and discuss relevant issues on evidence based manner.
C- Professional and Practical Skills:

*By the end of this Program the candidate should be able to:*

**c1**- Formulate appropriate management plans for individual patients presenting with **Phonetic** disorders with special emphasis on difficult, rare cases.

**c2**- Perform surgical approaches for laryngeal and pharyngeal disorders needed for correction of **Phonetic** disorders.

**c3**- Expert practicing video laryngoscopy and flexible nasopharyngoscopy.

**c4**- Write and evaluate a professional medical report related to his specialty.

**c5**- Use recent relevant technological tools in the professional practice

**d-General and Transferable Skills:**

*By the end of this Program the candidate should be able to:*

**d1**- Practice team working, and lead a team in specified professional job.

**d2**- Use different learning resources to get knowledge and information.

**d3**- Communicate effectively with his colleagues and patients and their relatives.

**d4**- Manage scientific seminars with good time management

3-Academic Standards:

3a-Academic Reference Standards (ARS) Menoufia M.D of Phonetics Academic Reference standards (Annex 1): for this program were compiled according to the general Academic Reference Standards provided by the national authority for quality assurance and accreditation of education (naqaae) for postgraduate programs(published on February 2009). This program ARS were approved by the faculty council on 19/9/2010 decree NO. 45/1/9/2010.
3b. Comparison between ARS and ILOS of the program (Annex 2).

4- Curriculum Structure and Contents

4.a- Program duration (2 years):

4.b- Program structure:

1\textsuperscript{st} part: 1 semester

2\textsuperscript{nd} part: 1 semester

Thesis: 2 semesters

No. of hours per week in each year / semester:

1\textsuperscript{st} part: 6 hrs

2\textsuperscript{nd} part: 30 hrs

Log book: 9 hrs

Thesis: 15 hrs

<table>
<thead>
<tr>
<th></th>
<th>Lecture</th>
<th>Tutorial s/ Seminars</th>
<th>Laboratory/ Practical</th>
<th>Others</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part 1</td>
<td>4</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>Part 2</td>
<td>20</td>
<td>-</td>
<td>10</td>
<td>-</td>
<td>30</td>
</tr>
<tr>
<td>Log book</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td>Thesis</td>
<td></td>
<td>9</td>
<td>6</td>
<td>-</td>
<td>15</td>
</tr>
</tbody>
</table>
5- Courses contributing to the program:

5.1. 1st part:

A. Compulsory

1. Code No. ENT831

   Course Titles: Surgical Anatomy of Otorhinolaryngology for Phonetics MD degree (1st part – credit hours).

   No. of hours / week: 2hrs

   Program ILOs covered: Refer to Matrix

2. Code No. ENT832

   Course Titles: Course of Surgical Pathology of Otorhinolaryngology for Phonetics MD degree (1st part – credit hours).

   No. of hours / week: 2 hrs

   Program ILOs covered: Refer to Matrix

3. Code No. ENT833

   Course Titles: Course of Physiology for Phonetics MD degree (1st part – credit hours).

   No. of hours / week: 2 hrs

   Program ILOs covered: Refer to Matrix
B. **Elective** – none

C. **Optional** – none

**5.2. 2nd part:**

A. **Compulsory**

1. **Code No.** ENT834

   **Course Titles:** Course of Phonetics for Phonetics MD degree (2nd part – credit hours).

   **No. of hours / week:** 16 hrs

   **Program ILOs covered:** Refer to Matrix

2. **Code No.** ENT835

   **Course Titles:** Course of Neuropsychiatry for Phonetics MD degree (1st part – credit hours).

   **No. of hours / week:** 2 hrs

   **Program ILOs covered:** Refer to Matrix

3. **Code No.** ENT836

   **Course Titles:** Course of Otorhinolaryngology for Phonetics MD degree (2nd part – credit hours).

   **No. of hours / week:** 8 hrs

   **Program ILOs covered:** Refer to Matrix
B. **Elective** – two

1. **Code No.** ENT837

   **Course Titles:** Course of surgery of congenital disorders of ear, nose and throat for Phonetics MD degree (2nd part – credit hours).

   **No. of hours / week:** 4 hrs

   **Program ILOs covered:** Refer to Matrix

2. **Code No.** ENT838

   **Course Titles:** Course of basis of audiology for Phonetics MD degree (2nd part – credit hours)

   **No. of hours / week:** 4 hrs

   **Program ILOs covered:** Refer to Matrix

C. **Optional** – non
6- Program - Course ILOS Matrix: (Annex3)

. Program admission requirements
The posgraduate student should have master degree in Phoniatrics.

. Regulations for progression and Program completion

First part
The student should have 60% of the marks specified for every written and oral exam

Second part:
The student should have 60% of the marks specified for every written and oral exam

Thesis:
It should be approved by the committee of discussion.

7- Evaluation of program intended learning outcomes

1- Senior students:

   Tool: Questionnaires-Review of assessment method

   Sample: Students in the last year

2- Alumni

   Tool: Questionnaires

   Sample: Student finished M.Sc. within 5 years

3- Stakeholders (Employers)

   Tool: interviews

   Sample: directors of nearby laboratories and hospitals.

4- External Evaluator(s) External Examiner

   Tool: Reports
We verify that all of the information required to deliver this program is contained in the above specification and will be implemented. All course specification for this program are in place.

Program coordinator:
Name: Prof. Dr. Abdel-Latif El-Rasheedy Signature
Date

Dean:
Name: Signature
Date

Head of Quality Assurance Unit:
Name: Signature
Date
Course specification of Surgical Anatomy of Otorhinolaryngology for Phonetics MD degree

Faculty of Medicine

A- Administrative Information

1) Course Title: Surgical Anatomy of Otorhinolaryngology for Phonetics MD degree
2) Code: ENT831
3) Department giving the course: Anatomy & Embryology
4) Program on which the course is given: MD degree of Phonetics
5) Department offering the programme: Otorhinolaryngology Department
6) Semester: first part of M.D. degree
7) Date of specification/revision: 2010
8) Date of approval by Departmental and Faculty Council: 2010
9) Credit hours: 2hrs.
   Lecture: 30(2 credit hrs)                  Practical:0       Other:              Total: 2 credit hours

B- Professional Information

1 – Overall aims of course:

• To provide A basic knowledge concerning the normal structure and development of most head and neck regions.
• To produce medical graduates educated on board basis to enable them for further training, learning and practice.
• To deal efficiently with the patients depending on anatomical basis.

2 – Intended learning outcomes of course (ILOs)

a-Knowledge and Understanding:

A1: Describe the basic anatomical principals of the structure and relations of the different anatomical regions of head and neck.
A2: identify the general features of the skull bones

A3: recognize nervous, vascular apparatus and anatomy of different regions.

A4: recall the anatomy of the airway and food tubes.

A5: identify the full details about nose, paranasal sinuses, mouth and ear

A7: put thyroid and pituitary glands in attention

A8: identify related cranial nerve, carotid and jugular systems

b-Intellectual skills

B1: Distinguish the different internal structures in cadaver and preserved specimens.

B2: Explain the different stages of development and growth of head and neck regions.

B3: Apply the anatomical facts to reach a proper diagnosis in the living subject.

B4: Interpret some clinical findings in relation to development basis.

b-Professional and practical skills

C1: Interpret the normal anatomical structures on radiographs (plain X-rays, C.T, M.R.I).

C2: Correlate the basic cross section anatomy with the available diagnostic imaging.

C-General and transferable skills

C1: Be responsible towards work.
### 3. Content

**Credit hours:** 2hrs. (Lecture: 2 \ Practical: 0)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Hours for lectures</th>
<th>Hours for tutorial and other small group</th>
<th>Hours for practical</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-bones.</td>
<td>7</td>
<td></td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>- Skull with stress on cranial cavity, temporal bone, nose and bones surrounding it</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Nasal sinuses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- head and neck</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- face and scalp</td>
<td>3</td>
<td></td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>- Submandibular region and infratemporal fossa</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Mouth, tongue, pharynx, larynx and trachea</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Topic</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nose and paranasal sinuses</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thyroid gland</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oesophagus</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vessels (carotid arteries and internal jugular vein)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cranial nerves:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Olfactory and 5-12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Autonomic supply of head and neck</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ear: external, middle and internal</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cranial cavity: meninges, pituitary gland and venous sinuses</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Embryology:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pharyngeal arches</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tongue</td>
<td>3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>face</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>nose</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>thyroid gland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>nasal sinuses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>oesophagus</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ear</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Total** 30 - - - 30

**Total credit hours** 2 - - - 2

1 credit hour = 15 hours theoretical

1 credit hour = 30 hours practical

**3– Teaching and learning methods**

**3.1 Lectures**: including; bone teaching.

**4- Student assessment methods**

**4.1 final written and written exams**

**5- Assessment schedule**

Final exams

**6- Weighting of assessments**

Final-term written examination 70%

Oral examination 30 %

Total 100%
Any formative only assessments:

7- List of references

7.1- Course notes

7.2- Essential books (text books)

1  Gray's anatomy for student.

2  Langman's medical embryology "Sadler"

7.3- Recommended books

3  clinical anatomy "Snell"
- Before we are born "Keith Moore"

7.4- Periodicals, Web sites, etc

www.humananatomyonline.com

8- Other Resources / Facilities required for teaching and learning achieving the above ILOs
No

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

Course coordinator:
Name Prof. Dr. Fouad Kamal Mansour.
Signature………………………………………………………. Date

Head of Department of Anatomy and Embryology
Name: Prof. Dr. Fouad Kamal Mansour
Signature………………………………………………………. Date
Course Specification of Surgical Pathology of Otorhinology for MD Phoniatrics

University: Menoufia
Faculty of Medicine

A - Administrative Information

1) Course Title: Surgical Pathology of Otorhinology for Phoniatrics MD
2) Code : ENT 832
3) Department giving the course: Pathology Department
4) Program on which the course is given: MD degree in Phonetics
5) Department offering the programme: Otorhinolaryngology Department
6) Academic level: 1st part M.D Degree
7) Semester: 1st part
8) Date of specification/revision: 2010
9) Date of approval by Departmental and Faculty Council: 2010
10) Credit hours: 2 h

B - Professional Information

I. Aim of the course:

I. 01. To familiarize students with the basic disease patterns including definition, etiology, morphologic changes in different organ system diseases in addition to their fate and complication

I. 02. To provide students with essential knowledge for gross and microscopic changes in different diseases for understanding and interpreting pathological reports.
2. INTENDED LEARNING OUTCOMES (I.L.O.S):

a- Knowledge & understanding:

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

a1. Identify the principals of general pathology (cell injury, inflammation, tissue repair, homodynamic, cellular dyspalsia, neoplasia... etc) and explain different disease processes occurring in cardiovascular system, renal and endocrinal organs; their causes (etioloogy), and how the disease develops in response to the etiologic agents (pathogenesis) together with infectious diseases in all body organs.

a2. Describe and discuss characteristic gross and microscopic pictures of different pathologic lesions within those organ systems and the associated functional disturbances.

a3. Determine the fate and complications of different disease processes.

b- Intellectual Skills

b1. Recognize gross and microscopic pictures aiming at reaching the correct diagnosis.

b2. Predict the diagnosis of different diseases based on the underlying gross and microscopic pictures.

C-Professional and Practical Skills

c1. Employ the different diagnostic pathological tools

c2. Interpret a pathology report in an accurate manner.
### D-General and Transferable Skills

**d1.** Search for the recent medical information and continued progress in medical sciences.

**d2.** Express freely and adequately themselves by improving descriptive capabilities and communication skills.

**d3.** Respond appropriately according to the seriousness of pathologic diagnosis in acceptable manner.

### 3-Contents

**Credit hours:** 2 h

<table>
<thead>
<tr>
<th>Topics</th>
<th>lectures</th>
<th>Practical</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GENERAL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Cellular adaptation, cell injury and cell death</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Acute and chronic inflammation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Tissue renewal and repair: regeneration, healing and fibrosis.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>*Hemodynamic disorders, Thromboimbolic disease and shock.</td>
<td></td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>*Genetic disorders.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Neoplasia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Infectious diseases</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* Environmental and nutritional</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
pathology.

*Diseases of infancy and childhood

**SYSTEMIC**

*Diseases of the blood

* Diseases of lymphoid system and spleen.

* Diseases of head and Neck

* Diseases of Larynx

* Diseases of the paranasal sinuse.

* Diseases of tongue and oral

<table>
<thead>
<tr>
<th></th>
<th>15</th>
<th></th>
<th>15</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>_</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total credit hours</strong></td>
<td>2</td>
<td>_</td>
<td>2</td>
</tr>
</tbody>
</table>

1 credit hour = 15 hours theoretical
1 credit hour = 30 hours practical

**Teaching And Methods**

I- **Teaching methods:**

**I. 01.** Formal Lectures.

I- **Assessment tools:**

Written exam in two hours + oral test at the end of course either in April or in October

II- **Learning and Reference material:**

* Staff member's color atlas of gars.
• Jar museum
• Suggested materials:
  o Kumar, Cotran & Robbins: Recommended text book : Basic Pathology.
  o Macfarlane, Reid & Callender: Illustrated Pathology Lectures.
  o CDs available at the department on request.
  o Diagnostic histopathology: Fletcher.
• Recommended web sites:
  o http://www.pathmax.com
  o http://www.medlib.med.utah.edu/webpath/labs/labmenu.html
  o http://www.medscap.com/pathologyhome
  o http://www.qwumc.edu/dept/path/2f.htm

We verify that all of the information required to deliver this program is contained in the above specification and will be implemented. All course specification for this program is in place.

Program coordinator:
Name: Prof Dr, Mona Kandil............... Signature.................. Date..................

Dean: Prof. Dr. Abdelkhalek Al Saidany
Name.................. Signature.................. Date..................

Head of Quality Assurance Unit:
Name.................. Signature.................. Date..................
Course Specification of Physiology for Phonetics

University: Menoufia

Faculty of Medicine

A-ADMINISTRATIVE INFORMATION:

1) Course Title: Physiology for Phonetics

2) Course Code: ENT833

3) Department giving the course: Physiology Department

4) Program on which the course is given: M.D Degree of Phonetics

5) Department offering the programme: Otorhinolaryngology Department

6) Academic level: M.D Degree Credit Hours

7) Semester: 1st part

8) Date of specification/revision: 2010

9) Date of approval by Departmental and Faculty Council: 2010

10) Credit hours: 2h

B-Professional Information

1- overall aims of the course:
By the end of the course, students should be able to:

1.1. Recall all basic physiological information regarding the learned subjects.

1.2. Explain, on a physiological bases, the related clinical pictures seen in the field of general medicine.

1.3. Apply course information to the explain the physiological background for treatment of the related abnormal, dysfunction, or dysregulated physiological mechanisms accompanying diseases of general medicine.
INTENDED LEARNING OUTCOMES (I.L.Os):

a. **Knowledge & Understanding:**
   By the end of the course, students should be able to:
   
   1. Name the different fluid compartments in the human body, and define moles, equivalents, and osmoles.
   2. Define the components of blood, their origins, and their role in homeostasis.
   3. Describe how the tonicity (osmolality) of the extracellular fluid is maintained by alterations in water intake and vasopressin secretion.
   4. Describe how the volume of the extracellular fluid is maintained by alterations in renin and aldosterone secretion.
   5. Name the major electrolytes in body fluids, and state their functions.
   6. Explain how a negative feedback mechanism works, and how a positive feedback mechanism differs.
   7. List the mechanisms by which heat is produced in and lost from the body.
   8. List the temperature-regulating mechanisms, and describe the way in which they are integrated under hypothalamic control to maintain normal body temperature.
   9. Define the term homeostasis, and use examples to explain its mechanism.
   10. Define the special features of the circulation in the skin and how it is regulated.
   11. Explain the basis of conditions where pituitary function and growth hormone secretion and function are abnormal, and how they can be treated.
   12. Name the hypophysiotropic hormones, and outline the effects that each has on anterior pituitary function.
   13. Name the key hormones secreted by Leydig cells and Sertoli cells of the testes and by graafian follicles and corpora lutea of the ovaries.
   14. Outline the steps involved in spermatogenesis and the mechanisms that produce erection and ejaculation.

b. **Intellectual Skills:**
   By the end of the course, students should be able to:
   
   1. Delineate the process of hemostasis that restricts blood loss when vessels are damaged, and the adverse consequences of intravascular thrombosis.
   2. Discuss the pathophysiology of fever.
3. Differentiate between pain and nociception.
4. Differentiate between fast and slow pain and acute and chronic pain.
5. Define circulatory shock, and list the compensatory processes that may arise during shock.
6. Suggest the primary disturbances that can account for cardiogenic, hypovolemic, anaphylactic, septic, and neurogenic shock states.
7. Compare the pathway that mediates sensory input from touch, proprioceptive, and vibratory senses to that mediating information from pain and thermoreceptors.
8. Describe the physiologic changes that occur in the female reproductive organs during the menstrual cycle.
9. Outline the hormonal changes and their physiologic effects during perimenopause and menopause.
10. Describe the hormonal changes that accompany pregnancy and parturition.

C- Professional and Practical Skills:
By the end of the course, students should be able to:

C1- Implement course information to explain the basis of disease states where components of the blood and vasculature are abnormal, deregulated, or both.
C2- Diagnose and explain referred pain

D- General and Transferable Skills:
By the end of the course, students should be able to:

1. Use course information effectively in the field of general medicine practice.
2. Retrieve, manage, and manipulate course information by all means, including electronic means.
3. Present course information clearly in written, electronic and oral forms.
4. Communicate ideas and arguments effectively.
5. Analyze and use numerical data including the use of simple statistical methods.
**3. COURSE CONTENT (SYLLABUS):**

5- Credit hours: 2h

<table>
<thead>
<tr>
<th>Topics</th>
<th>Lectures</th>
<th>Practical</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Body Fluids and Blood:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 0 Body Fluid Compartments and Their Constituents.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 1-Blood; White Blood Cells, Platelets, Red Blood Cells Types and Transfusion Reactions.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 2-Hemoglobin; Reactions, Synthesis, and Catabolism.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 3-Hemostasis and Anticoagulants.</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td><strong>2. Water and Electrolyte Balance:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 4- Defense of Tonicity: Vasopressin; Receptors, Effects, Control of Secretion, and Clinical Implications.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 6- Regulation of Electrolytes.</td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>3. Homeostasis:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 7- Definition of Homeostasis, Negative &amp; Positive Feedback Mechanisms</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>4. Body Temperature:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 8- Normal Body Temperature; Heat Production &amp; Heat Loss.</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>- 9- Temperature-Regulating Mechanisms; Fever, Hypothermia.</td>
<td></td>
<td></td>
<td>2</td>
</tr>
<tr>
<td><strong>5. Pain Sensation:</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 10-Nociceptors.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- 11-Classification of Pain; Deep,</td>
<td>2</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>6. Hemorrhage and Shock:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12-Physiologic Causes of Circulatory Shock.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13-Stages &amp; Types of Circulatory Shock.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-Physiology of Treatment in Shock.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>7. Cardiovascular System:</th>
</tr>
</thead>
<tbody>
<tr>
<td>16- The Heart as a Pump.</td>
</tr>
<tr>
<td>17- Cardiovascular Regulatory Mechanisms.</td>
</tr>
<tr>
<td>18-Circulation through Special Regions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>8. Renal Physiology and Micturition:</th>
</tr>
</thead>
<tbody>
<tr>
<td>19- Formation of Urine; Glomerular Filtration, Tubular Reabsorption &amp; Secretion.</td>
</tr>
<tr>
<td>20- Urine Concentration and Diuretics.</td>
</tr>
<tr>
<td>21-Micturition.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>9. Respiratory Physiology:</th>
</tr>
</thead>
<tbody>
<tr>
<td>22-Pulmonary Function.</td>
</tr>
<tr>
<td>23- Gas Transport &amp; pH in the Lung.</td>
</tr>
<tr>
<td>24-Regulation of Respiration.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10. Gastrointestinal System:</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-Overview of Gastrointestinal Function &amp; Regulation.</td>
</tr>
<tr>
<td>26- Digestion, Absorption, &amp; Nutritional Principles.</td>
</tr>
</tbody>
</table>
27- Gastrointestinal Motility.
28- Transport & Metabolic Functions of the Liver.

<table>
<thead>
<tr>
<th>29- The Thyroid Gland.</th>
</tr>
</thead>
<tbody>
<tr>
<td>30- Endocrine Functions of the Pancreas &amp; Regulation of Carbohydrate Metabolism.</td>
</tr>
<tr>
<td>3- The Adrenal Medulla &amp; Adrenal Cortex.</td>
</tr>
<tr>
<td>32- Hormonal Control of Calcium &amp; Phosphate Metabolism &amp; the Physiology of Bone.</td>
</tr>
<tr>
<td>33- The Pituitary Gland.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>34- Somatosensory Pathways.</th>
</tr>
</thead>
<tbody>
<tr>
<td>36- Control of Posture &amp; Movement.</td>
</tr>
<tr>
<td>37- Hypothalamic Regulation of Hormonal Functions.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total credit hours</td>
<td>2</td>
</tr>
</tbody>
</table>
6. **TEACHING & LEARNING METHODS:**

6.1. **Lectures:**

6.2. **Lectures:** One hour lecture per week.

6.2.1. For the first 5 weeks, 2 hs/week lectures are given to all M.D. students to cover the first 6 topics.

6.2.2. For the next 10 weeks, students are divided by their specialties, and 2 hs/wk lectures are given to each group. ILOs 3.4.3 and 3.4.5 are achieved during these lectures via lecturer-student contact.

6.2.3. Lecture loads are distributed between Professors (2) of the department and external Professors of Physiology (3).

6.3. **Others:** None.

7. **METHODS FOR DISABLED STUDENTS:**

Not available.

8. **STUDENT ASSESSMENT:**

Minimal acceptable attendance is 60%. Students who fail to attend that percentage will not allowed to apply for final written examination.

8.1. **Assessment Tools:**

Three hours written examination.

8.2. **Assessment Schedule:**

One time at the end of each semester.

8.3. **Grading System:**

<table>
<thead>
<tr>
<th>Examination</th>
<th>Description</th>
<th>Marks</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Final written exam</em></td>
<td>MCQs:</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Short assay:</td>
<td>60%</td>
</tr>
<tr>
<td></td>
<td>Case study:</td>
<td>20%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>
9. LEARNING AND REFERENCE MATERIALS:

9.1. **Text Books:**

9.2. **Course Notes:**
Not available.

9.3. **Suggested Readings:**

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

**Course coordinator:**

Name:

Signature : Date :

**Head of the Department of Medical Physiology:**

Name:

10. Signature :
University: Menoufia

Faculty of Medicine

A- Administrative Information

1) Course Title: Phonetics
2) Code: ENT834
3) Department giving the course: Otorhinolaryngology Department
4) Program on which the course is given: Phonetics MD degree
5) Department offering the programme: Otorhinolaryngology Department
6) Semester: 2\textsuperscript{nd} part
7) Date of specification/revision: 2010
8) Date of approval by Departmental and Faculty Council: 2010
9) Credit hours: 16

Lecture: 10 \hspace{1cm} Tutorial: 2 \hspace{1cm} Practical: 4 \hspace{1cm} Other: \hspace{1cm} Total: 16

B- Professional Information

1 – Overall aims of course:

a- Competency in the diagnosis of Phonetics disorders.

b- Competency in the assessment of communication disorders.

c- Competency in the rehabilitation of communicative disorders.

2– Intended learning outcomes of course (ILOs):

a-Knowledge and Understanding:

By the end of the course the candidate will be able to:

a1) Explain principles of communication disorders in 3 major categories comprising common presentations in Language, Speech, and voice.

a2) Describe the principles of swallowing disorders.
a3) Discuss the principles of phonosurgery.

a4) Master sound knowledge of the rehabilitation of communication disorders.

a5) Apply the principles, methods, ethics and various tools of medical research.

a6) Demonstrate the ethical and legal principles of medical and professional practice.

a7) Approve the principles of quality assurance in medical practice.

b - Intellectual skills

**By the end of the course the candidate will be able to:**

b1) Apply analytical skills in choice of investigations and treatment situations.

b2) Carry out problem solving of common Phonetics disorders.

b3) Perform proper follow-up of cases presentations.

b4) Argue, and discuss relevant issues on evidence based manner.

C - Professional and practical skills

**By the end of the course the candidate will be able to:**

C1) Carry out history taking skills.

C2) Perform vocal tract examination thoroughly.

C3) Examine patients with disorders of voice, speech and language clinically and instrumentally and perform related etiological diagnosis and suggest prognosis. formal tests on those patients in order to reach detailed

C4) Adequately apply therapeutic measures in the field of diseases of voice, speech and language.

C5) Write and evaluate a professional medical report related to his specialty.

C6) Use recent relevant technological tools in the professional practice.

**d - General and Transferable Skills:**

**By the end of the course the candidate will be able to:**

d1) Research and gathering data and following recent advances in medical science.
d2-Use proper communication skills in dealing with patients and relatives.
d3-Achieve best contact with Phonetic disorders including delayed language development in order to guide them to best results.
d4 – Transfer knowledge to junior stuff members of his society.

3-Content

1 Voice Disorders:
2 Symptomatology.
3 Etiology.
4 Diagnosis
5 Aetiological Classification of voice disorders:
6 Organic causes:
7 Congenital
8 Acquired:
9 Traumatic
10 Inflammatory
11 Neoplastic
12 Endocrinopathies.
13 Neurological disorders and vocal folds immobility
14 Miscellaneous
15 Functional causes:
16 Chronic habitual hyperfunctional dysphonia of childhood
17 Mutational voice disorders
18 Hyperfunctional dysphonia
19 Hypofunctional dysphonia
20 Phonathenia
21 Functional aphonias
22 Spastic dysphonia
23 Minimal Associated pathological lesions (MAP lesions):
24 Vocal fold polypi
25 Vocal fold nodules
26 Vocal fold cysts
27 Reinke's oedem
28 Contact granuloma
29 Intubation granuloma
30 Phonosurgery:
31 Vocal fold augmentation
32 Vocal fold reposition
33 Post laryngectomy
34 Use of LASER in laryngeal diseases
35 Neuro phono Surgery
36 Voice therapy
37 Oesophageal speech
38 Oesophageal voice
39 Surgical methods of laryngectomy
40 Artificial larynx

2- Speech Disorders:
   a Stuttering
   b Dysarthrias
   c Dyslalia

3 Language Disorders:
   a Delayed Language development
   b Dysphasia
   c Dyslexia and learning disability

4 Swallowing disorders

5

Credit hours: 16 (Lecture: 10 Tutorial: 2 Practical: 4)

<table>
<thead>
<tr>
<th>Topic</th>
<th>ILo</th>
<th>Hours for lectures</th>
<th>Hours for tutorial</th>
<th>Hours for practical</th>
<th>Total no. of hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice Disorders:</td>
<td>a1,a2, a3,a4,b1,b2,b3,c1,c2,c3,c4,d1,d2,d3,d4</td>
<td>45</td>
<td>15</td>
<td>30</td>
<td>80</td>
</tr>
<tr>
<td>Speech</td>
<td>a1,a2,</td>
<td>35</td>
<td>15</td>
<td>30</td>
<td>80</td>
</tr>
<tr>
<td>Disorders:</td>
<td>a3,a4,b1,b2,b3,c1,c2,c3,c4,d1,d2,d3,d4,</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Language Disorders:</td>
<td>a1,a2,a3,a4,b1,b2,b3,c1,c2,c3,c4,d1,d2,d3,d4,</td>
<td>35</td>
<td>15</td>
<td>30</td>
<td>80</td>
</tr>
<tr>
<td>Swallowing disorders</td>
<td>a1,a2,a3,a4,b1,b2,b3,c1,c2,c3,c4,d1,d2,d3,d4,</td>
<td>35</td>
<td>15</td>
<td>30</td>
<td>80</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>150</td>
<td>30</td>
<td>120</td>
<td>300</td>
</tr>
<tr>
<td>Total credit hours</td>
<td></td>
<td>10</td>
<td>2</td>
<td>4</td>
<td>16</td>
</tr>
</tbody>
</table>

1 credit hour = 15 hours theoretical

1 credit hour = 30 hours practical

4– Teaching and learning methods

4.1 Lectures

4.2 Clinical rounds
5- Student assessment methods

5.1 Two written exams (3hrs each) to assess (a1, a2, a3, a4)

5.2 Oral exam to assess to assess (b1, b2, b3, b4, d1, d2, d3, d4)

5.3 Practical exam to assess (c1, c2, c3)

Assessment schedule
Assessment is done within the exams of 2nd part

6- Weighting of assessments

Written examination
Oral examination %
Practical examination%
Total 100%

7- List of references

7.1- Course notes

Course notes by:
Prof. Dr – Mohammad Barakah
Prof. Dr. Mohammad Frahat.
Prof. Dr. Hassan Al- Ghandoor

7.2- Essential books (text books)

Hirano: Clinical examination of voice
Kotby: The accent method of voice therapy
Darley: Motor speech disorders
Lahey: Language disorders and Language development
8- Other Resources / Facilities required for teaching and learning to achieve the above ILOs

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

<table>
<thead>
<tr>
<th>Course coordinator:</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name........................................</td>
<td></td>
</tr>
<tr>
<td>Signature.............................</td>
<td></td>
</tr>
</tbody>
</table>

Head of Department

of..........................................................

Name..........................................................

Signature............................. Date

..........................................................
Course specification of Neuropsychiatry for MD Phoniatrics

University: Menoufia

Faculty of Medicine

A-Administrative Information:

1) Course Title: Neuropsychiatry

2) Code: ENT835

3) Department offering the course: Neuropsychiatry Department

4) Program on which the course is given: Phonetics MD degree

5) Department offering the programme: Otorhinolaryngology Department

6) Semester: 2nd part

7) Date of specification/revision: 2010

8) Date of approval by Departmental and Faculty Council: 2010

9) Credit hours: 2

Lecture: 1    Tutorial:    Practical: 1    Other:    Total: 2

*B-Professional information:*

(1)Course Aims:

1- To support acquisition of knowledge and understanding of health and its promotion, and of disease prevention and management, in the context of the whole individual and his or her place in the family and in society.

2. Discuss the common psychiatric and neurological problems presenting to doctors - in primary health care setting, hospital and community such as depression, anxiety, psychosis, stroke, dementia, epilepsy and their diagnosis, prevention and treatment.
3- This course will enable the post graduate student to:
• Deal with the different clinical neuropsychiatric symptoms and signs in order to catch a diagnosis
• Deal with neuropsychiatric emergencies in a safe and efficient way.
• Identify the proper cost-effective investigations on facing neuropsychiatric problem.
• Having the ability of interpretation of most common neurological investigations.
• Observe the specialized way of management of cases in special units.
• Learn neuropsychiatry on an evidence basis.
• Know the magnitude of neuropsychiatric problems in the community
• know the basic guidelines of preparing & doing a thesis in neuropsychiatric research.
• Academic references standard for master degree of evaluation

(2) Intended Learning Outcomes (ILOs) for programme:

a- Knowledge and Understanding
By the end of the neuropsychiatric course, the student will be able to:

a 1. Discuss the common neuropsychiatric problems presenting to doctors - in primary health care setting, hospital and community - their diagnosis, prevention and treatment.

a 2. Describe how to deal with the different symptoms.

a 3. Identify neuropsychiatric disorders.

a 4. Recognize the clinical spectrum of common neuropsychiatric disorders.

a 5. State the clinical manifestations and differential diagnosis of common neuropsychiatric disorders.

a 6. Discuss a series of lectures that covers the field of neuropsychiatry.

a 7. Get information about and demonstrations on modern diagnostic tools within neuropsychiatry.

a 8. Assess with special therapeutic and interventional techniques related to neuropsychiatry.

a 9. Identify a clear priority plan in the patient's management.

a 10. Identify the indications for consulting higher levels or reference to other disciplines.
a 11. Define the New Egyptian law regulatory neuropsychiatry.

b- Intellectual skills:

b 1. Design and present a comprehensive neurological sheet including history and detailed neurological examination.

b 2. Design and present a comprehensive psychiatric sheet including history and detailed psychiatric symptom and signs.

b 3. Design an appropriate plan for management of common neuropsychiatric disorders and emergencies.

b 4. Analyze symptoms & signs and construct a differential diagnosis for common presenting symptoms.

b 5. Interpret the significance & relevance of abnormal physical signs.

b 6. Design an appropriate diagnostic plan for evaluation of presenting neurological complaints which is appropriate in terms of the differential diagnosis, the severity of the neurological situation and the risks, benefits and costs to the patient.

b 7. Interpret accurately the results of commonly used diagnostic procedures.

b 8. Interpret the results of common laboratory investigations, radiological investigation, neurophysiological investigation.

b 9. Setup the skills of neuropsychiatric research.

c- Professional Skills:

c 1. Diagnose common neuropsychiatry disorders.

c 2. Evaluate adequately the patient's acute conditions and need for urgent neuropsychiatric management.

c 3. Signify & interrelate the methods of assessment of patient’s neuropsychiatric conditions and monitoring.

d- General and transferable skills:

d 1. Establish rapport and trust with the patient.

d 2. Explain to the patients and their relatives the nature of illness, the diagnostic and therapeutic options and recommend life style modification in compassionate and ethical way.

d 3. Respond effectively to a patient's emotional and psychosocial concerns.
### Topics

<table>
<thead>
<tr>
<th>Neurological content</th>
<th>lectures</th>
<th>practical</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-Blood supply to the brain</td>
<td>7.5</td>
<td>15</td>
<td>22.5</td>
</tr>
<tr>
<td>II-Anatomy of cranial nerves (5, 7, 8, 9, 10, 11, 12)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>III- Speech development and its disorders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IV. VASCULAR DISEASES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathogenesis, Classification, and Epidemiology of Cerebrovascular Disease</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examination of the Patient with Cerebrovascular Disease</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transient Ischemic Attack</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cerebral Infarction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cerebral and Cerebellar Hemorrhage</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>V. TUMORS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Considerations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tumors of the Skull and Cranial Nerves</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tumors of the Meninges</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gliomas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lymphomas</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tumors of the Pituitary Gland</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congenital and Childhood Central Nervous System Tumors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vascular Tumors and Malformations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metastatic Tumors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VI. PERIPHERAL NEUROPATHIES</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Considerations</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hereditary Neuropathies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquired Neuropathies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VII. DEMENTIAS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alzheimer Disease and Related Dementias</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIII. Tremors, ATAXIA, and Cerebellar disorders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tremors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cerebellar disorders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ataxia</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IX. MOVEMENT DISORDERS</strong></td>
<td>Sydenham and Other Forms of Chorea</td>
<td>Essential Tremor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Parkinsonism</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>X. SPINAL CORD DISEASES</strong></td>
<td>Syringomyelia</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>XI. DISORDERS OF THE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>NEUROMUSCULAR JUNCTION</strong></td>
<td>Myasthenia Gravis</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>X II. MYOPATHIES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>XIII. Demyelinating Diseases</strong></td>
<td>Multiple Sclerosis</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PSYCHIATRIC CONTENTS:</th>
<th>7.5</th>
<th>15</th>
<th>22.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-Delirium, Dementia, Amnestic and other cognitive disorders.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2- Schizophrenia and other psychotic disorders</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Definition, aetiology, epidemiology, diagnosis, types, prognosis and treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3-Mood Disorders: Definition, aetiology, epidemiology, diagnosis, types, prognosis and treatment</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4-Anxiety Disorders(OCD, phobic disorders, and hysterical)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5-Personality Disorders

6-Child Psychiatry, Mental Retardation, Pervasive developmental disorders, Learning disorders

7- IQ. Psychometric measurement of Personality and IQ.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total</strong></td>
<td>15</td>
<td>30</td>
<td>45</td>
</tr>
<tr>
<td><strong>Total credit hours</strong></td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

1 credit hour = 15 hours theoretical
1 credit hour = 30 hours practical

4– Teaching and learning methods

Lectures

Clinical rounds

Group discussion

Seminar

5- Student assessment methods:

The examination will be by the end of each semester
written exam…
oral and clinical

Weighting of assessments
Final-term examination % 50 % for written exam (25 degrees)
Oral examination and clinical % 50% (25 degrees)
Total 100% (50 degrees)

6- List of references
Course notes
Essential books (text books)
Maxi textbook
Recommended books
Periodicals, Web sites, etc
Center for disease control and prevention

7- Resources / Facilities required for teaching and learning achieving the above ILOs
New advanced laboratory facility and equipment to help teaching
- Overhead projectors
- Computers
- Internet club

We verify that all of the information required to deliver this program is contained in the above specification and will be implemented. All course specification for this program are in place.

Program coordinator:
Name: PROF DR Mohammed Ezzat Elwan
Signature.................. Date..................
Dean:
Name…dr. Abdelkhalek el Saedany..............
Signature.................. Date..................
Head of Quality Assurance Unit:
Name…dr Wafa Zahran................. Signature..................
Date.....................
Course specification of Otorhinolaryngology for MD Phoniatrics

University: Menoufia

Faculty of Medicine

A- Administrative Information

1) Course Title: Otorhinolaryngology
2) Code: ENT836
3) Department giving the course: Otorhinolaryngology Department
4) Program on which the course is given: Phonetics MD degree
5) Department offering the programme: Otorhinolaryngology Department
6) Semester: 2nd part
7) Date of specification/revision: 2010
8) Date of approval by Departmental and Faculty Council: 2010
9) Cred’it hours

| Lecture: 6     | Tutorial: | Practical: 2 | Other: | Total: 8 |

8-Professional Information

1 – Overall aims of course:

Provide candidates with essential basis and skills of Otorhinolaryngology needed for diagnosis and management of different Phonetic disorders

2 – Intended learning outcomes of course (ILOs):

a- Knowledge and Understanding:

By the end of this course the students should be able to:

a1- recognize E.N.T symptomatology, methods of examination and investigations applied for diagnosis in E.N.T.

a2- Define the clinical symptoms and signs of E.N.T with its etiology & pathological picture with emphasis on emergencies and early diagnosis of serious illness
b- Intellectual skills:

By the end of the course the candidate will be able to:
b1) Differentiate various otorhinolaryngological disorders.
b2) Correlate otorhinolaryngological disorders and the etiology of communication disturbances.

c- Professional and practical skills:

By the end of the course the candidate will be able to
c1- Carry out ear, nose and throat examination.
c2- Accurately diagnose communication disorders due to otorhinolaryngological diseases

d- General and transferable skills:

By the end of this course the students should be able to:
d1- Research and gather data and follow recent advances in medical science.
d2- Use proper communication skills in dealing with patients and relatives.
d3- Set priorities in dealing with patients according to their health condition.

3- Content:

Nose
1. Physiology of Olfaction
2. Evaluation of Nasal Breathing Function with Objective Airway Testing
3. Manifestations of Systemic Diseases of the Nose
4. Epistaxis
5. Nasal Fractures
6. Allergic Rhinitis
7. Non-allergic Rhinitis
8. The Nasal Septum
9. Rhinoplasty
10. Special Rhinoplasty Techniques
11. Revision Rhinoplasty
12. Reconstructive Rhinoplasty

**Paranasal Sinuses**
1. Radiology of the Nasal Cavity and Paranasal Sinuses
2. Infectious Causes of Rhinosinusitis
3. Neoplasms
4. Medical Management of Nasosinus Infectious and Inflammatory Disease
5. Primary Sinus Surgery
6. Revision Endoscopic Sinus Surgery
7. Cerebrospinal Fluid Rhinorrhea

**Oral Cavity/ Pharynx/Esophagus**
1. Oral Physiology
2. Mechanisms of Normal and Abnormal Swallowing
3. Oral Mucosal Lesions
4. Oral Manifestations of Systemic Diseases
5. Odontogenesis and Odontogenic Cysts and Tumors
6. Odontogenic Infections
7. Temporomandibular Joint Disorders
8. Benign Tumors and Tumor-like Lesions of the Oral Cavity
9. Malignant Neoplasms of the Oral Cavity
10. Reconstruction of the Mandible and Maxilla
11. Maxillofacial Prosthetics: Management of Acquired Head and Neck Defects and the Radiation Oncology Patient
12. Benign and Malignant Tumors of the Nasopharynx
13. Pharyngitis in Adults
14. Sleep Apnea and Sleep-disordered Breathing
15. Malignant Neoplasms of the Oropharynx
16. Reconstruction of the Oropharynx
17. Diagnostic Imaging of the Pharynx and Esophagus
18. Endoscopy of the Pharynx and Esophagus
19. The Esophagus
20. Zenker’s Diverticulum
22. Radiotherapy and Chemotherapy of Squamous Cell Carcinomas of the Hypopharynx and Esophagus

Larynx/Trachea/Bronchus
1. A. Laryngeal and Pharyngeal Function
2. B. Evaluation and Management of Hyperfunctional Disorders
3. Visual documentation of Larynx
4. Voice Analysis
5. Diagnostic Imaging of the Larynx
6. Neurologic Evaluation of the Larynx and Pharynx
7. Laryngeal and Tracheal Manifestations of Systemic Disease
8. Chronic Aspiration
9. Laryngeal and Esophageal Trauma
10. Surgical Management of Upper Airway Stenosis
11. The Professional Voice
12. Benign Vocal Fold Mucosal Disorders
13. Medialization Thyroplasty
14. Arytenoid Adduction
15. Laryngeal Reinnervation
16. Malignant Tumors of the Larynx
17. Management of Early Glottic Cancer
18. Transoral Laser Microresection of Advanced Laryngeal Tumors
19. Conservation Laryngeal Surgery
20. Total Laryngectomy and Laryngopharyngectomy
21. Radiation Therapy for the Larynx and Hypopharynx
22. Vocal Rehabilitation Following Laryngectomy
23. Management of the Impaired Airway in the Adult
24. Tracheobronchial Endoscopy
25. Diagnosis and Management of Tracheal Neoplasms
26. Upper Airway Manifestations of Gastroesophageal Reflux Disease

Credit hours: 8 hours

(Lecture: 6    Tutorial:    Practical: 2)
<table>
<thead>
<tr>
<th>Topic</th>
<th>ILos</th>
<th>Hours for lectures</th>
<th>Hours for tutorial and other small group</th>
<th>Hours for practical</th>
<th>Total no. of hours per semester / year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nose</td>
<td>a1,a2, b1,b2,c1,c2, d1,d2,d3,</td>
<td>22</td>
<td></td>
<td>15</td>
<td>37</td>
</tr>
<tr>
<td>Paranasal sinuses</td>
<td>a1,a2, b1,b2,c1,c2, d1,d2,d3,</td>
<td>22</td>
<td></td>
<td>15</td>
<td>37</td>
</tr>
<tr>
<td>Oral Cavity/Pharynx/Oesophagus</td>
<td>a1,a2, b1,b2,c1,c2, d1,d2,d3,</td>
<td>22</td>
<td></td>
<td>15</td>
<td>37</td>
</tr>
<tr>
<td>Larynx, Trachea, Bronchus</td>
<td>a1,a2, b1,b2,c1,c2, d1,d2,d3,</td>
<td>24</td>
<td></td>
<td>15</td>
<td>39</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>90</td>
<td></td>
<td>60</td>
<td>150</td>
</tr>
<tr>
<td>Total credit hours</td>
<td></td>
<td>6</td>
<td></td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

1 credit hour = 15 hours theoretical
1 credit hour = 30 hours practical


4– Teaching and learning methods

4.1 Lectures

4.2 Clinical lessons

5- Student assessment methods

5.1 Written exam (3 hrs) to assess (a1, a2)

5.2 Oral exam to assess (b1, b2, d1, d2, d3)

5.3 Clinical exam to assess (c1, c2)

Assessment schedule

Assessment is done within the exams of 2\textsuperscript{nd} part.

6- Weighting of assessments

Written examination 60 %
Oral examination 20%
Clinical examination 20%
Total 100%

7- List of references

.1- Course notes
Prof. Dr. Abdel- Latif El-Rasheedy
Prof. Dr. Maged El-Shenawy
Prof. Dr. Tarek Abdel- Fattah

.2- Essential books (text books)
Scott Brown Otolaryngology, Head And Neck Surgery
Ballenger ’Otorhinolaryngology, Head and Neck Surgery
Cummings Otolaryngology, Head And Neck Surgery
Current Diagnosis and treatment, Otolaryngology , Head and Neck surgery
D'hirnrga Diseases of Ear, Nose and throat
Basic OtorhinoLaryngology a Step By step learning guide
Essential K.J. Lee Otorhinolaryngology, Head and Neck Surgery

.3- Recommended books

Prof. Dr. Abdel- Latif El-Rasheedy
Scott Brown Otolaryngology, Head And Neck Surgery
Ballenger ’Otorhinolaryngology, Head and Neck Surgery
Scott Brown Otolaryngology, Head And Neck Surgery
Ballenger 'Otorhinolaryngology, Head and Neck Surgery
Cummings Otolaryngology, Head And Neck Surgery
Current Diagnosis and treatment, Otolaryngology, Head and Neck surgery
D'hingra Diseases of Ear, Nose and throat
Basic Otorhinolaryngology a Step By step learning guide
Essential K.J. Lee Otorhinolaryngology, Head and Neck Surgery
Prof. Dr. Abdel- Latif El-Rasheedy
Scott Brown Otolaryngology, Head And Neck Surgery
Ballenger 'Otorhinolaryngology, Head and Neck Surgery

8- Other Resources / Facilities required for teaching and learning to achieve the above ILOs

(for example, Field trips)........................................................................................................

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

Course coordinator:
Name........................................................................................................................................
Signature.............................................................................. Date
...............................................................................................
Head of Department
of........................................................................................................
Name........................................................................................................................................
signature.............................................................................. Date ............................
Course specification of surgery for congenital disorders of the ear, nose and throat for Phonetics

University: Menoufia
Faculty: Medicine

**a-Administrative Information**

**Course Title:** surgery of congenital disorders of ear, nose and throat for Phonetics MD degree (2nd part – credit hours).

1) **Code:** ENT837
2) **Department giving the course:** Otorhinolaryngology Department
3) **Program(s) on which the course is given:** MD degree in **Phoniatics**
4) **Department(s) offering the Program:** Otorhinolaryngology Department
5) **Academic year/level:** 1st part, MD degree
6) **Date of specification/revision:** 2010
7) **Date of approval by Departmental and Faculty Council:** 2010
8) **Credit/taught hours:**
   - Lecture: 2 Tutorial: 2 Practical: 2 Other: Total: 4

**b-Professional Information**

1 – **Overall aims of course:**

By the end of this course candidates should be able to recognize different congenital anomalies of the ear and different surgical approaches for their correction.

2– **Intended learning outcomes of course (ILOs)**

**A-Knowledge and Understanding:**

*By the end of this course the students should be able to:*

a 1- Recognize different congenital anomalies of the ear.

a 2- Define different surgical approaches for correction of different congenital anomalies
B-Intellectual skills:
By the end of this course the students should be able to:

b1 Report symptoms and signs of different ontological congenital anomalies
b2 Correlate between clinical data, radiological data and other forms of investigations to diagnose otorhinolaryngological congenital anomalies

C-Professional and practical skills
By the end of this course the students should be able to:

c1 - Conduct history taking and clinical examination to diagnose different otorhinolaryngological congenital anomalies
c2 - Use different investigations to diagnose congenital anomalies of the ear

D-General and transferable skills:
By the end of this course the students should be able to:

d1 - Research and gather data and follow recent advances in medical science.
d2 - Use proper communication skills in dealing with patients and relatives.
d3 - Set priorities in dealing with patients according to their health condition.

3- Content:

1. Developmental Anatomy of the ear
2- Congenital Malformation of the external ear::
   Prominent ears
   Hyperostosis and exostosis of the ear canal
   Preauricular appendages
   Preauricular pit or sinus
   Anotia
   Microtia
   Ex Auditory canal atresia
3- Congenital Malformation of Middle ear:
   Middle ear cleft atresia:

Credit hours:2 (Lecture : 1   Tutorial:    Practical:1)
<table>
<thead>
<tr>
<th>Topic</th>
<th>ILOs</th>
<th>Hours for lectures</th>
<th>Hours for tutorial</th>
<th>Hours for practical</th>
<th>Total no. of hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental Anatomy of the ear</td>
<td>a1,a2,b1,b2,c1,c2,d1,d2,d3</td>
<td>3.75</td>
<td></td>
<td>7.5</td>
<td>11.25</td>
</tr>
<tr>
<td>Congenital Malformation of the external ear and of Middle ear</td>
<td>a1,a2,b1,b2,c1,c2,d1,d2,d3</td>
<td>3.75</td>
<td></td>
<td>7.5</td>
<td>11.25</td>
</tr>
<tr>
<td>Congenital Malformations of the Inner Ear</td>
<td>a1,a2,b1,b2,c1,c2,d1,d2,d3</td>
<td>3.75</td>
<td></td>
<td>7.5</td>
<td>11.25</td>
</tr>
<tr>
<td>Reconstruction Surgery of the Ear:</td>
<td>a1,a2,b1,b2,c1,c2,d1,d2,d3</td>
<td>3.75</td>
<td></td>
<td>7.5</td>
<td>11.25</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>15</td>
<td>30</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td><strong>Total credit hours</strong></td>
<td></td>
<td>1</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

1 credit hour = 15 hours theoretical
1 credit hour = 30 hours practical

4– Teaching and learning methods

4.1 Lectures

4.2 Practical lessons

5- Student assessment methods

5.1 Written exam (2 hrs) to assess (a1,a2)

5.2 Oral exam to assess (b,b2, d1,d2,d3,e1,e2,e3)

5.3 Clinical exam to assess (c1,c2)
- **Assessment schedule:**

Assessment is done within the exams of 2\textsuperscript{nd} part

- **Weighting of assessments:**

Written examination 60 %
Oral examination 20%
Clinical examination 20 %
Total 100%
Any formative only assessments: NO

6- **List of references**

6.1- **Course notes**

Prof. Dr. Abdel- Latif El-Rasheedy
Prof. Dr. Maged El-Shenawy
Prof. Dr. Tarek Abdel- Fattah

6.2- **Essential books (text books)**

Scott Brown Otolaryngology,HeAD And Neck Surgery
Ballenger’Otorhinolaryngology,Head and Neck Surgery
Cummings Otolaryngology,HeAD And Neck Surgery
Current Diagnosis and treatment, Otolaryngology, Head and Neck surgery
D’hingra Diseases of Ear, Nose and throat
Basic OtorhinoLaryngology a Step By step learning guide
Essential K.J. Lee Otorhinolaryngology,Head and Neck Surgery

6.3- **Recommended books**

Prof. Dr. Abdel- Latif El-Rasheedy
Scott Brown Otolaryngology,HeAD And Neck Surgery
Ballenger’Otorhinolaryngology,Head and Neck Surgery

6.4- **Periodicals, Web sites, etc**
7- Other Resources / Facilities required for teaching and learning achieving the above ILOs

(for example, Field trips) ... NO

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

Course coordinator:
Name..........................................................................................................................................................
Signature...................................................................................................................................................
Date .........................................................................................................................................................

Head of Department of................................................................................................................................
Name............................................................................................................................................................
Signature........................................................................................................................................................
Date ..............................................................................................................................................................
Course specification of Audiology for MD Phoniatrics

University: Menoufia

Faculty of Medicine

A- Administrative Information

1) Course Title: Audiology

2) Code: ENT837

3) Department giving the course: Otorhinolaryngology Department

4) Programon which the course is given: Phonetics MD degree

5) Department offering the programme: Otorhinolaryngology Department

6) Semester: 2\textsuperscript{nd} part

7) Date of specification/revision: 2010

8) Date of approval by Departmental and Faculty Council: 2010

9) Credit hours: 4

\begin{align*}
\text{Lecture: } & 2 & \text{Tutorial: } & \text{Practical: } & 2 & \text{Other: } & \text{Total: } & 4
\end{align*}

B- Professional Information

1 – Overall aims of course:

At the completion of this course students will have an understanding of the basics of audiology:
1. Basic audiological testing
2. Types of hearing aids
3. Assessment and auditory rehabilitation of hearing disorders
2 - Intended learning outcomes of course (ILOs):

a- Knowledge and Understanding:

*By the end of the course the candidate will be able to:*

a1) Chose the appropriate audiological test according the age
a2) Describe the principles of various audiological tests
a3) Describe the types of hearing aids
a4) Describe the program of assessment and rehabilitation of cochlear implantation

b- Intellectual skills

*By the end of the course the candidate will be able to:*

b1) Interpret the results of audiological testing.
b2) Identify the appropriate auditory habilitation/rehabilitation program for a hearing impaired patient.

c- Professional and practical skills

*By the end of the course the candidate will be able to*
c1- Carry out Auditory training program.
c2- Assess a candidate for a cochlear implannation.

d- General and transferable skills:

*By the end of this course the candidate should be able to:*
d1-Research and gather data and follow recent advances in medical science.
d2-Use proper communication skills in dealing with patients and relatives.
d3- Set priorities in dealing with patients according to their health condition
**Intended learning outcomes of course (ILOs)**

1. Hearing loss in children (definition, types and causes)
2. Impact of hearing loss on children
3. Identification of hearing loss in children
4. Hearing tests in children
5. Management of hearing loss in children (A. Amplification)
6. Management of hearing loss in children (B. Rehabilitation)
7. Management of hearing loss in children (C. Rehabilitation of central hearing loss)

**Credit hours: 4** (Lecture: 2 Tutorial: Practical: 2)

### 3 – Content

<table>
<thead>
<tr>
<th>Topic</th>
<th>ILOs</th>
<th>Hours for lectures</th>
<th>Hours for tutorial</th>
<th>Hours for practical</th>
<th>Total no. of hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing loss in children (definition, types and causes)</td>
<td>a1,a2,b1,d1,d2,d3</td>
<td>4</td>
<td></td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Impact of hearing loss on children</td>
<td>a1,a2,b1,d1,d2,d3</td>
<td>5</td>
<td></td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Identification of hearing loss in children</td>
<td>a1,a2,b1,d1,d2,d3</td>
<td>4</td>
<td></td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Hearing tests in children</td>
<td>a1,a2,b1,d1,d2,d3</td>
<td>5</td>
<td></td>
<td>10</td>
<td>15</td>
</tr>
<tr>
<td>Management of hearing loss in children (A. Amplification)</td>
<td>a3,a4,b2,c1,c2,d1,d2,d3</td>
<td>4</td>
<td></td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Management of hearing loss in children (B. Rehabilitation)</td>
<td>a3,a4,b2,c1,c2,d1,d2,d3</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------</td>
<td>--------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Management of hearing loss in children (C. Rehabilitation of central hearing loss)</td>
<td>a3,a4,b2,c1,c2,d1,d2,d3</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>30</strong></td>
<td><strong>60</strong></td>
<td><strong>90</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total credit hours</strong></td>
<td></td>
<td><strong>2</strong></td>
<td><strong>2</strong></td>
<td><strong>4</strong></td>
<td></td>
</tr>
</tbody>
</table>

1 credit hour = 15 hours theoretical
1 credit hour = 30 hours practical

4 **Teaching and learning methods**

4.1 Lectures
4.2 Practical lessons

5 **Student assessment methods**

5.1 Written exam (3 hrs) to assess (a1, a2, a3)
5.2 Oral exam to assess (b1, b2, d1, d2, d3)
5.3 Clinical exam to assess (c1, c2)

- **Assessment schedule**
  Assessment is done within the exams of 2nd part

6 **Weighting of assessments**

  Written examination 60%
  Oral examination 20%
  Clinical examination 20%
  Total 100%

  Any formative only assessments:
7- List of references

7.1- Course notes
Prof, Dr. Tarek Abdel- Fattah.

7.2- Essential books (text books)
Handbook of clinical Audiology, Jack Katz
Handbook of auditory evoked potential.
Hearing Aids, Dellon
Auditory Diagnosis, Michel Valenti
Practical Management f the balance disorder patients
Assessment and Management of central auditory processing disorders in the educational setting.

7.3- Recommended books

7.4- Periodicals, Web sites, etc

8- Other Resources / Facilities required for teaching and learning to achieve the above ILOs

Data show, computers.

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

Course coordinator:
Name........................................................................................................................................

........................................
Signature................................................................. Date

Head of Department
of........................................................................
Name........................................................................................................................................

............
Signature................................................................. Date ........................................
Attributes of the graduate:

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

1. Perfect the bases and methods of medical research.
2. Enrich his specialty through original medical research.
3. Apply analytical and critical methods when dealing with medical problem.
4. Merge medical knowledge to hypothesize new relations and explain pathogenesis.
5. Deeply oriented with the current medical problems, and up to date hypothesis in his specialty.
6. Detect professional problems and suggest innovative solutions.
7. Perfect large scale of professional skills in his specialty.
8. Adopt positive attitude towards the development of new modalities and methods of professional practice in his specialty.
9. Perfect use of technological tools needed in his practice,
10. Communicate and lead team in systematic and professional manner
11. Decision making through analysis of available information.
12. Effectively manage available resources, planning to increase it, and develop new resources.
13 Oriented with his role in community development, and environmental safety.

14 React in a professional manner reflecting his commitment towards impartiality, credibility, medical ethics, and responsibilities.

15 Commit to continuous self development and transfer of his medical experience to others.

a **Knowledge and Understanding:**

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

a1- The theories and principles, and up to dates in his specialty and related sciences needed in his career.

a2- The principles, methods, ethics and various tools of medical researches.

a3- The ethical and legal principles of medical and professional practice.

a4- The principles of quality assurance in medical practice.

a5- The effect of medical practice on surrounding environment and how to develop and protect environment.

b **Intellectual Skills:**

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

b1- Analyze, and evaluate medical information to elicit new conclusions.

b2- Solve medical problem related to his specialty.

b3- Perform medical research to add new to his specialty.
b4- Argue, and discuss medical issues on evidence based manner.

c  **Professional and Practical Skills:**

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

c1- Perfect basic, and recent professional medical skills in his specialty.

c2- write and evaluate a professional medical report related to his specialty.

c3- Use recent technological tools to serve his career.

**d  General transferable skills:**

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

d1- Communicate effectively with his colleagues and patients.

d2- Use different learning resources to get knowledge and information.

d3 – Work in and lead team

d4- Time management
## (Annex2) Comparison between ARS & ILOs

<table>
<thead>
<tr>
<th>ARS</th>
<th>ILOS</th>
</tr>
</thead>
<tbody>
<tr>
<td>a1- The theories and principles, and up to dates in his specialty and related sciences needed in his career.</td>
<td>a1-Identify Basic Anatomy, pathology and physiology needed for understanding the etiology and pathogenesis of Phonetics disorders:</td>
</tr>
<tr>
<td></td>
<td>a2 – Define Diseases of which play a neuropsychiatry role in the pathogenesis of Phonetics disorders.</td>
</tr>
<tr>
<td></td>
<td>a5-Define Basis of special fields of ENT including plastic surgery of ear and nose and throat.</td>
</tr>
<tr>
<td></td>
<td>a6 – Name Basis of audiology which has an essential effect on the science of Phonetics</td>
</tr>
<tr>
<td>a2- The principles, methods, ethics and various tools of medical research.</td>
<td>a7- Apply the principles, methods, and ethics of medical research.</td>
</tr>
<tr>
<td>a3- The ethical and legal principles of medical and professional practice.</td>
<td>a8- Demonstrate the ethical and legal principles of medical and professional practice.</td>
</tr>
<tr>
<td>a4- The principles of quality assurance in medical practice.</td>
<td>a9- Approve the principles of quality assurance in medical practice.</td>
</tr>
<tr>
<td>b1- Analyze, and evaluate medical</td>
<td>b4- Analyze, and evaluate relevant</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>information to elicit new conclusions.</strong></td>
<td><strong>medical information to reach a diagnosis.</strong></td>
</tr>
<tr>
<td><strong>b2- Solve medical problem related to his specialty.</strong></td>
<td><strong>b5- Solve related medical problem depending upon data analysis.</strong></td>
</tr>
<tr>
<td><strong>b3- Perform medical research to add new to his specialty.</strong></td>
<td><strong>b6- Design, conduct a research plan in the area of specialty.</strong></td>
</tr>
<tr>
<td><strong>b4- Argue, and discuss medical issues on evidence based manner.</strong></td>
<td><strong>b7- Argue, and discuss relevant issues on evidence based manner.</strong></td>
</tr>
<tr>
<td><strong>c1- Perfect basic, and recent professional medical skills in his specialty.</strong></td>
<td><strong>c1- Formulate appropriate management plans for individual patients presenting with <strong>Phonetic</strong> disorders with special emphasis on difficult, rare cases.</strong></td>
</tr>
<tr>
<td><strong>c2- Write and evaluate a professional medical report related to his specialty.</strong></td>
<td><strong>c2- Perform surgical approaches for laryngeal and pharyngeal disorders needed for correction of <strong>Phonetic</strong> disorders.</strong></td>
</tr>
<tr>
<td><strong>c3- Expert practicing video laryngescopy and flexible nasopharyngescopy.</strong></td>
<td><strong>c3- Perform surgical approaches for laryngeal and pharyngeal disorders needed for correction of <strong>Phonetic</strong> disorders.</strong></td>
</tr>
<tr>
<td><strong>C3- Use recent technological tools to serve his career.</strong></td>
<td><strong>c4- Write and evaluate a professional medical report related to his specialty.</strong></td>
</tr>
<tr>
<td><strong>d1- Communicate effectively with his colleagues and patients.</strong></td>
<td><strong>d3- Communicate effectively with his colleagues and patients and their relatives.</strong></td>
</tr>
<tr>
<td><strong>D2- Use different learning resources</strong></td>
<td><strong>d2- Use different learning resources to get</strong></td>
</tr>
<tr>
<td>Knowledge and Information</td>
<td>Knowledge and Information</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td><strong>D3 – Work in and lead team.</strong></td>
<td><strong>d4- Manage scientific seminars with good time management</strong></td>
</tr>
<tr>
<td><strong>d1- Practice team working, and lead a team in specified professional job.</strong></td>
<td><strong>d4- Manage scientific seminars with good time management</strong></td>
</tr>
</tbody>
</table>
## Annex 3

**Program – Course ILOS Matrix**

<table>
<thead>
<tr>
<th>Course title</th>
<th>A1</th>
<th>A2</th>
<th>A3</th>
<th>A4</th>
<th>A5</th>
<th>A6</th>
<th>A7</th>
<th>A8</th>
<th>A9</th>
<th>B1</th>
<th>B2</th>
<th>B3</th>
<th>B4</th>
<th>B5</th>
<th>B6</th>
<th>B7</th>
<th>C1</th>
<th>C2</th>
<th>C3</th>
<th>C4</th>
<th>C5</th>
<th>C6</th>
<th>C7</th>
<th>C8</th>
<th>C9</th>
<th>D1</th>
<th>D2</th>
<th>D3</th>
<th>D4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pathology</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physiology</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuropsychiatry</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Phoniatrics</td>
<td>X</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Otorhinolaryngology</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
</tr>
<tr>
<td>Congenital</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td>x</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*web site: www.mfm2015.com  Tel: 048/2222731 - 048/2317508  Fax: 048/2317502 - 048/2317508*
<table>
<thead>
<tr>
<th>Disorder</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Audiology</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>