UNIVERSITY OF BAGHDAD
COLLEGE OF MEDICINE
DEPARTMENT OF ANATOMY

HUMAN STRUCTURE AND FUNCTION – 3
MODULE
Workbook 2014-2015

Moderator: Professor Nawfal K. Al-Hadithi

Assessor: Dr. Mahmood Mish'al
INTRODUCTION:

This handbook contains much of the information which the student might need concerning this course in relation to the theory lectures, & the practicals of HSF3 module, in addition to the way of mark calculation & assessments done in this module.

The module is concerned in delivering knowledge in the Gross & Functional Anatomy & Embryology for the head, neck & back regions both in theory (LGT) & practical sessions in the dissecting room on real body prosections & on virtual anatomy tables, with discussion of some related topics with students especially concentrating on the clinical application of these knowledge (How can the student use these knowledge in the medical practice).

Every effort will be available to solve student's problem & to reply their questions in this module.
**Aims of the module:**

The module aims at building the knowledge of the student in the Embryology & Gross & Functional Anatomy of the Head, Neck & Back, with correlation to some clinical conditions as related to the Anatomy of the region concerned.

**Objectives of the module:**

1. To describe the bone structure & articulations in the axial skeleton.
2. To define major regions in the head & neck.
3. To describe an introductory anatomy for specialized regions that will be discussed in more detailed way with other specialties (like the ear, nose, throat & orbit).
4. To explore major neurovascular routes in the region.
5. To describe in brief the embryology of the head & neck.
6. To correlate these knowledge to some clinical cases when required.

**The teaching staff:**

1- Professor Nawfal K. Al-Hadithi.
2- Professor Malak A. Taha
3- Assistant prof. Kais A. Hussein
4- Assistant Prof. Ma'an H. Hussein
5- Assistant lecturer Mahmood Mish'al
6- Assistant lecturer Esam Tarek
7- Dr. Ahmed Sa'ad
### LGT theory lectures in HSF3 module

<table>
<thead>
<tr>
<th>L. No.</th>
<th>Title</th>
<th>Objectives</th>
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</thead>
</table>
| 1      | o Skull | o To define the main features of skull & cervical vertebrae.  
|        | o Cervico-cranial articulation | o To relate different regions in the head to each other  
|        | | o To identify types of joints in this region. |
| 2      | o Fascia of the neck  
|        | o Posterior cervical triangle | o To define fascial compartments of the neck.  
|        | | o To describe the borders & main contents of the posterior cervical triangle.  
|        | | o To relate subclavian vessels & brachial plexus to the region. |
| 3      | Anterior cervical triangle, carotid sheath | o To describe the anterior cervical triangle.  
|        | | o To list the contents of this triangle.  
|        | | o To describe the carotid sheath & its relations. |
| 4      | Anterior cervical triangle, thyroid gland | o To describe the anatomy of thyroid gland with important clinically related points.  
|        | | o To define the parathyroids.  
|        | | o To relate the main vessels & nerves in the region to these structures. |
| 5      | o The face  
|        | o The scalp | o To define facial muscles in general.  
|        | | o To follow the course of facial nerve in the region.  
|        | | o To follow the course of trigeminal nerve in the region.  
|        | | o To list scalp layers.  
|        | | o To list some clinically related points. |
| 6      | o Salivary glands  
|        | o Parapharyngeal area | o To define the borders & main contents of the infratemporal fossa.  
|        | | o To list major salivary glands.  
|        | | o To identify the main structures related to salivary glands. |
| 7      | o The nose  
|        | o The nasopharynx | o To describe the external nose.  
|        | | o To define the nasal cavity & its contents.  
|        | | o To list the paranasal sinuses.  
|        | | o To describe the nasal part of the pharynx. |
| 8      | o The Larynx  
|        | o The hypopharynx  
|        | o The oropharynx | o To describe oro- & hypo-pharynx  
|        | | o To describe the laryngeal skeleton & membranes.  
|        | | o To analyze the function of laryngeal parts in relation to its anatomy. |
| 9      | Orbit | o To describe the orbit.  
|        | | o To relate it to other regions in the head.  
|        | | o To list its main contents. |
| 10     | o The external ear  
|        | o The middle ear | o To define external & middle ears.  
|        | | o To list major contents in the middle ear. |
| 11     | o Lymphatic drainage  
|        | o Parasympathetic system  
|        | o TM joint | o To list groups of lymph nodes in the head & neck  
|        | | o To list parasympathetic foci in the region  
|        | | o To describe the TM joint |
| 12     | Osteology, arthrology & mycology of the back | o To describe vertebral column in various regions  
|        | | o To describe lumbar fascia  
|        | | o To list back muscles |
# Practical sessions in HSF3 module

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<thead>
<tr>
<th>P No.</th>
<th>Title</th>
<th>Objectives</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Osteology of H &amp; N</td>
<td>- To define various skull bones.</td>
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<td></td>
<td></td>
<td>- To define major skull features.</td>
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<td></td>
<td></td>
<td>- To distinguish atypical from typical vertebrae.</td>
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<tr>
<td>2</td>
<td>Posterior triangle</td>
<td>- To demonstrate the borders, roof &amp; floor of the posterior triangle.</td>
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<td></td>
<td></td>
<td>- To demonstrate the subclavian artery, parts &amp; branches.</td>
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<td></td>
<td></td>
<td>- To define main nerves in the triangle.</td>
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<tr>
<td>3</td>
<td>Anterior triangle 1</td>
<td>- To demonstrate the borders, roof &amp; floor of the anterior triangle.</td>
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<td></td>
<td></td>
<td>- To explore the contents of carotid sheath.</td>
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<td>4</td>
<td>Anterior triangle 2</td>
<td>- To define the thyroid gland.</td>
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<td></td>
<td></td>
<td>- To explore thyroid arteries &amp; related nerves.</td>
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<td></td>
<td></td>
<td>- To demonstrate nerves in the region.</td>
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<td>5</td>
<td>Scalp &amp; face</td>
<td>- To follow the course of facial vessels &amp; nerve.</td>
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<td></td>
<td></td>
<td>- To explore main branches of trigeminal nerve.</td>
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<td></td>
<td>- To localize facial muscles.</td>
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<td>6</td>
<td>Infratemporal fossa</td>
<td>- To explore mastication muscles.</td>
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<td></td>
<td></td>
<td>- To follow the main branches of maxillary artery.</td>
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<td></td>
<td></td>
<td>- To explore main branches of mandibular nerve.</td>
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<td>7</td>
<td>Oral region &amp; pharynx</td>
<td>- To demonstrate tongue extrinsic muscles.</td>
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<td></td>
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<td>- To explore main structures in the floor of the mouth.</td>
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<td></td>
<td></td>
<td>- To define pharyngeal wall.</td>
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<td></td>
<td>- To define main contents in the various parts of the pharynx.</td>
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<td>8</td>
<td>Larynx</td>
<td>- To define laryngeal cartilages, membranes &amp; muscles.</td>
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<td></td>
<td>- To explore the main vessels &amp; nerves in the region.</td>
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<td>- To relate the larynx to the surrounding structures.</td>
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<td>9</td>
<td>Orbit</td>
<td>- To explore the main contents of the orbit.</td>
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<td></td>
<td>- To relate this region to the surroundings.</td>
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<tr>
<td>10</td>
<td>SGLS</td>
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**Embryology:**

This will be given as three LGT lectures with the following titles:

1- Development of the head & neck I.
2- Development of the head & neck II.
3- Development of the skeletal system.
**Small group learning (SGL):**

At the end of each practical term, small group teaching sessions will be held depending on case scenarios derived from the material studied.

**General objectives of SGLs:**

1. To increase student self learning & communication with each other.
2. To encourage students to interchange their thoughts & ways of thinking.
3. To direct students to the ways that they can get use of this module in their future clinical practice.
4. To examine some sectional radiological films (MRI & CT scans) as related to their gross knowledge.
5. To assess the students concerning their way of thinking & behavioral states.

**Tutorials:**

At the beginning of each practical session, a brief tutorial in which a case scenario is prepared (almost fitting the subject of that session) will be discussed with students for about 20 minutes time.

This will raise the attention of the student to the major points which he should be care of during that session (and related ones).

*The participation of students in discussion & their attitude & way of thinking in the workshops & the tutorials will be taken in consideration during the continuous progress evaluations of the module.*
**Assessment:**

Assessment of the student will be done depending on the following criteria:

- **Continuous progress assessment;** in which the student's knowledge, behavior, attendance, the way of thinking … will be evaluated on intervals throughout the academic year in the practicals, tutorials & SGLs, 10 marks will be awarded according to this evaluation.

- **End module exam;** done at the end of each module similar to the final exam, this exam ranks 10 marks of the total 100 of the module.

- **A formative theory exam** will be held in the middle of the module in order to let students expose to the theory exams & to assess the pattern & amount of their learning in the course in order to diagnose pitfalls & get rid of them as possible.

- **The final summative exam** will be divided into two sets:

  1- **Practical slide exam;** will be held at the end of the practical term. Assessment includes cadaveric spots, bones, X-rays of normal bones & other radiological films might be used together with Embryology slides. 20 marks will be given for this exam.

  2- **Theory exam;** as case scenarios & multiple choice questions, 60 marks will be given to this exam.
**Recommended readings:**

Students can get benefit from the wide variety of Anatomy books, atlases & articles online. The following books in their latest versions are mostly recommended:

4- McMinn’s Clinical Atlas of Human Anatomy.

**Advice:**

Students who have interest in Anatomy can consult the moderator or assessor or any of the teaching staff to direct them to do certain researches (optional), & this will have a reflection on the mark of CPA.

*Professor Dr.*

*Nawfal K. Al-Hadithi*

*The moderator of HSF modules*