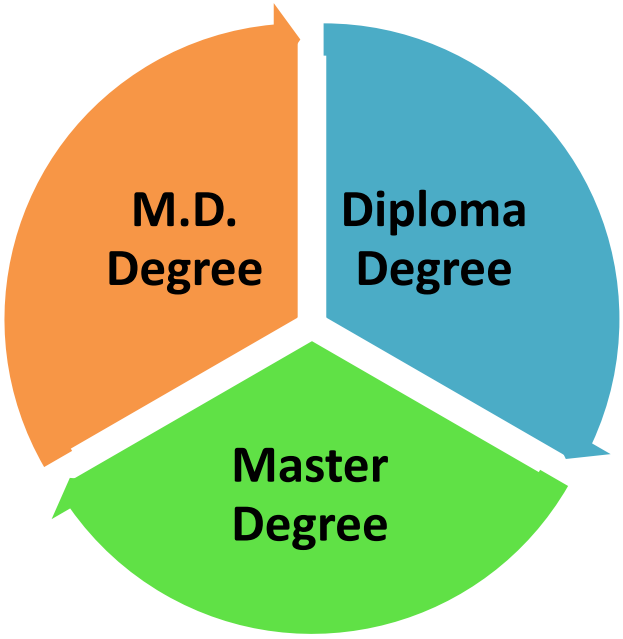
POSTGRADUATE STUDENTS



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- **Diploma degrees Perquisites and Requirements**
  - The candidate should have M. B.B. Ch from Al-Azhar University or other corresponding University.
  - The candidate should attend the courses which are approved by the department of anatomy and by the faculty board.
  - The candidate should pass the evaluation examination for the degree.
  - The candidate should have 60 % in each test separately to pass the evaluation examination
  - The non Al-Azhar graduate should attend a course in Islamic study

2

- **Master degrees Perquisites and requirements**
  - The candidate should have M. B.B. Ch from Al-Azhar University or other corresponding University.
  - The candidate should attend the courses which are approved by the department of anatomy and by the faculty board.
  - The candidate should pass the evaluation examination for the degree.
  - The candidate should have 60 % in each test separately to pass the evaluation examination.
  - The non Al-Azhar graduate should attend a course in Islamic study

3

- **M.D. DEGREES PERQUISITES AND REQUIREMENTS**
  - The candidate should have M. Sc. In the specialty with grade “good” at least from Al-Azhar University or other corresponding University.
  - The candidate wishing to register for MD degree in Anatomy and Embryology should have a M. Sc. In anatomy and embryology with grade “good” at least.
  - The candidate should attend the courses which are approved by the department of anatomy and by the faculty board.
  - The candidate should submit a thesis within two years at least. This thesis should be accepted by a board in a public discussion.
  - The candidate should pass the evaluation examination for the degree.
  - The candidate should have an approval for undertaking the evaluation examination one month before its due time, after accepting his thesis.
  - The candidate should have 60 % in each test separately to pass the evaluation examination.
  - The candidate should not be registered for the degree more than 4 years without accepting his thesis, but the faculty board can extend this period for no more than another 2 years after the approval of the supervisor and departments board.
  - The non Al-Azhar graduate should attend a course in Islamic study.

COURSE SPECIFICATIONS FOR

Diploma degrees

Anaesthesia and Surgery

NEURO-ANATOMY:

- Spinal cord (general features, segments, grey and white matter, meninges & blood supply).
- Brain (general features, functional areas and nuclei, meninges, dural venous sinuses, ventricular system, CSF formations and circulation)
- Brain stem (general features, vital centres and cranial nerves nuclei)
- Vertebral canal and intervertebral foramina and meningeal spaces.
- Cranial nerves, peripheral nerves and nerve plexuses.
- Tractology and autonomic nervous system
- Body dermatomes

HEAD AND NECK:

- Anatomy of the nose, mouth, tongue and palate.
- Anatomy of the pharynx, larynx, trachea, bronchi and the bronchial tree.

THORAX:

- Anatomy of the pleura, lungs and pulmonary segments.
- Anatomy of the diaphragm.
- Thoracic aorta (parts, relations and branches).

LIMBS:

- Superficial veins of upper limb.
- Superficial veins of lower limb.

Methods of Assessment:
Examination: Tree hours paper (Anatomy, Physiology and Pharmacology), and oral examination
Allocated marks for Anatomy: Written (50) Oral (50) total (100)

Ear Nose and Throat (07-700-ENT-Dp)

Head and Neck:

- Osteology of the skull
- Anatomy of nose and paranasal sinuses.
- Anatomy of palate.
- Anatomy of the mouth and tongue.
- Anatomy of the pharynx.
- Anatomy of the larynx.
- Meninges, CSF circulation.
- Dural venous sinus.
- Facial, glossopharyngeal, Vagus and hypoglossal nerves.
- Carotid system of arteries.
- Jugular veins.
- Fascia of the neck and facial spaces.
- Lymphatic drainage of the head and neck

Neuroanatomy:

- Pathway of hearing and equilibrium.
- Olfactory pathway.
- Taste pathway.

Embryology:

- Pharyngeal apparatus
- Development and anomalies of the face, nose and palate.
- Development and anomalies of the tongue.
- Development and anomalies of the ear.

Methods of Assessment:

Examination: one and half hour paper examination and oral examination
Allocated marks: Written (50) Oral (50) total (100)

Ophthalmology (07-700-Oph-Dp)

- Anatomy of bony orbit and paranasal sinuses.
- Anatomy and histology of the eye ball.
- Ocular appendages.
- Eye lids.
- Lacrimal apparatus.
- Conjunctiva.
- Extra-ocular muscles.
- Orbital nerves.
- Visual pathway.
- Orbital autonomic nervous system.
- Orbital vessels.
- Development of eye and its appendages.

Methods of Assessment:
Examination: one and half hour paper examination and oral examination
Allocated marks: Written (50) Oral (40) total (90)

Oral and Dental Medicine (07-700-Dent-Dp)

(A) Head and Neck

- Anatomy of the skull, mandible and cervical vertebrae
- Anatomy of scalp and face.
- Tempromandibular joint (TMJ)
- Temporal and infra-temporal fossae and their contents
- Cranial cavity (formation, meninges and Dural venous sinuses).
- Salivary glands
- Oral cavity and pharynx
- Triangles of the neck (posterior, anterior and suboccipital triangles).
- Cranial nerves (V,VII, IX, XII)
- Larynx
- Sympathetic and para-sympathetic ganglia of the head and neck

(B) Embryology

- Development of the skull and mandible
- Development of the pharyngeal arches
- Development of the Oral Cavity (Palate and Tongue)
- Development of the face

Methods of Assessment:
Examination: 3 hours paper examination and oral examination
Allocated marks: Written (70) Oral (30) total (100)

Physical Medicine (07-700-Rheu-Med-Dp)

- Joints of limbs and biomechanics.
- Muscles of limbs and trunk.
- Nerves of limbs and plexuses.
- Joints of the vertebral column, curves, movements and function.
- Spinal cord and spinal nerves

Methods of Assessment:
Examination: one and half hour paper examination, oral and practical examination
Allocated marks: Written (25) Oral (25) total (50)

COURSE SPECIFICATIONS for

MASTER DEGREES

Anaesth-Surg-Ms07-700

NEURO-ANATOMY:

- Spinal cord (general features, segments, grey and white matter, meninges & blood supply).
- Brain (general features, functional areas and nuclei, meninges, dural venous sinuses, ventricular system, CSF formations and circulation)
- Brain stem (general features, vital centers and cranial nerves nuclei)
- Vertebral canal and intervertebral foramina and meningeal spaces.
- Cranial nerves, peripheral nerves and nerve plexuses.
- Tractology and autonomic nervous system
- Body dermatomes

HEAD AND NECK:

- Anatomy of the nose, mouth, tongue and palate.
- Anatomy of the pharynx, larynx, trachea, bronchi and the bronchial tree.

THORAX:

- Anatomy of the pleura, lungs and pulmonary segments.
- Anatomy of the diaphragm.
- Thoracic aorta (parts, relations and branches).

LIMBS:

- Superficial veins of upper limb.
- Superficial veins of lower limb.

Methods of Assessment:
Examination: one hour paper examination and oral examination
Allocated marks: Written (30) Oral (30) total (60)

Anaesthesia and Pain

(07-700-Anaesth-Surg-Ms)

NEURO-ANATOMY:

- Spinal cord (general features, segments, grey and white matter, meninges & blood supply).
- Brain (general features, functional areas and nuclei, meninges, dural venous sinuses, ventricular system, CSF formations and circulation)
- Brain stem (general features, vital centers and cranial nerves nuclei)
- Vertebral canal and intervertebral foramina and meningeal spaces.
- Cranial nerves, peripheral nerves and nerve plexuses.
- Tractology and autonomic nervous system
- Body dermatomes

HEAD AND NECK:

- Anatomy of the nose, mouth, tongue and palate.
- Anatomy of the pharynx, larynx, trachea, bronchi and the bronchial tree.

THORAX:

- Anatomy of the pleura, lungs and pulmonary segments.
- Anatomy of the diaphragm.
- Thoracic aorta (parts, relations and branches).

LIMBS:

- Superficial veins of upper limb.
- Superficial veins of lower limb.

Methods of Assessment:
Examination: one hour paper examination and oral examination
Allocated marks: Written (30) Oral (30) total (60)

Anatomy and Embryology

(07-700-Ant-Ms)

First part (Histology)

- General and special histological structures of the human body
- Histochemistry
- Immunohistochemistry
- Electron microscopic structures
- Methods of preparing the tissue for examination (Fixation, embedding….etc.).
- General and Special stains

First part (Embryology)

- General embryology and Special embryology
- Anomalies of the human body
- Practical study (preparing embryological sections at different embryonic periods, Especially in chick embryo)
- Histogenesis and teratogenesis
- I.V.F. and tissue culture.

Second part

- Theoretical and practical human anatomy
- Human embryology (if the first part had been histology)
- Comparative anatomy
- Applied and surgical anatomy

Methods of Assessment:

1) First part:

Examination: Three hours paper, Practical and oral examination
Allocated marks: Written (200) Practical (200) Oral (200) total (600)

2) Second part:

Examination: Two papers (three hours each), Practical and oral examination
Allocated marks: Written (300 for each paper) Practical (400) Oral (400) total (1400)

Audiology

(07-700-Aud-Ms)

Head and Neck:

- Osteology of the skull
- Anatomy of nose and para-nasal sinuses.
- Anatomy of palate.
- Anatomy of the mouth and tongue.
- Anatomy of the pharynx.
- Anatomy of eth larynx.
- Meninges, CSF circulation.
- Dural venous sinus.
- Facial, glossopharyngeal, Vagus and hypoglossal nerves.
- Carotid system of arteries.
- Jugular veins.
- Fascia of the neck and facial spaces.
- Lymphatic drainage of the head and neck

Neuroanatomy:

- Pathway of hearing and equilibrium.
- Olfactory pathway.
- Taste pathway.

Embryology:

- Pharyngeal apparatus
- Development and anomalies of the face, nose and palate.
- Development and anomalies of the tongue.
- Development and anomalies of the ear.

Methods of Assessment:
Examination: one hour paper examination and oral examination
Allocated marks: Written (75) Oral (75) total (150)

Chest

(07-700-Ches-Med-Ms)

Chest wall and thoracic cavity:

- Thoracic cage
- Intercostal muscles and blood vessels.
- Intercostal nerves and anatomical basis of intercostal nerve block.
- Anatomy of diaphragms & respiratory muscles and respiratory movement.
- Anatomy of the mediastinum (divisions and structure arrangement)

Thoracic viscera:

- Anatomy of the pleura and the lungs.
- Respiratory passages:
- Nose and para-nasal sinuses.
- Pharynx
- Larynx
- Trachea, bronchi and Broncho-pulmonary segments.
- Thoracic aorta (parts, relations and branches)
- Thoracic duct and lymphatic drainage of the thorax.
- Inferior vena cave, azygos venous system.
- Esophagus.

Embryology:

- Development and anomalies of pleura, lungs, Trachea and bronchial tree.

Methods of Assessment:
Examination: one hour paper examination and oral examination
Allocated marks: Written (50) Oral (50) total (100)

Ear Nose and Throat (07-700-ENT-Ms)

Head and Neck:

- Osteology of the skull
- Anatomy of nose and para-nasal sinuses.
- Anatomy of palate.
- Anatomy of the mouth and tongue.
- Anatomy of the pharynx.
- Anatomy of eth larynx.
- Meninges, CSF circulation.
- Dural venous sinus.
- Facial, glossopharyngeal, Vagus and hypoglossal nerves.
- Carotid system of arteries.
- Jugular veins.
- Fascia of the neck and facial spaces.
- Lymphatic drainage of the head and neck

Neuroanatomy:

- Pathway of hearing and equilibrium.
- Olfactory pathway.
- Taste pathway.

Embryology:

- Pharyngeal apparatus
- Development and anomalies of the face, nose and palate.
- Development and anomalies of the tongue.
- Development and anomalies of the ear.

Methods of Assessment:
Examination: 3 hours paper examination and oral examination
Allocated marks: Written (80) Oral (80) total (160)

General Medicine (07-700-Med-Ms)

Neuro-anatomy:

- Anatomy of the spinal cord.
- Arterial supply of the spinal cord. - Arterial supply of the cerebrum.
- Arterial supply of the cerebellum. - Anatomy of the internal capsule.
- Tracts:
- Pyramidal tract, Spino-thalamic tract, Gracile and cuneate tracts.
- Spino-cerebellar tract. & Spinal reflex arc.
- Sympathetic and parasympathetic systems.
- Dermatomes

Head and neck.

- Thyroid gland.
- Salivary gland.
- Carotid vessels.
- Muscles of eye.
- Cranial nerves (3, 4, 5, 6, 7, 10, 11, and 12).
- Muscles of the neck.

Abdomen:

- Surface anatomy of abdominal organs.
- Peritoneum.
- Blood supply of the gut.
- Diaphragm.
- Autonomic supply of the abdomen.

Thorax:

- Surface anatomy of thoracic organs.
- Thoracic organs : heart , lungs , esophagus , trachea & bronchi
- Mediastinum & Diaphragm.
- Blood supply and Lymph drainage of thorax.

Methods of Assessment:
Examination: one and half hour paper examination and oral examination
Allocated marks: Written (15) Oral (15) total (30)

General Surgery (07-700-Surg-Ms)

Head and neck:

- Anatomy of the scalp.
- Thyroid gland and related laryngeal nerves.
- Salivary glands. and pituitary gland
- Anatomy of the tongue.
- Cervical fascia and fascial spaces of the neck.
- Triangles of the neck (anterior, posterior and suboccipital).
- Vascular blood supply of the head and neck
- Lymphatic drainage of head and neck.
- Applied surgical and radiological anatomy

Abdomen and pelvis:

- Anatomy of anterior abdominal wall (Muscles, Abdominal regions and types of Hernias).
- External genital organs.
- Anatomy of the diaphragm and subphrenic spaces.
- Peritoneum (layers, compartments and recesses)
- Abdominal aorta (course, relations and branches), and I.V.C.
- Blood supply of the gastrointestinal tract. Portal vein and portosystemic anastomosis.
- Anatomy of liver and biliary system. Pancreas and spleen.
- Anatomy and anomalies of oesophagus, stomach, duodenum, intestine, rectum and anal canal.
- Inferior vena cava, azygos venous system and jugular veins.
- Perineum (boundaries and spaces).

- Topographical anatomy, transverse sections and radiological anatomy

Upper Limb:

- Brachial plexus and axillary lymph nodes.
- Breast anatomy and pectoral muscles.
- Groups of muscles and their nerve supply
- Arteries, superficial and deep veins, and nerves of the upper limb.
- Detailed anatomy of the hand and retinaculae
- Fascia and fascial spaces of the hand.
- Lymphatic drainage of the upper limb
- Applied, surgical and radiological anatomy.

Lower Limb:

- Groups of muscles and their nerve supply
- Superficial and deep fascia and fascial spaces.
- Femoral triangle, sheath and hernia. Adductor canal and popliteal fossa
- Superficial and deep veins of the lower limb.
- Vessels and nerves of lower limb
- Lymphatic drainage of lower limb.
- Applied, surgical and radiological anatomy.

Methods of Assessment:
Examination: one and half hour paper examination and oral examination
Allocated marks: Written (60) Oral (60) total (120)

Gynaecology and Obstetrics (07-700Gyn-Ms)

Abdomen:

- Anatomy of anterior abdominal wall and related important regions & muscles.
- Urinary tract
- Anatomy of female external genital organs.
- Lumbar plexus and autonomic innervations of the abdominal viscera.
- Abdominal aorta and inferior vena cava.
- Abdominal vessels

Pelvis:

- Female bony pelvis and pelvic wall (shapes, parts and boundaries).
- Female genital organs:
- Uterus (Morphological anatomy, relations positions, support and vascular and nerve supply).
- Anatomy of the vagina, ovaries and Fallopian tubes.
- Urinary bladder, Ureters and female urethra.
- Internal iliac artery.
- Sacral plexus and autonomic innervations of the pelvic organs.
- Anatomy of the perineum (boundaries, and spaces).
- Surgical and radiological anatomy (C.T.) and (M.R.I.)

General embryology:

- Fertilization and implantation.
- Placenta, Amnion and umbilical cord.
- Twin pregnancy.

Special embryology:

- Development and anomalies of the female genital organs.
- Development of the urinary organs (kidney, urinary bladder and urethra).

Methods of Assessment:
Examination: 3 hours paper examination and oral examination
Allocated marks: Written (45) Oral (45) total (90)

Neuropsychiatric (07-700-Neur-Med-Ms)

- Spinal cord (external features, internal structures and blood supply).
- Cerebral hemispheres (external features and cortical centers).
- Blood supply of the brain.
- White matter of cerebrum.
- Internal capsule.
- Blood brain barrier, blood-CSF barrier and circulation of CSF.
- Basal ganglia.
- Autonomic nervous system.
- Limbic system and reticular formation.
- Types of speech.

Methods of Assessment:

Examination: 3 hours paper examination and oral examination

Allocated marks: Written (40) Oral (40) total (80)

Neurosurgery

(07-700-Neur-Surg-Ms)

Neuroanatomy:

- Spinal cord (external features, internal structures and blood supply).
- Cerebral hemispheres (external features and cortical centers).
- Blood supply of the brain.
- White matter of cerebrum.
- Internal capsule.
- Blood brain barrier, blood-CSF barrier and circulation of CSF.
- Ventricles of the brain.
- Basal ganglia.
- Autonomic nervous system.

Head and Neck

- Cranial nerves (deep origin, functional analysis and distribution).
- Vertebral column (anatomy curvatures and articulation).
- Cranial cavity (formation, meninges and dural venous sinuses).
- Anatomy of scalp and face.
- Triangles of the neck (posterior, anterior and suboccipital triangles).

Methods of Assessment:
Examination: one and half hour paper examination, oral and practical examination
Allocated marks: Written (30) Oral (45) total (75)

Ophthalmology (07-700-Oph-Ms)

- Anatomy of bony orbit and paranasal sinuses.
- Anatomy and histology of the eye ball.
- Ocular appendages.
- Eye lids.
- Lacrimal apparatus.
- Conjunctiva.
- Extra-ocular muscles.
- Orbital nerves.
- Visual pathway.
- Orbital autonomic nervous system.
- Orbital vessels.
- Development of the eye and its appendages.

Methods of Assessment:
Examination: 3 hours paper examination and oral examination
Allocated marks: Written (70) Oral (50) total (120)

Oral and Dental Medicine(07-700-Dent-Ms)

Head and Neck

- Anatomy of the skull, mandible and cervical vertebrae
- Anatomy of scalp and face.
- Tempromandibular joint (TMJ)
- Temporal and infra-temporal fossae and their contents
- Cranial cavity (formation, meninges and Dural venous sinuses).
- Salivary glands
- Oral cavity and pharynx
- Triangles of the neck (posterior, anterior and suboccipital triangles).
- Cranial nerves (V,VII, IX, XII)
- Larynx
- Sympathetic and para-sympathetic ganglia of the head and neck

Embryology

- Development of the skull and mandible
- Development of the pharyngeal arches
- Development of the Oral Cavity (Palate and Tongue)
- Development of the face

Methods of Assessment:
Examination: *3 hours paper examination and oral examination*
Allocated marks: *Written (60) Oral (20) Practical (20) total (100)*

Orthopaedics

(07-700-ortho-surg-Ms)

Head and Neck:

- Anatomy of the vertebral column (Textures and curves).
- Anatomy of the cervical vertebrae (general features and articulation)
- Anatomy of the vertebral artery.

Thoracic cage:

- Skeleton of the thorax and intercostal structures

Upper limb:

- Osteology of the upper limb.
- Brachial plexus (formations, distributions and effect of nerve lesion).
- Pectoral girdle and pectoral muscles.
- Axilla and axillary lymph nodes.
- Shoulder joint, elbow joint, wrist joint.

Lower limb:

- Osteology of the lower limb.
- Big nerves of the lower limb (course distributions and effect of lesion).
- Femoral triangle.
- Popliteal fossa.
- Hip joint, knee joint, ankle joint.
- Arches of the foot and their functions and factors support it.

Methods of Assessment:
Examination: *one and half hour paper examination and oral examination*
Allocated marks: *Written (50) Oral (50) total (100)*

Paediatrics

(07-700-Ped-Ms)

General embryology:

- Developmental periods
- Folding of the embryo (types, causes and results)
- Fetal membranes (Amnion and yolk sac).
- Placenta and umbilical cord.
- Fetal circulation.
- Pharyngeal apparatus

Special embryology:

- Development of urinary system
- (Kidney, ureter, urinary bladder, urethra)
- Development of the male and female genital ducts and gonads.
- Development of the face.
- Development of the nervous system.
- Development of gastrointestinal tube
- (Stomach and duodenum, intestine, rectum and anal canal).
- Development and anomalies of the liver and biliary system, and pancreas.
- Development and anomalies of the cardiovascular system.
- Development and anomalies of the respiratory system.
- Development and anomalies of the limbs.

Methods of Assessment:
Examination: *one and half hour paper examination, oral and practical examination*
Allocated marks: *Written (20) Oral (20) total (40)*

Physical medicine (07-700-Rheu-Med-Ms)

- Joints of limbs and biomechanics.
- Muscles of limbs and trunk.
- Nerves of limbs and plexuses.
- Joints of the vertebral column, curves, movements and function.
- Spinal cord and spinal nerves

Methods of Assessment:

Examination: *one and half hour paper examination and oral examination*

Allocated marks: *Written (40) Oral (40) total (80)*

Urology

(07-700-Uro-Surg-Ms)

- Bony pelvis and lumbar vertebrae
- Anterior and posterior abdominal wall
- Pelvic wall
- Blood supply of the abdominal and pelvic viscera
- Lumbar and sacral plexuses
- Autonomic supply of pelvic organs
- Urogenital system and other pelvic viscera
- Pelvic peritoneum
- Perineum
- Surgical and radiological anatomy
- Development of urogenital system

Methods of Assessment:

Examination: *one and half hour paper examination and oral examination*

Allocated marks: *Written (60) Oral (60) total (120)*

Al-Azhar University جـامـعـة الأزهـــر
Faculty of Medicine كـلـيـة الـطـب

Course Specification of Human AnatomyofMaster Degree

1- Data of the course:

Code of the course: **07-700-antMs**	Title of the course:Human Anatomy	Year: 2015 - 2016
Speciality:Human Anatomy	Number of teaching units: 1	Lectures: 48 Practical:24

2- Objectives of the cours	2\1 By the end of the course the post graduate students should be able to have theprofessional knowledge of the Human Anatomy and congenital anomalies

3- ILOs

A- Knowledge and understandir	By the end of the course, the student should be able to: A1. Enumerate recent advances in the natural history of Normal structure of different Parts of Human body A2. Enumerate recent advances in the causation of general congenital anomalies
B- Intellectual Skill	By the end of the course, the student should be able to: b1. Have the ability to innovate nontraditional solutions to identify the structure of different organs and systems and relations between them b2. Identify general developmental problems and find solutions. b3. Analyze reading of research and issues related to the general surgery.
C- Professional Skill	By the end of the course, the student should be able to: C1. Identify full data about normal human structure and arrangement of organs with full data about normal relation of all structures and organs of the body

D- General Skills	By the end of the course, the student should be able to: d1. Assess himself and identify of personal learning needs. d2. Use different sources to obtain information and knowledge. d3. Work in a team, and team's leadership in various professional contexts. d4. Learn himself continuously.

Course Content:

Topics	Lecture	Practical
1- Human Anatomy	4 8	2 4
1.1. Anatomy of lower limb		
1.2. Anatomy of upper limb		
1.3. Anatomy of thorax		
1.4. Anatomy of Head&Neck		
1.5. Anatomy of Abdomen		
1.6. Anatomy of Pelvis&Perinium		
1.7. Neuronanatomy		
1.8. Seurgicalanatomy		
		.

4- Methods of teachin	5.1-lectures. 5.2-practical lessons. 5.3- Assignments for the students to empower and assess the general and transferable skills
5- Methods of teaching of handica	N o t p r e s e n t

7- Students evaluation and assessment:

A- Method of assessmen	Method | What to measure of ILOs 1-Essay questions | Assess level of Knowledge and Understanding 2-Oral examinatio | Assess intellectual capabilities & attitude 3-practical examination
B- Time of assessmer	Continuous assessment during the course Fulfilment of course (April & November)
C- Allocated marks/Distributic	1-Written exam (130) 2-Oral exam (30) 3-Practical Examination. (40)

8- Teaching books, notebooks, and references:

- References:	**G r a y ' s A n a t o m y** The anatomical basis of clinical practice.41st ed, 2016 standring s, Elsevier . LONDON •

Course Coordinator:

Prof. Mohamed A.Autifi Head of the departments of Anatomy&Embryology

Signature:Date: 11-2016

Al-Azhar University جـامـعـة الأزهـــر
Faculty of Medicine كـلـيـة الـطـب

Course Specifications of EmberyologyforMaster Degr

4- Data of the course:

Code of the course: **07-700-antMs**	Title of the course: Emberyology	Year: 2015 - 2016
Speciality:Emberyology	Number of teaching units: 1	Lectures: 30 Practical:15

5- Objectives of the cours	2\1 By the end of the course the post graduate students should be able to have theprofessional knowledge of the Human Emberyology and congenital anomalies

6- ILOs

E- Knowledge and understand	By the end of the course, the student should be able to: A1. Enumerate recent advances in the natural history of general &special Emberyology . A2. Enumerate recent advances in the causation of general congenital anomalies
F- Intellectual Skil	By the end of the course, the student should be able to: b1. Have the ability to innovate nontraditional solutions to identify the causes of development of different congenital anomalies b2. Identify general developmental problems and find solutions. b3. Analyze reading of research and issues related to the general surgery.
G- Professional Skil	By the end of the course, the student should be able to: C1. Perform solutions and prevention to causes of development of different congenital anomalies

H- General Skill

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

d1. Assess himself and identify of personal learning needs.

d2. Use different sources to obtain information and knowledge.

d3. Work in a team, and team's leadership in various professional contexts.

d4. Learn himself continuously.

Course Content:

Topics	Lecture	Practical
1- General Emberyology	10	5
1.1. Cell division		
1.2. Cell response to injury .		
1.3. Layers of Emberyo		
1.4. Fertilization		
1.5. Stages of development		
1.6. Disturbances of cellular growth.		
1.7. Placenta		
1.8. Twins		
2- &special Emberyology	20	. 10
2.1. Development of GIT		
2.2. Development of Urinary tract		
2.3.Development of CVS		
2.4. Development of CNS		
2.5. Development of Genitalia		
2.6. Development of Lung		
7_Development of Pharengial Arches		

6- Methods of teaching	5.1-lectures. 5.2-practical lessons. 5.3- Assignments for the students to empower and assess the general and transferable skills
7- Methods of teaching of handica	Not present

9- Students evaluation and assessment:

D- Method of assessmen	Method: What to measure of ILOs 1-Essay questions: Assess level of Knowledge and Understanding 2-Oral examinatio: Assess intellectual capabilities & attitude 3-practical examination
E- Time of assessmer	Continuous assessment during the course Fulfilment of course (April & November)
F- Allocated marks/Distributic	1-Written exam (100) 2-Oral exam (50) 3-Practical Examination. (50)

10- Teaching books, notebooks, and references:

- References:	**Gray's Anatomy** The anatomical basis of clinical practice.41st ed, 2016 standring s, Elsevier . LONDON ●

Course Coordinator:

Prof. Mohamed A.AutifiHead of the departments of Anatomy&Embryology

Signature:Date:11-2016

MEDICAL DOCTORATE DEGREES
COURSE SPECIFICATIONS

Anatomy for M.D. Degree *of Anatomy and Embryology*

(07-700-Ant-Doc)

- Theoretical and practical human anatomy
- Human embryology
- Comparative anatomy
- Applied and surgical anatomy
- Evolution
- Statistics
- Genetics
- Histochemistry
- Embryology

Methods of Assessment:
Examination: *3 papers (3 hours each), practical and oral examination*
Allocated marks: *Written (100 for each paper) Practical (100) Oral (100) Total (500)*

Anatomy for M.D. Degree of Oral and Dental Medicine (07-700-Dent-Doc)

Embryology

- Development of the skull and mandible
- Development of the face
- Development of the Oral Cavity (Palate and Tongue)
- Development nasal cavities
- Development of the pharynx
- Development of the pharyngeal arches
- Derivatives of the pharyngeal pouches
- Derivatives of the pharyngeal grooves (clefts)
- Derivatives of the pharyngeal floor
- Development of the Thyroid Gland

Methods of Assessment:

Examination: *3 hours paper examination, oral and practical examination*
Allocated marks: *Written (50) Oral (20) Practical (30) total (100)*

POSTGRADUATE STUDENTS INTENDED LEARNING OUTCOMES (ILOS)

A- Essential Knowledge

By the end of this course, all postgraduate students should be able to:
1- **Describe** the basic anatomical structure of the different organs and systems of the body.
2- **Enumerate** the different branches of nerves and vessels.
3- **Explain** the different stages of human development and growth.
4- **Explain** the causes of the congenital anomalies.

B- Intellectual Skills

By the end of the course student will be able to:
1- **Make** critical judgments based on a sound knowledge.
2- **Interpret** the normal anatomical structures on plain radio-graphs, ultra-Sonography (US), computerized axis topography (C.T. Scan) and magnetic resonance images (MRI).
3- **Correlate** his knowledge in embryology with clinical findings caused by errors in development.
4- Recall the beginning, course termination and minute branches of different nerves and vessels as well as actions of the different muscles.
5- **Outline** the major clinical applications of different organ of the body.
6- **Predict** clinical signs of nerve injuries based on their normal anatomy.

C- Practical and professional skills

1- Draw diagrams for different organs, vessels and nerves.
2- **Draw** various body structures as reflected on the surface of the body.
3- **Design** an anatomical model for different organs.
4- **Learn** proper use of models.
5- **Assemble** the different internal structures in models.

D- General and transferable skills

By the end of the course the student will be able to:
1- **Use** internet in research and communications.

2- **Learn** how to work as part of a team.

3- **Recognize** the scope and limits of their role as students and the necessity to collaborate with others.

4- **Maintain** a professional image concerning behaviour, dress and speech.

Manage the time in their study and future career. -8

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Course Specification of Human Anatomyof Docratt Degree

7- Data of the course:

Code of the course: **07-700-antDoc**	Title of the course:Human Anatomy	Year: 2015 - 2016
Speciality:Human Anatomy	Number of teaching units: 1	Lectures: 48 Practical: 24

8- Objectives of the cours	2\1 By the end of the course the post graduate students should be able to have theprofessional knowledge of the Human Anatomy and congenital anomalies

9- ILOs

I- Knowledge and understandir	By the end of the course, the student should be able to: A1. Enumerate recent advances in the natural history of Normal structure of different Parts of Human body A2. Enumerate recent advances in the causation of general congenital anomalies
J- Intellectual Skill	By the end of the course, the student should be able to: b1. Have the ability to innovate nontraditional solutions to identify the structure of different organs and systems and relations between them b2. Identify general developmental problems and find solutions. b3. Analyze reading of research and issues related to the general surgery.
K- Professional Skill	By the end of the course, the student should be able to: C1. Identify full data about normal human structure and arrangement of organs with full data about normal relation of all structures and organs of the body

L- General Skills

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

d1. Assess himself and identify of personal learning needs.

d2. Use different sources to obtain information and knowledge.

d3. Work in a team, and team's leadership in various professional contexts.

d4. Learn himself continuously.

Course Content:

Topics	Lecture	Practical
1- Human Anatomy	48	24
1.1. Anatomy of lower limb		
1.2. Anatomy of upper limb		
1.3. Anatomy of thorax		
1.4. Anatomy of Head&Neck		
1.5. Anatomy of Abdomen		
1.6. Anatomy of Pelvis&Perinium		
1.7. Neuronanatomy		
1.8. Seurgicalanatomy		
		.

9- Methods of teaching	5.1-lectures. 5.2-practical lessons. 5.3- Assignments for the students to empower and assess the general and transferable skills
10- Methods of teaching of handi	Not present

11- Students evaluation and assessment:

G- Method of assessmen	Method | What to measure of ILOs 1-Essay questions | Assess level of Knowledge and Understanding 2-Oral examinatio | Assess intellectual capabilities & attitude 3-practical examination
H- Time of assessmer	Continuous assessment during the course Fulfilment of course (April & November)
I- Allocated marks/Distributic	1-Written exam (130) 2-Oral exam (30) 3-Practical Examination. (40)

12- Teaching books, notebooks, and references:

- References:	**Gray's Anatomy** The anatomical basis of clinical practice.41st ed, 2016 standring s, Elsevier . LONDON •

Course Coordinator:

Prof. Mohamed A.Autifi Head of the departments of Anatomy&Embryology

Signature:Date: 11-2016

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Course Specifications of EmberyologyforDoctorate Degr

10- Data of the course:

Code of the course: **07-700-ant MD**	Title of the course: Emberyology	Year: 2015 - 2016
Speciality:Emberyology	Number of teaching units: 1	Lectures: 24 Practical:12

11- Objectives of the	2\1 By the end of the course the post graduate students should be able to have theprofessional knowledge of the Human Emberyology and congenital anomalies

12- ILOs

M- Knowledge and understandi	By the end of the course, the student should be able to: A1. Enumerate recent advances in the natural history of general &special Emberyology . A2. Enumerate recent advances in the causation of general congenital anomalies
N- Intellectual Skill	By the end of the course, the student should be able to: b1. Have the ability to innovate nontraditional solutions to identify the causes of development of different congenital anomalies b2. Identify general developmental problems and find solutions. b3. Analyze reading of research and issues related to the general surgery.

O- Professional Skil	By the end of the course, the student should be able to: C1. Perform solutions and prevention to causes of development of different congenital anomalies
P- General Skill	By the end of the course, the student should be able to: d1. Assess himself and identify of personal learning needs. d2. Use different sources to obtain information and knowledge. d3. Work in a team, and team's leadership in various professional contexts. d4. Learn himself continuously.

Course Content:

Topics	Lecture	Practical
1- General Emberyology	1 0	1 0
1.1. Cell division		
1.2. Cell response to injury .		
1.3. Layers of Emberyo		
1.4. Fertilization		
1.5. Stages of development		
1.6. Disturbances of cellular growth.		
1.7. Placenta		
1.8. Twins		
2- &special Emberyology	1 4	. 14
2.1. Development of GIT		
2.2. Development of Urinary tract		
2.3.Development of CVS		
2.4. Development of CNS		
2.5. Development of Genitalia		
2.6. Development of Lung		
7_Development of Pharengial Arches		
	3 0	3 0

11- Methods of teach	5.1-lectures. 5.2-practical lessons. 5.3- Assignments for the students to empower and assess the general and transferable skills
12- Methods of teaching of han	N o t p r e s e n t

13- Students evaluation and assessment:

J- Method of assessmen	Method | What to measure of ILOs 1-Essay questions | Assess level of Knowledge and Understanding 2-Oral examination | Assess intellectual capabilities & attitude
K- Time of assessmer	Continuous assessment during the course Fulfilment of course (April & November)
L- Allocated marks/Distributic	1-Written exam (50) 2-Oral exam (25)

14- Teaching books, notebooks, and references:

- References:	**G r a y ' s A n a t o m y** The anatomical basis of clinical practice.41st ed, 2016 standring s, Elsevier . LONDON •

Course Coordinator:

Prof. Mohamed A.Autifi Head of the departments of Anatomy&Embryology

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POSTGRADUATES TEACHING TIMETABLE AND PROFESSORS RESPONSIBLE FOR:

No.	Professor	Specialty	Day
1	Prof Dr Mohamed Ali Abdel-Raheem	Ear, Nose, Throat and Audiology	Sunday
2	ProfDr Ahmed Mustafa Kamal	General Medicine	Monday
3	Prof Dr Mohamed Ahmad Ebada	Paediatric	Sunday
4	ProfDr Mohamed MokhtarAl-Assaly	General Surgery	Tuesday
5	Prof Dr Mahmoud Ibrahim Al-Najjar	Orthopaedic	Tuesday
6	ProfDr Ahmad Maher Ameen	Ophthalmology	Tuesday
7	Prof Dr Hussein FahmyEmara	Neurosurgery and Neuropsychiatry	Sunday
8	Prof Dr Gamal Sayed Desouki	Orthopaedic	Tuesday
9	ProfDr Abdel Ma'boudEmara	Paediatric	Sunday
10	Prof Dr WaheedYousry Mohamed	Anaesthesia and Pain	Monday
11	ProfDr Mohamed Al-HadyZahraan	Gynaecology and Obstetrics	Thursday
12	Prof Dr Mohamed Abdel Hamid Sowailam	Oral and Dental Medicine	Wednesday
13	ProfDr Ashraf Abdel-Rahman Abdel-Rahman	Gynaecology and Obstetrics	Monday
14	ProfDr Abdel-Aziz AbdallaShohda	Chest	Wednesday
15	Prof Dr Mustafa El-Sayed Al-Jizawy	Physical Medicine	Thursday
16	Prof Dr YahiaMahmoud Yousof	General Surgery	Tuesday
17	Prof Dr Ahmad Sun'AllahKhalifa	Urology	Thursday
18	Prof Dr Sobhy Hassan Ewais	Oral and Dental Medicine	Wednesday