



Mansoura University Faculty of Medicine

Log Book Anatomy Department 2016 - 2017



UDC UNIVERSITY DEVELOPMENT CENTER



ANATOMY LOG BOOK



Template for Course Specifications

UDC

رؤية كلية طب المنصورة

رؤية الكلية

أن نصنف إقليميا ونحقق التميز في التعليم الطبي والبحوث وخدمة المجتم

Vision

To be ranked regionally and to achieve excellence in medical education, research and community service. رسالة كلية طب المنصورة

رسالة الكلية

تقديم مستوى عال التميز في التعليم والتدريب الطبي وتقديم خدمات صحية متميزة للمجتمع عن طريق المراكز الطبية

المتخصصة وكذلك الإرتقاء بالبحث العلمى

Mission

To provide distinguished best practice in medical education and community health care services through our specialized medical centers and scientific research.

Basic information							
Program title	Bachelor of Medicine and Surgery; MB, Bch						
Department offering	Anatomy						
the course							
Academic year	First year						
Total teaching hours	Total: 9						
	Lectures: 5						
	Practical: 4						
Allocated marks	250 Marks						
Allocated duration	September through May						
Course director	Prof. Dr. Adel EL Hawary						
	Head of the Department						
Teaching staff	Professors : 12						
	Assistant professors: 3						
	Lecturers: 11						
	Assistant lecturers: 20						
	Demonstrators: 12						

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Weighing of assessment

	Percentage	Method	Weight		
Mid-year exam	200/	MCQ	40 marks		
	20%		(16%)		
Student activity		Power point	10 Marks		
		Presentation	(4%)		
Final exam	80%	Written exam	90 Marks		
			(36%)		
		MCQ exam	35 Marks		
			(14%)		
		Practical (OSPE)	50 Marks		
			(20%)		
		Oral exam (OSPE)	25 marks		
			(10%)		
Total	100%		250 Mark		

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Course Specification 2015/2016 For the Anatomy (first year)

Faculty: Medicine

Department: Anatomy and Embryology Department

Course Specification:

Programme (s) on which the course is given :M.B.B.Ch programDepartment offering the
course : Academic year /
level :Anatomy and Embryology
1st year
29/12/2015Date of specification
approval :9/12/2015

A- Basic information:

Title:	Medio	al Physiology				Code:	ANT.1
Lecture:	120	Tutorial:	Practical	120	Total:	240	

B- Professional Information:

<u>1 - Overall Aims of Course</u>

The overall aim of the course is to provide the students with the basic anatomical knowledge of

the normal structure of the human body at the level of organs and systems of the upper limb, thorax,

abdomen, pelvis and perineum and the normal growth and development of the different parts of the body and abnormalities that can occur on development of gastro-intestinal tract.

2 – Intended Learning Outcomes of Course (ILOs)

A - Knowledge and Understanding:

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

A 1. Describe the basic anatomical structure of the different organs and systems of the human body

A 2. Recognize the surface landmarks of the underlying bones, muscles and tendons, and internal structures (main nerves, vessels and viscera) of upper limb, thorax, pelvis and abdomen

A 3. Enumerate the different branches of nerves and vessels upper limb, thorax and abdomen

A 4. Explain the actions of the different muscles of the upper limb, thorax, pelvis and abdomen

A 5. Distinguish the movements of different joints and the muscles responsible for each movement of

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upper limb, thorax, pelvis and

abdomen.

A 6. Explain the clinical signs of nerve injuries of the upper limb based on their normal anatomy

A 7. Explain the different stages of human development

and growth. A 8. Explain the anatomical facts based on

their development

A 9. Discuss errors in development of the different parts of gastro-intestinal tract

A 10. Explain the causes of the congenital anomalies

B- Intellectual Skills:

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

B 1. Integrate the anatomical facts while examining the living subject in order to reach a proper

diagnosis

B 2. Relate the surface markings of different structures determine the position or course of internal

structures

B 3. Assemble the different internal structures

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- B 4. Correlate the anatomical knowledge with clinical signs seen in cases of nerve injuries of upper limb
- B 5. Correlate his knowledge in embryology with clinical findings caused by errors in development

P-Professional and Practical Skills:

By the end of the course, students should be

able to:

- C1- Perform an anatomical model for different organs
- C2- Draw diagrams for different organs, vessels and nerves.
- C3- Elicit the normal anatomical structures on radiographs, ultrasonography,
- C.T. scan and nuclear magnetic resonance images

T- General and Transferable Skills:

- By the end of the course, students should be able to:
- D1 Plan and work as a team.
- D2 Use internet and learn searching skills.
- D3 Recognize the scope and limits of their role as students and the necessity to collaborate with others

<u>3 – Contents:</u>

Topics	Number of	lectures	Practical
 <u>1.Introduction, general anatomy of:</u> 1. Anatomical planes & terminology 	1	1	-
2. Bones (types and general features).	1	1	-
3. Cardiovascular & Lymphatic systems.	2	2	-
4. Nervous system: anatomical organization	1	1	-
5. Joints (types).	2	2	-
6.Anatomical aspects of the skin.	1	1	-
7.General anatomy of the muscles	2	2	-
2.Upper limb: 1. Bones of upper limb (clavicle, scapula, humorous)	3	1	2
2. Pectoral region (breast, muscles and fascia).	3	1	2
3. Axilla (boundaries and contents).	2	1	1
4. Back (muscles and intermuscular spaces).	2	1	1
5. Shoulder region (muscles, vessels and nerves).	2	1	1
 Anterior & posterior compartment of arm (muscles, vessels and nerves). 	6	3	3
7. Cubital fossa (boundaries and contents).	3	1	2
8. Bones of forearm (general and special features of radius	3	1	2
9. Front of forearm (muscles, vessels and nerves).	6	2	4
10. Back of forearm (muscles, vessels and nerves).	6	2	4
11. Hand (muscles, retinaculum, vessels and nerves).	7	3	4
12. Joints (type, ligaments, movements, nerve supply, blood supply	7	3	4

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 Nerve injury (brachial plexus, ulnar, radial and median nerves injury). 	6	2	4

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14.Applied & radiological anatomy	8	2	6
 <u>3.Thorax:</u> 1. Chest wall (intercostal muscles, nerves and vessels). 	7	3	4
2. Mediastinum (boundaries and contents).	6	2	4
 Lung (shape, fissures, surface anatomy, blood and nerve supply) & Pleura (recesses, surface anatomy). 	8	4	4
4. Pericardium (function and sinuses)	3	1	2
 Heart, coronary arteries, venous drainage, nerve supply & surface anatomy. 	11	5	6
 Great vessels (arch of aorta, SVC, IVC and descending aorta) & 	12	6	6
7. Thoracic duct (length, coarse, drainage, relations).	2	1	1
8. Thoracic part of trachea (length, coarse, constrictions, blood, nerve supply and relations)	2	1	1
9. Thoracic part of esophagus (length, coarse, constrictions, blood, nerve supply and relations).	3	1	2
<u>4.Abdomen & Pelvis:</u> 1. Anterior Abdominal wall (skin, fascia, muscles, vessels and nerves).	5	2	3
2. Peritoneum (def., compartments, recesses, lesser sac).	5	2	3
3. Stomach (features, shape, blood nerve supply	2	1	1
4. Spleen (site, impressions blood nerve supply and applied anatomy) & Coeliac trunk (origin and branches splenic, hepatic and	3	1	2
5. Pancreas (features, relations, blood and nerve supply) & duodenum	6	2	4
6. Small intestine (length, parts, blood nerve supply and peritoneal covering).	4	1	3
7. Large intestine (features, parts, mesentery, blood and	9	4	5
8. Superior & inferior mesenteric vessels (beginning, coarse, relations, termination and branches).	4	2	2
9.Liver (site, lobes, features, relations, peritoneal covering, blood, nerve supply and surface anatomy).	9	5	4
10.Extrahepatic biliary system (common hepatic duct, cvstic duct, common bile duct).	3	1	2
11.Portal circulation (origin, coarse, termination and tributaries) &	3	3	-
12. Kidney (site, features, blood, nerve supply and surface	5	1	4

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13. Suprarenal gland (site, blood, nerve supply and	3	3	-
14. Ureter (length, constrictions, blood, nerve supply and surface marking).	2	1	1
15. Posterior abdominal Wall (muscles and fascia).	4	-	4
16. Bony pelvis (hip bone and sacrum).	2	1	1
17. Muscles of the pelvis (levator ani and coccyges muscles).	3	1	2
18. Pelvic viscera (rectum, anal canal, UB, urethra, vas deferens, uterus, vagina, prostate).	8	4	4
19. Blood supply of the pelvis (internal iliac vessels, anterior and posterior iliac vessels).	4	2	2
20. Pelvic peritoneum	3	2	1
21. Perineum: urogenital triangle and anal triangle, superficial and deep perineal pouches, ischiorectal fossa, pudendal nerve	5	3	2
<u>5.Embryology:</u> 1. Male genital system.	1	1	-
2. Female genital system.	1	1	-
3. Gametogenesis (spermatogenesis and oogenesis).	1	1	-
4. Ovarian cycle (duration and stages).	1	1	-
5. Menstrual cycle (stages and its duration).	1	1	-
6. First week of pregnancy	2	2	-
7. Second week of pregnancy.	2	2	-
8. Third week of pregnancy.	2	2	-
9. Fetal membranes.	2	2	-
10. Placenta (features and anomalies).	2	2	-
11. I wins.	1	1	-
12. Development and anomalies of G.I.T.	4	4	-
TOTAL	240	120	120

Content ILOs Matrix:

			Α							B C					D							
		1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	1	2	3	1	2	3
Introduction		•																				
a	n																					
Upper limb			٠	•	•	•	•					•	•	•	•			•	•	•	•	•
Thorax			٠	•	•	•						•	٠	•			•	٠	•	•	•	•
Abdomen				•								•	٠	•			•	•	•	•	•	•
a	n																					
Embryology									•	•	•									٠	•	•

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Teaching Methods	Description
Lecture	The lecturers are conducted using:
	a. Audiovisual aids through animations and
	diagrams
Practical lessons	The Egyptian students are divided into 10 groups.
	The Malaysian students are divided into 3 groups
	Each group is divided into three subgroups (A, B, C)
	The practical teaching is conducted using:
	a. Models
	b. Skeletons and individual bones
	c. Prossected specimens
	d. Plastinated specimens
	e. Plain X-ray films
	f. X-ray with dye films
	g. CT scan films
	h. MRI films
	i. Diagrams and posters
Self learning	Self learning through giving them certain topics to search, collect

4 – Teaching and Learning Methods

5 – Student Assessment Methods: Assessment ILOs matrix:

		Α								В				С			D				
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	1	2	3	1	2	3
Written	•	٠	•	ullet	•	•			•	•											
Examination																					
Structured Oral	ullet							ullet	•	•	ullet	•	ullet								
exam.																					
Objective			•	ullet		ullet							•					•			
structured																					
Practical exam.																					
Log book		•										•			•		•				
Activity (all over														•	•	•	•	•	•	•	•
the year)																					
Mid year exam	•	•	•	•	•																

Weight of the assessment:

Method of Assessment		Marks						
Final Written exam.	125 (3	125 (30% MCQ,70%short						
Objective structured Practical	50	50 75						
Structured Oral exam.	25	75	5070					
Midyear exam.	40							
Activity	5	50	20%					
Log book	5							
Total		250	100%					
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Template for Course Specifications

Assessment Schedule:

Method of assessment	Descriptio
Midyear written examination	Held at January, students should submit their Log
	books
Final written examination	At the end of the academic year for all students.
Objective structured Practical exam.	At the end of the academic year for all students.
Structured Oral exam.	Held by the end of the academic year.
Activity	Essay and presentation by the end of the
l a c h a c h	Students should submit their Log books to sit for
LOG DOOK	the

<u>6 – List of References</u>

6.1- Course Notes

otes Book authorized by department

6.2- Essential Books (Text Books) a

Cunningham's anatomy. b) Gray's anatomy. c) National books

7 – Facilities Required for Teaching and Learning

1. Dissecting room including cadavers, bones, plastic models and plastinated specimens.

- 2. Museum specimens and x-ray.
- 3. Visual aids.

Course Coordinator: Prof. Dr. Adel Abdel-Mohdy Al Hawary

Head of Department: Prof. Dr. Adel Abdel-Mohdy Al Hawary

List of references

Course notes: Mansoura department of anatomy books

Essential & recommended text books:

- Gray's Anatomy For Student
- Snell Rs: Clinical Anatomy By Regions
- Keith Moore, L and Persasud, TVN: The Developing Human
- Langman's Medical Embryology

Essential atlases:

- Netter's interactive Atlas of Anatomy
- Lippincott Williams Atlas of Anatomy
- Grant's Atlas of Anatomy
- Sobotta Atlas of Human Anatomy

Student selected activity (PowerPoint presentation)

Title:

Team members	Role of the student

Supervisors

- ♦ Dr:
- Assistant lecturer:
- Demonstrator:

Other activities

Student can participate in one of the following activities:

- 1. Making scientific models.
- 2. Making posters.
- 3. Making wall journals (anatomy should be the core of the contents).
- 4. Help in making anatomical jars.
- 5. Writing scientific article.
- 6. Participating in work shop when possible.
- 7. Giving short talk (presentation).
- 8. Working as models help demonstrating anatomical facts (example surface anatomy).
- Winning the best anatomical image (hand draw, digital photo, x-ray, MRI, US, CT, contrast, radioisotopes).
- 10. Any other activities which might have a good scientific effect).

NB: Departmental committee will look at the student work and will decide marks on that particular work.

1st term Curriculum

Week		Specimen/	At the end you should know (ILOs)
		jar	
			 Describe general features of clavicle & scapula and
	Α		humerus
			 Place these bones in anatomical position (right & left)
1			 Identify attachment of muscles of pectoral region
	В		&serratus anterior on bone
			Describe the movement produced by muscles
			 Attachment of Clavipectoral fascia and
			structures piercing it.
			 Identify muscles of the back & their attachment
	Α		 Describe the movement produced by muscles
			 Identify muscles in shoulder region & their attachment
2	В		 Describe the movement produced by muscles
			 List rotator cuff muscles
	Α		Identify boundaries of axilla & mention its contents
			 Describe general features of radius & ulna
3			 Place these bones in anatomical position (right & left)
			 Enumerate bones of hand
	В		 Identify muscles of arm & their attachment
			Describe the movement produced by muscles

Week		Specimen/	At the end you should know (ILOs)	
	1	jar		
			 Describe attachment of the superficial muscles of the 	
	Α		anterior compartment of forearm	
			Mention the action of the superficial muscles of anterior	
4			compartment of forearm	
			 Describe attachment & action of the deep muscles of the 	
	В		anterior compartment of forearm	
			 Describe attachment & relations of flexor retinaculum 	
			 Describe, boundaries, roof, floor & contents of cubital 	
			fossa	
			 Describe attachment of the superficial muscles of 	
	Α		posterior compartment of forearm	
			 Mention the action of superficial muscles of the 	
_			posterior compartment of forearm	
5			 Describe attachment & action of of the deep muscles of 	
			posterior compartment of forearm	
			 Describe attachments & relations of extensor 	
	В		retinaculum	
			 Describe boundaries, roof , floor & contents of 	
			anatomical snuffbox	
			 Enumerate muscle groups in the hand 	
			 Describe attachment of lumbericals & interossei 	
	Α		 Describe stages of brachial plexus 	
6			 Identify branches of different stages 	
			 Describe distribution of axillary N and its injury 	
			 Describe distribution of radial N and its injury 	
	В		Describe distribution of musculocutaneous N and its	
	injury			
 Describe distribution of median N and its inju 				
Describe distribution of ulnar N and its injury				

Week		Specimen/	At the end you should know (ILOs)
		jar	
			 Describe origin and termination and branches
	Α		of axillary and brachial arteries
			 Describe the anastomosis around scapula & surgical
7			neck of humerus& elbow
			 Describe origin & termination of radial and ulnar
	В		arteries in forearm & hand
			 Identify the ribs (typical or atypical)
	Α		 Place the ribs at anatomical position (right /left)
			 Identify the thoracic vertebra (typical or atypical)
			 General features of ribs & vertebra and sternum
8			 Identify intercostal muscles and their attachment
			 Define typical & atypical intercostal nerves
	В		 Identify course & distribution of typical intercostal
			nerves
	Α		 Number & Origin and termination of anterior
			Intercostal arteries
			 Number & Origin & distribution and termination of
9			posterior Intercostal arteries
			 Internal thoracic vessels Intercostal veins
	В		 Describe boundaries of different parts of
			mediastinum
			 Enumerate the contents of different parts of
			mediastinum
			 Enumerate structures at the level of sternal angle

Week		Specimen/	At the end you should know (ILOs)
		jar	
	Α		 Describe parts of pleura & its features
			 Identify apex, base, borders & surfaces of lungs
			 Identify lobes & fissures of lung
			Place lungs in anatomical position (right & left)
10	В		 Identify relations of mediastinal surface of lungs
			 Define the hilum & identify its content
			 Blood supply of lungs
	Α		 External features of the heart (borders & surfaces)
			 Surface anatomy of heart
			 Coronary arteries
11	В		 Venous drainage of heart
			 Internal features of chambers of heart
			 Valves of the heart
	Α		 Identify the origin &termination of great vessels in
			mediastinum
			 Origin & termination & branches of arteries
12			 Beginning and termination and tributaries of veins
			 Relationship between different structures in
			mediastinum
	В		 Describe origin & distribution of phrenic, vagus nerves
			& thoracic sympathetic chain
			 Describe trachea & esophagus and thoracic duct

2nd term curriculum

Week		Specimen/	At the end you should know (ILOs)				
		jar					
	A Differentiate lumbar vertebra						
			 Identify different parts of hip bones related to abdomen 				
			Define planes & regions of abdomen				
	В		Describe external & internal oblique and				
1			transversus abdominins				
			 Differentiate between superficial and deep inguinal rings 				
			Describe attachment of inguinal ligament & its relations				
	Α		Describe inguinal canal & its content and describe its				
			related clinical anatomy				
			 Describe rectus abdominis muscle & its intersections 				
2			Describe rectus sheath & mention its contents				
	В		Describe layers of scrotum & anatomy & coverings of				
			testis				
			Define spermatic cord & mention its contents				
	Α		Describe muscles of posterior abdominal wall				
			◆Describe lumbar plexus				
			Describe diaphragm and its foramina				
3	В		Describe parts of stomach				
			Describe relations of stomach & its peritoneal				
			covering.				
			Describe position & relations of spleen				
			Describe peritoneal covering of spleen				

Week		Specimen/	At the end you should know (ILOs)			
		jar				
A						
			parts of duodenum			
4			Differentiate between jejunum & ileum			
	В		 Differentiate between small & large intestine 			
			 Describe different parts of large intestine 			
			 Describe caecum and appendix 			
	Α		 Describe anatomical & functional lobes 			
			 Describe surface anatomy of liver 			
			 Describe relations of different surfaces 			
_			 Identify portahepatis and its content 			
5	5 B ♦ Identify different parts of extra-hepatic biliary					
			♦ Describe gall bladder			
			 Describe relations of different parts of pancreas 			
			 Describe pancreatic ducts 			
	Α		 Describe surface anatomy of kidney 			
			 Describe relations of kidney 			
			 Describe relations of different parts of ureter 			
6			 Identify constrictions of ureter 			
			 Differentiate right & left suprarenal glands 			
B Revision						

Week		Specimen/	At the end you should know (ILOs)			
		jar				
	Α		 Identify different parts of sacrum 			
			Describe structures in sacral canal & hiatus			
			Identify parts of hip bone related to pelvis			
			Memorize diameters of pelvic inlet & outlet			
	В		 Describe sacrotuberous&sacrospinous ligaments 			
7			 Describe muscles & fascia in lateral wall of pelvis 			
			 Describe pelvic diaphragm 			
	Α		 Identify origin & termination and branches 			
			of internal iliac artery			
			 Relation of pelvic organs to each other's 			
	В		 Position &curvatures & peritoneal covering and 			
8			relations of rectum			
			 Blood supply of rectum 			
			 Differentiate between internal & external anal 			
			sphincter			
			 Differentiate between upper and lower parts of 			
			anal canal			
	A		 Describe urinary bladder & its relations, peritoneal 			
			covering and blood supply			
			Describe pelvic part of ureter			
			Describe prostate & vas deference and seminal vesicle			
	B		 Describe parts of uterine tube Describe position & parts 			
9			& relations of uterus			
			Describe ligaments & peritoneal covering of uterus			
			 Describe position & ligaments and blood supply of 			
			ovary			

Intended Learning Outcomes (ILOs):

A: Knowledge and understanding (K):

- **K1: Describe** the basic anatomical structure of the different organs and systems of the human body.
- **K2: Recognize** the surface landmarks of the underlying bones, muscles and tendons, and internal structures (main nerves, vessels and viscera).
- K3: Enumerate the different branches of nerves and vessels.
- **K4: Recall** the actions of the different muscles.
- **K5: Distinguish** the movements of different joints and the muscles responsible for each movement.
- K6: Outline the major clinical applications of anatomical facts.
- **K7: Predict** clinical signs of nerve injuries based on their normal anatomy.
- **K8: Explain** the different stages of human development and growth.
- **K9: Explain** the anatomical facts based on their development.
- **K10: Discuss** errors in development of the different systems
- **K11: Explain** the causes of the congenital anomalies.

B: Intellectual skills (I):

- **I1: Integrate** the anatomical facts while examining the living subject in order to reach a proper diagnosis.
- **I2: Relate** the surface markings of different structures determine the position or course of internal structures.
- **I3:** Assemble the different internal structures in cadavers and preserved specimens.
- **I4: Design** an anatomical model for different organs.

- **I5: Draw diagrams** for different organs, vessels and nerves.
- **I6: Interpret** the normal anatomical structures on radiographs, ultrasonography, C.T. scan and nuclear magnetic resonance images.
- **I7: Correlate** the anatomical knowledge with clinical signs seen in cases of nerve injuries.
- **I8: Correlate** his knowledge in embryology with clinical findings caused by errors in development.

C: Professional and practical skills (P):

- **P1: Make** critical judgments based on a sound knowledge base
- **P2: Recognize** the scope and limits of their role as students and the necessity to collaborate with others.
- **P3: Maintain** a professional image concerning behavior, dress and speech.
- **P4: Manage** the time in their study and future career.

D: General and transferable skills (T):

- **T1:** responsible towards **working as a team**.
- **T2: Use** internet and learn searching skills.

Attendance

Date	Section	Signature

Date	Section	Signature

Date	Section	Signature

Date	Section	Signature