



Benha University. Faculty of Medicine. Department of Anatomy & Embryology

Course Specifications

Course title: Human anatomy and Embryology

Code: MED 0701

Academic Year (2010 - 2011)

- Department offering the course: Human Anatomy and Embryology
 Department
- Academic year of M.B. & B.Ch. program: first Year (2010-2011)
- Date of specification approval:
- Department council no. 101 date: 20/7/2010
- faculty council no. date:

A) Basic Information:

- Allocated marks: <u>250</u> marks.
- Course duration: <u>30</u> weeks of teaching.
- Teaching hours: <u>10</u> hours / week = <u>300</u> total teaching hours.

Hours / week	Total hours

1- Lectures	4hours/week for	120 hrs
	30 weeks	
2- Small group teaching / tutorials	2 hrs/week for 30	60 hrs
	weeks	
3- Practical	4hours/week for	120 hrs
	30weeks	
Total	30 weeks	300 hrs

B) Professional Information:

1- Overall Aim of the Course:

- 1.1. To Provide a scientific knowledge of the normal structure of the human body at the level of organ and organ system ,with the study of the normal growth and development relevant to the anatomical topics
- 1.2. To provide appropriate ethical and professional education necessary for dealing with cadavers.
- 1.3. To correlate anatomical facts with their clinical applications.

2- Intended Learning Outcomes (ILOs):

2.1. Knowledge and understanding:

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

- 2.1.1. Define different general anatomical and embryological terminology.
- 2.1.2 Describe the basic principles of structure of different tissues , organs and systems of the human body.
- 2.1.3 Describe the surface landmarks of the underlying bones ,muscles ,tendons and internal structures(nerves, vessels & viscera).
- 2.1.4 Point out the different stages of the human :development and growth
- 2.1.5 Outlines major clinical applications of anatomical facts.
- 2.1.6 Describe different parts of human body and regional development and growth of each part

2.2. Practical and Clinical Skills

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

- 2.2.1. Maintain honesty and integrity in all interactions wit teachers, colleagues, patients and others with whom physicians must interact in their professional lives.
- 2.2.2. Value the ethics and respect to all individuals inside and outside the dissecting room and pay a good deal of respect to the cadavers.
- 2.2.3. Identify different parts of human body by X ray.
- 2.2.4. Recognize the scope and limits of their role as a students as well as the necessity to seek and apply collaboration with other workers.
- 2.2.5. Be responsible towards work.
- 2.2.6. Maintain a professional image concerning behavior, dress and speech
- 2.2.7. Interpret some clinical findings in relation to developmental basis.
- 2.2.8 Demonstrate the different surface markings and determine the position or course of the internal structures.

2.3. Professional Attitude and Behavioral kills:

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

- 2.3.1. Demonstrate Respect for patients' rights and involve them and /or their caretakers in management decisions.
- 2.3.2. Demonstrate respect to all patients irrespective of their socioeconomic levels, culture or religious beliefs using appropriate language to establish a good patient-physician relationship.
- 2.3.3. Respect the role and the contributions of other health care professionals regardless their degrees or rank (top management, subordinate or colleague).
- 2.3.4. Reflect critically on their own performance and that of others, to recognize personal limitations regarding skills and knowledge to refer patients to appropriate health facility at the appropriate stage.

2.4. Communication skills:

By the end of the program the graduate will be able to:

2.4.1. Communicate clearly, sensitively and effectively with patients and their relatives, and colleagues from a variety of health and social care professions.

- 2.4.2. Establish good relations with other health care professionals regardless their degrees or rank (top management, subordinate or colleague).
- 2.4.3. Communicate effectively with individuals regardless of their social, cultural, ethnic backgrounds, or their disabilities.
- 2.4.4. Cope up with difficult situations as breaking news.
- 2.4.5. Respect patients and their relatives, superiors, colleagues and all members of the health profession.

2.5. Intellectual Skills:

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

- 2.5.1. Apply the anatomical facts while examining the living subject in order to reach a proper diagnosis
- 2.5.2. Interpret the normal anatomical structures on x ray
- 2.5.3. Identify the different surface markings and determine the position or course of the internal structures.
- 2.5.4. Identify the different internal structures in cadavers and specimen's faculty of Medicine, Benha University

2.6. General and transferable Skills:

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

- 2.6.1. Recognize the legal and moral aspects of medical practice.
- 2.6.2 Present data in an organized and informative manner.
- 2.6.3 Demonstrate appropriate professional attitudes and behaviors in different practice situations.
- 2.6.4 Establish life-long self-learning required for continuous professional development.

- 2.6.5 Use the sources of biomedical information and communication technology to remain current with advances in knowledge and practice.
- 2.6.6 Retrieve, manage, and manipulate information by all means, including electronic means.
- 2.6.7 Present information clearly in written, electronic and oral forms.
- 2.6.8 Establish effective interpersonal relationship to Communicate ideas and arguments.

3- Course contents:

Subject	Lectures (hrs)	Tutorial / Small group discussion (hrs)	Practical (hrs)	Total (hrs)	% of Total
1 - General anatomy (terms of positions & plans, movements, bone structure, function & classifications, cartilage features & types, types of joints, types of muscles, skin features, fascia form & features, parts of nervous system, cranial & spinal nerves, autonomic nervous system, arteries and veins, anastomoses, lymphatic system - etc.)	15	8	16	39	13%
2- upper limb (pectoral region, axilla, fascia & compartments of arm, anastomoses around elbow, fascia & compartments of front of forearm, fascia & compartments of palm, dorsum of hand, shoulder joint, elbow joint, radio-ulnar joint & wrist joint, fingers, nerve injuries, collateral circulation in upper limb etc.)	25	12	24	61	20%
3-general embryology (male & female reproductive system, oogenesis, ovulation, spermatogenesis, structure of mature sperm, fertilization, cleavage, implantation & deciduas, bilaminar disc, trilaminar disc, folding of embryo, derivatives of	14	xx	xx	14	5%

ectoderm & endoderm & mesoderm, fetal membranes, umbilical cord, twining, causes of congenital malformation). 4- thorax(thoracic cage, thoracic wall, intercostals spaces, azygos system, division & content of mediastinum, pleura, lungs, broncho pulmonary system, pericardium, heart features & chambers & valves& coronary arteries, trachea, nerves vessels, ascending aorta, arch of aorta,	20	12	24	56	19%
5- abdomen (anterior abdominal wall, rectus sheath, inguinal canal, peritoneum, spleen, stomach, classification of peritoneal folds, lesser sac, coeliac trunk, relation of duodenum, pancreas, portal vein, liver, suprarenal gland, kidneys, abdominal ureters, abdominal aorta, inferior vena cava, lymphatic elements, collateral circulation in abdomen	30	16	32	78	26%
6- pelvis(peritoneum, ovary, uterine tubes, uterus, vagina, pelvic part of ureter, urinary bladder, prostate, urethra in male & female, anal canal, division of perineum, ischiorectal fossa, anal sphincter, perinial body & its attachment, urogenital triangle, urogenital diaphragm, pudental canal, pudental vessels& nerves)	16	8	16	40	13%
TOTAL	120	60	120	300	100%

4- Teaching and learning methods:

METHODS USED:

1. Lectures.

2. Small group discussions: Museum specimens, demonstration (x ray films and data show), models.

3. Tutorials

4. Practical classes

TEACHING PLAIN:

Lectures: 120 lectures

Tutorials: 60 tutorials

Practical classes: 120 practical classes

Time plain:

Item	Time schedule	Teaching hours	Total hours
Lectures	2_times/week;		
	Two hour each/30weeks	120 hours	40%
Practical classes	2_times/week;	120 hours	40%
	two hour each/30 week		10/0
Tutorials	2_times/week;	60 hours	
	one hour each/30weeks		20%
Total		300 hours	100%

5- Students Assessment methods:

5-A) ATTENDANCE CRITERIA:

- 1. Practical attendance
- 2. Practical books

5-B) Assessment TOOLS:

Tool	Purpose (ILOs)
Written examination	To assess knowledge acquisition, including MCQs
Oral examination	To assess understanding and stability of knowledge given, attitude and presentation.
Practical examination	To assess practical skills.

5-C) TIME SCHEDULE:

Exam	Week	
1- Assessment 1	Week 10	
2- Assessment 2	Week 14	
3- Assessment 3	Week 24	
4- Final exam	At end of year (week 30)	

5-D) Weighting System:

Examination	Marks allocated	% of Total Marks
1- First half of the	15	6%
academic year		
(P.C.T in head and neck)		
2- Mid-year exam	15	6%
(P.C.T in Embryology)		
3- Second half of the	10	4%
academic year		
(P.C.T in Lower		
limb&neuroanatomy)		
3- Final exam:		
a- Written	125	50%
b- Practical	60	24%
c- Oral	15	6%
4- Assignments & other	10	4%
activities		
Total	250	100%

FORMATIVE ASSESSMENT:

• Student knows his marks after the Formative exams.

5-E) Examination description:

Examination	Description
1- First half of the	Quiz (MCQs),short questions
academic year	
2- Mid-year	Objectively structured questions& practical exam
3- Second half	Objectively structured questions& practical exam
3- Final exam:	
a- Written	select (MCQs) & Supply (Short essay) &
b- Practical	cases
c- Oral	Do, identify
	Two sessions
4- Assignments & other	. Assignments, projects, practical books
activities	

6- List of references:

6.1- Basic materials:

Department books:

- 1- Anatomy Department, Benha Faculty of Medicine
- 2.- Practical books

6.2- Essential books (text books):

- Gray's Anatomy (2004): The Anatomical Basis of Medicine and Surgery.

6.3- Recommended books:

Cunningham's Manual of Practical Anatomy (2000)

Couper Brash: anatomy

6.4- Periodicals, Web sites, etc:

- http://www.anatomy.com
- http://www.medscape.com.
- http://www.pubmed.com.
- http://sciencedirect.com.

7- Facilities required for teaching and learning:

Facilities used for teaching this course include:

- Faculty lectures halls: 2
- Department lectures halls: 4
- Museum hall: 6TH floor
- Department lab.
- Audio-visual teaching equipments (Computer, data show,)
- Models and mannequins
- Data show, scientific pictures archives.
- Radiology collections & archives.

Course coordinator:: Prof. Saadia Ahmed Shalaby

Head of Department: Prof. Saadia Ahmed Shalaby

Date: 2010- 2011