



COURSE SPECIFICATION

Embryology

Faculty of Medicine– Mansoura University

(A) Administrative information

(1) Programme offering the course.	Master degree of Histology & Cytology
(2) Department offering the programme.	Histology & Cell biology
(3) Department responsible for teaching the course.	Human Anatomy and Embryology
(4) Part of the programme.	First part
(5) Date of approval by the Department's council	3/5/2016
(6) Date of last approval of programme specification by Faculty council	9-8-2016
(7) Course title.	Embryology
(8) Course code.	HIST 501
(9) Credit hours	4 hours (3 lectures– 1 practical)
(10) Total teaching hours.	60 (45 lectures–30 practical)

(B) Professional information

(1) Course Aims.

The broad aims of the course are as follows.

The aim of this course is to prepare the candidate to be professional in the field of Histology and cell biology through increasing his/ her awareness about

1. Developmental overview of the human body.
2. Developmental changes occur during embryogenesis.

(2) Intended Learning Outcomes (ILOs).

Intended learning outcomes (ILOs); Are four main categories: knowledge & understanding to be gained, intellectual qualities, professional/practical and transferable skills.

On successful completion of the course, the candidate will be able to:

A- Knowledge and Understanding

- A1 Identify the anatomical features of male and female genital tract and explain gametogenesis and female reproductive cycle.
- A 2 Recognize changes occur during 1st, 2nd, 3rd, 4th weeks of gestation and the prenatal period.
- A 3 Describe the fetal membranes.
- A 4 Identify stages of development in different body system and acquire information about common developmental anomalies and twins.

B- Intellectual skills

- B1 Analyze some clinical findings in relation to developmental basis.
- B 2 Compare the relation between structure and functions of different body system components.

C- Professional/practical skills

C1 Draw diagrams for different stages of embryonic development.

D- Communication & Transferable skills

D 1 Be responsible toward work.

D 2 Communicate and use internet.

D3 Maintains honesty in all interaction with doctors, colleagues and other with whom physician interact in their professional life.

(3) Course content.

Subjects	Lectures	Laboratory	Total Teaching Hours
I- General embryology:	20	5	25
1- Anatomy of male and female genital tracts	2		
2- Gametogenesis	2		
– Oogenesis			
– Spermatogenesis			
3- Female reproductive cycle	2		
– Uterine cycle			
– Ovarian cycle			
4- First week of pregnancy	2		
– Fertilization			
– Implantation			
– Decidua formation			
5- Second week of pregnancy	2		
– Cleavage			
– Changes in the embryonic disc			
6- Third week of pregnancy	2		
– Gastrulation			
– Notochord formation			
– Neural tube formation			
7- Fourth week of pregnancy (organogenesis)	2		
– Embryonic disc folding			

8- Prenatal periods	2		
9- Congenital malformations	2		
10- Foetal membranes	1		
11- Twins	1		
II- Special embryology:	25	10	35
1- Development of the gastrointestinal tract	3		
2- Development of the cardiovascular system	2		
3- Development of the genito-urinary system	3		
4- Development of the respiratory system	2		
5- Development of the nervous system	3		
6- Development of the limbs	2		
7- Development of the special sense organs	2		
8- Development of body cavities	2		
9- Development of the endocrine system	2		
10- Development of the pharyngeal apparatus	2		
11- Development of head and neck	2		
Total	45	15	60

(4) Teaching methods:

4.1. Lectures

4.2. Practical sessions

4.3. Workshops

4.4. Seminars: the student presents a seminar in his/her own field of interest and attends the weekly seminars presented by invited guests, faculty members and students

4.5. Self learning (internet search for specific topics)

(5) Assessment methods:

5.1. Written exam for assessment of A1-4, B1, B2.

5.2. OSPE for assessment of A1, A2, B1, C1

5.3. Structured oral exam for assessment of A1-4, B1, B2

Percentage of each Assessment to the total mark.

Written exam: 144 Marks

MCQ: 36 Marks

OSPE: 60 Marks

Structured oral exam: 60 Marks

(6) References of the course.

6.1. Hand books: Human anatomy and embryology department book

6.2. Text books: Langman's Embryology, Keith L. Moore Embryology, Student's Grants Atlas, Netter's Atlas, Snell's Atlas and Grey's Anatomy

6.3. Websites.

<http://www.med.uc.edu/embryology/contents.htm>

<http://www.uic.edu/com/surgery/embryo/animation.htm>

<http://embryo.soad.umich.edu/links.html>

(7) Facilities and resources mandatory for course completion.

Data show for power point presentations

Laboratories

Library

Computers

Microscopes

Course coordinator: Dr. Shireen Mazroa

Assistant coordinator: Doaa Nabil

Head of the department: Dr. Salwa Gawish

Date: