



Course Syllabus of Introduction to embryology

Faculty : Faculty of Medicine and Health Sciences.

Department: Basic Sciences

Program : Bachelor of Medicine and Surgery

I. General information about the course instructor :							
Name	Fahd Nagy THAWABAH	Office Hours(3 Hours Weekly)					
Location & phone number	733371481	Sat	Sun	Mon	Tue	Wed	Thu
Email	DRTHAWABAH74@YAHOO.COM	-√					

II. General information about the course:							
1	Course Title :	Introduction to embryology					
2	Course Code and Number :	BMD07					
3	Credit Hours :	Credit Hours					Total
		Theoretical	Seminar/Tutorial	Practical	Clinical	Training	
		3	-	-	-	-	3
4	Study Level and Semester:	1 st year /1 st semester					
5	Pre-requisites:	None					
6	Co-requisites:	None					
7	Program in which the course is offered:	Bachelor of Medicine and Surgery					
8	Teaching Language:	English					
9	Instruction location:	University of Science and Technology, Sana'a					

III. Course Description

This is one of the courses provided for undergraduate first year students in the program of Bachelor of Medicine and Surgery. This course will prepare the students to understand normal human development, formation of organs and abnormal development and prepare student to .utilize, retrieve, interpret and allocate information useful to their practice and in their clinical rotations. The students will be also familiarize with basic definitions and principles related to general embryology of human body. The course is taught through lectures, interactive class discussions, demonstration, and revised assignments

IV. Course Aims:

- 1) To introduce students to a basic knowledge concerning the fundamental basics of general embryology of human.
- 2) To acquire students core knowledge of the different stages of human development
- 3) To provide students with an understanding of the principles of embryogenesis that can be use in the diagnosis, care and prevention of birth defects.
- 4- To get students the ability to correlate between the embryological structure and its clinical significance

V. Course Intended Learning Outcomes (CILOs) :

1. Describe the stages of prenatal development and stages of differentiation, growth , development , stages of spermatogenesis and oogenesis .
2. Explain the changes that occur during ovulatory & menstrual cycle, oogenesis and spermatogenesis.
3. Distinguish between growth , development at different prenatal periods, and normal and abnormal gametogenesis with their clinical aspects
4. Interpret the sequences of events of developing embryonic disc and folding of the trilaminar germ disc with its sequllae
5. Detect the congenital anomalies during embryonic development and its clinical significance
- 6 Use computer tools and Participate in scientific topic in a tutorial, a staff meeting or the yearly scientific day.

VI. Course Contents				
Theoretical Aspect:				
No.	Course Units	Sub-topics	No. of lectures	Contact Hours
1	Introduction	- General terms -Prenatal development -Zygote formation -Segmentation -Gastrulation -Organogenesis -Differentiation -Organizers -Prenatal periods - Gametogenesis	4	8
2	Ovulatory cycle and menstrual cycle	- Stages , -Hormonal status , -The effects of ovarian cycle on menstrual cycle.	3	6
3	Fertilization and its phases	- Chemotaxis -Fusion of male pronucleus with female pronucleus and the results	2	4
4	Changes that occur through the 1st week after fertilization	- Development of morula and , blastocyst with normal and abnormal implantation of blastocyst	3	6
5	Changes that occur through the 2nd week after fertilization	Development of bilaminar germ disc , amniotic cavity , yolk sac, extraembryonic mesoderm and precordial plate	4	5
6	Changes that occur through the 3^d week after fertilization	Development of primitive streak and node -Development of notochord , intraembryonic mesoderm , intraembryonic coelom, somites , endothelial heart tubes , and neural tube -Folding of the trilaminar germ disc and its results	4	7
7	Fetal membranes	Development of : allantois , yolk sac, amniotic cavity ,umbilical cord and placenta -Determine the age of the embryo by number of somites and by crown rump length	3	6
Total			15	30=2CH

Second: Practical/Tutorial/Clinical Aspects :			
No.	Practical/Tutorial/Clinical topics	No. of Weeks	Contact Hours
1.	Non applicable	-	-
Total number of weeks and hours			

VII. Teaching Strategies
<p>The methodologies and teaching and learning strategies that can be used:</p> <ul style="list-style-type: none"> - Lectures - Group discussion - Seminars - Self- learning