Course Description Template for the subject | Embryology

University/College Name	Al-Ayen University, Iraq / College of Medicine
Subject Name	Embryology
Academic Stage	second Stage
Available Attendance Modes	Lecture and Discussion
Subject System	Yearly
Number of Hours per Week	
Academic Year for Preparing this Description"	2023-2022

Week	Lecture title	Objective
1	Cell division	understanding of types of cell division 1-mitosis 2-meiosis and their phases . Similarity and difference between them
2	Chromosomal abnormalities-2 hours	This lecture explain causes of congenital anomaly which result from chromosomal abnormality either in their number or structure .Also showexamples of congenital anomaly.
3	spermatogenesis	This lecture discuss the steps of sperm formation from primordial germ cellsto mature spermatozoa, hormonal control and abnormality of spermatogenesis
4		This lecture discuss formation of oocyteand it is hormonal control .The similarity and

	oogenesis	differences between oogenesis and spermatogenesis
5	Ovarian cycle	This lecture discuss the physiology of menstrual cycle both ovarian and uterine with their hormonal control .
6	Fertilization	This lecture explain the process of fertilization and what are the mainresults
7	Cleavage, blastocyst formation and implantation	This lecture gives idea about definition of cleavage ,blastocyst ,and appropriate time of implantation
8	Second Week of Development: Bilaminar Germ Disc	This lecture discuss the developmentalevents at second week day-by-day.
9	Third week of development: Trilaminar Germ Disc	This lecture shows the most importantevent (gastrulation) the process that establishes all three germ layers (ectoderm , mesoderm and endoderm) in the embryo.
10	Third to eighth weeks : the embryonic period part-1	The embryonic period, or period of organogenesis , development of threelayers ,ectoderm ,mesoderm and endoderm ,and derivatives.(ectoderm derivatives)
11	Third to eighth weeks : the embryonic period part- 2	The embryonic period, or period of organogenesis , development of three layers , (mesoderm and endodermderivatives).
12	Third Month to Birth: theFetus and Placenta/Part 1	The period from beginning of ninth weekto birth is known as the fetal period .It is characterized by maturation of tissues and organs and rapid growth of the body.those

		lectures discuss all events of fetal period.
13	Third Month to Birth: theFetus and Placenta/Part-2	The period from beginning of ninth weekto birth is known as the fetal period .It is characterized by maturation of tissues and organs and rapid growth of the body.those lectures discuss all events of fetal period.
14	Third Month to Birth: theFetus and Placenta/Part-3	The period from beginning of ninth weekto birth is known as the fetal period .It is characterized by maturation of tissues and organs and rapid growth of the body.those lectures discuss all events of fetal period.
15	Birth defects part -1	This lecture describe the birth defects ,types of abnormalities and causes ofthese abnormalities
16	Birth defects part -2	This lecture discuss the principles ofteratology, and teratogens associatedwith human malformations
17	Prenatal diagnosis	This lecture explain the advantage and disadvantage of several techniques designed to detect fetal malformation,also shows fetal therapy.
18	Respiratory system	This lecture discuss formation of lung buds ,larynx, trachea and maturation oflungs
19	Digestive system part-1	Discuss the divisions of guttube,mesentries and foregut
20	Digestive system part- 2	Discuss the divisions of gut tube,development of mid gut and hindgut, also their abnormalities
21	Cardiovascular system part-1	This lecture shows establishment and patterning of the primary heart field. Formation and position of the heart tube
22	Cardiovascular system part-2	This lecture explain development ofvascular and lymphatic systems
23	Urinary system	This lecture show the normal embryonic development of urinary system. Also congenital abnormalities of the system.

24	Development of the Limbs	This lecture discuss limb growth and development and congenital abnormalities related to limbs
25	Lecture title	Objective
26	Genital system / gonads	This lecture show the normal embryonic development of gonads forboth male and female embryo. Also congenital abnormalities of the system.
27	External genitalia	This lecture show the normal embryonic development of externalgenitalia for male and female . Alsocongenital abnormalities of the genitalia.
28	Ear	This lecture show the normal embryonic development of ear. Alsocongenital abnormalities of the ear.
29	Eye	This lecture show the normal embryonic development of eye. Alsocongenital abnormalities of the eye.
30	Integumentary system	This lecture show the normal embryonic development of skin and itsassociated structures, hair, nails, and glands. . Also congenital abnormalities related to this system.