السنة الأولى – الفصل الثاني
مادة مقدمة في التشريح وعلم الأجنة العام
Introduction to Anatomy and General Embryology
(4) Credit Hours
0502109
(3 hrs) 2 lecture + 1 practical
1 (general embryology)

This course covers: introduction in gross anatomy to all parts of the body (upper limb & lower limb, thorax, abdomen, head & neck, and neuroanatomy) including terms, region, muscles, blood vessels, and nerves also introduction in the nervous system. This course also covers the general embryology including the development of embryo from the zygot also the featal membranes, placenta and congenital malformations.

I. General Embryology:

A. Contents:

Gametogenesis-ovulation-implantation
Bilaminan germ disc – trilaminar germ disc
Foetal period – congenital malformations
Foetal memebranes and placenta

B. Objectives:

- Describe how sperm cells are produced
- Explain the roles of hormones in regulating male reproductive functions
- Describe how oocytes are produced
- Define the ovarian and menstrual cycles and explain how they are related to the female reproductive hormones
- Discuss the formation of the primary germ layers and the extraembryonic membranes during the embryonic period
- List representative body structures produced by the primary germ layers
- Describe the formation of the placenta and umbilical cord

C. References:

- Langmans Medical embryology, Sadler, 8th edition
- Before we are Born essentials of embryology and birth defects, Moore persaud, 6th edition

II. Gross Anatomy:

A. Contents:

- anatomical position and anatomical terms
- human skeleton (general features)
- muscular system (muscle-nerve relation, brachial plexus, origin and insertion of selected muscles of the upper and lower limbs)
- cardiovascular system (brief account on the heart and major vessels)
- respiratory system (pleural cavity, mediastinum, lungs)
- gastrointestinal tract (general survey of its components peritoneal cavity, liver & biliary passages)
- reproductive system (general survey of its components)
- renal system (general surveyof its components) kidneys.
- nervous system (survey of its components)

B. Objectives:

- describe the anatomical position
- describe the general features of the different bones forming the skeleton using the anatomical terms
- describe the basic structure of a spinal nerve and discuss nerve-muscle relationship describe the origin and insertion of selected muscles of the upper and lower limbs and discuss the types of contraction (isotonic & isometric)
- describe the basic structure of brachial plexus
- describe the major anatomical features of the human heart and briefly discuss the cardiac cycle
- name the major blood vessels & discuss sites of feeling pulsations
- describe the basic structure of the pleural cavity & mediastinum. Discuss the anatomy of the lungs
- describe the different parts of the gut and discuss the basic structure of the peritoneal cavity
- describe the anatomy of the liver and discuss the components of the biliary passages
- describe the different components of the male and female reproductive systems
- describe the different components of the renal system with special reference to the kidneys
- describe the different parts of the brain and spinal cord
- Nomenclature of the cranial nerves

32 Lecture	No. Lect.	16 Practical	No. Prac.
Upper Limp - Introduction & terms - Region - Muscles - Blood vessels - Nerves	5	**Upper Limp** - Bones of the U.L - Bones of the U.L - Practical on the Cadaver	3
Lower Limp - Region - Muscles - Blood vessels - Nerves	4	**Upper Limp** - Bones of the U.L - Bones of the U.L - Practical on the Cadaver	3
Thorax - Thoracic wall - Mediastinum - Heart - Blood Vessels - Respiratory organs	5	**Thoracic Cage** - Thoracic cage & Bones - Thoracic wall - Thoracic organs - Blood Vessels	3
Abdomen Wall - Muscles - Peritoneum - Abdomen viscera & organs - Blood vessels - Nerve	5	**Abdominal Wall & Bones** - Abdominal viscera - Abdominal viscera	3
Head & Neck - Scalp & face - Muscles – face, neck - Blood vessels - Cranial - Lymph nodes - Nervous system C.N.S P.N.S Aut. N.S	8 4	**Head & Neck** - Bones (skull & mandible) & cervical vertebra - Muscles - Blood vessels - Sinuses & meninges	4