Para-Medical Program

Specialization	**المهارات المتخصصه**
Course Number	020800131
Course Title	**علم التشريح**
Credit Hours	**(3)**
Theoretical Hours	**(3)**
Practical Hours	**(0)**

Course description

This course presents a systematic approach to the study of the human body for the allied health students. It develops a basic understanding of the structure of body organs and systems and their interactions. Also, it enhances students understanding of the human body in health and disease.

Course objectives :

Intended Learning Outcomes

Upon the completion of this course the student will be able to:

A. Knowledge & Understanding

1. Acquire knowledge and understanding of the structures of the body systems.
2. Define anatomy.
3. Describe the body organs, their locations, compositions, and specific characteristics.

B. Intellectual skills

1. Interpret normal and abnormal anatomy.
2. Use anatomical knowledge to predict physiological consequences.

C. Subject specific skills

1. Synthesize ideas to make a connection between knowledge of anatomy and physiology and real-world situations, including healthy lifestyle decisions.
2. Interpret graphs of anatomical data.

D. Transferable skills

1. Develop a vocabulary of appropriate terminology to effectively communicate information related to anatomy.
2. Integrate the anatomy of the body with its physiology.

Course outline:

Unit No.	Unit name	Unit Content	Time Needed
1	**Introduction to medical terminology**	• Discuss the four parts of medical terms • Identify the most common prefixes and suffixes. • Studying the methods of word buildings • Abbreviations related to time, location, and number • Abbreviations related to anatomical position, directional terms, body regions, planes and cavities)	2 hrs
2	**Introduction to the human body**	• Definition of Anatomy • Levels of Body Organization • Body Systems and their Organs	2 hrs
3	**The cells and tissues of the body**	• Structure of the cell: • The cell membrane • The cytoplasm and cell organelles • The nucleus • Body tissues (Epithelium, Connective,Muscular, Nervous) • Membranes of the body	2 hrs
4	**Blood, and blood vessels**	• Blood • Composition of blood: – Plasma – Erythrocytes(red blood cells) – Leukocytes(white blood cells) – Thrombocytes (platelets) • Blood groups • Blood Vessels: – Types of blood vessels. – Structure of blood vessels. – Major Blood Vessels – Circulatory routes of blood vessels	2 hrs
4	**The Cardiovascular system**	• Heart: – Size and location – Structure • Flow of blood through the heart • Blood supply to the heart • Conducting system of the heart structure	2 hrs
5	**The Respiratory System**	• Structure of the upper respiratory tract - Nose and Nasal Cavity - Pharynx, Larynx and the Trachea • Structure of the lower respiratory tract - Bronchi and smaller air passages – Respiratory bronchioles and alveoli – Lungs: (Position, Structure and Organization) – Pleura and pleural cavity • Respiration: – Muscles of respiration	4 hrs

6	**The nervous System**	• Structure of the Nervous System – Neuron • Central Nervous System – Brain – Spinal Cord • Peripheral Nervous System – The Meninges – The Cerebrospinal Fluid (Formation, spaces) • Autonomic Nervous System – Main Features of Sympathetic andParasympathetic System Nerves	4 hrs
7	**Lymph System**	• Lymph and Lymph vessels • Thoracic Duct (Right and left Lymph Ducts) • Lymph nodes(Structure) • Lymphatic Organs and Tissue – Spleen – Thymus gland (also an endocrine gland) • Mucosa-associated with lymphoid tissue.	2 hrs
	The Endocrine System	• Location , Shape, Size and structure of Endocrine Glands: – Pituitary Gland – Thyroid Gland – Parathyroid Glands – Adrenal Glands – Pancreatic Islets – Pineal Gland – Ovaries and Testes (also parts of the genitourinary system)	2 hrs
8	**The digestive System**	• Structure andorgans of the Digestive system: • The upper/ lower tracts – Mouth and Salivary glands – Pharynx and Esophagus – Stomach – Small and Large intestines – Pancreas – Liver – Biliary Tract	4 hrs
9	**The Genitourinary System**	• Structure andorgans of the Urinary system: – Kidneys – Ureters – Urinary bladder – Urethra	2 hrs
		• Structure andorgans of the Female reproductive system: – External genitalia and Internal genitalia – Vagina – Uterus – Fallopian tubes – Breast and mammary glands	4 hrs
		• Structure andorgans of the Male reproductive system: – Scrotum	

		– Spermatic cords – Seminal vesicles – Ejaculatory ducts – Prostate gland – Urethra and penis	
10	**The skin**	• Structure of the skin: – Epidermis – Dermis – Subcutaneous layer • Accessory organs of the skin: – Nails – Hair follicles – Sebaceous glands – sweat glands	2 hrs
11	**The Skeletomuscular system**	• Structure andorgans of the Skeletal system: – Bones (types) – Joints, synovial joints • The main division of the skeleton (shape, position, number of bones) • Axial skeleton: – Skull – Vertebral column – Thoracic cage • Appendicular skeleton – Shoulder girdle and upper limb – Pelvic girdle and lower limb • Articulation and movement	4 hrs
		• Muscular system: – Muscles of the face – Muscles of the back – Muscles of the abdominal wall – Muscles of the pelvic floor	2 hrs

Teaching Methodology:

Lectures. Slides and posters and computers. Models. Coloring sheets. Activities.

References:

1. Moini, (2016). Anatomy and Physiology for Health Professionals, (2nd Ed.), Jones and Bartlett learning.
2. Moore, Dalley&Agur, (2014). Clinically Oriented anatomy, Lippincott & Williams.
3. Peate, I. & Nair, M. (2017). Fundamentals of Anatomy and Physiology: For Nursing and Healthcare Students (2nd Ed)
4. Mosby's Anatomy and Physiology Coloring Book (2014), (2nd Ed). Mosby.
5. Stanfield, P. S., Hui, Y. H., Cross, H. (2015). Essential Medical Terminology, Jones and Bartlett learning.