

**Syllabus**  
**COURSE: 1<sup>ST</sup> SEMESTER**  
**SUBJECT: APPLIED ANATOMY**

Sl. no	Hrs	UNIT TITLE	MUST KNOW (70%)	DESIRABLE TO KNOW (20%)	NICE TO KNOW (10%)
1	8	Introduction to anatomical terms and organization of the human body	<ul style="list-style-type: none"> <li>● Introduction to anatomical terms relative to position – anterior, ventral, posterior dorsal, superior, inferior, median, lateral, proximal, distal, superficial, deep, prone, supine, palmar and plantar</li> <li>● Cell structure and cell division</li> <li>● Tissue – Definition, types, characteristics, classification and location</li> <li>● Identify major surface and bony land marks in each body region and organization of human body</li> <li>● Membrane, glands – classification and structure</li> <li>● Hyaline, fibro cartilage and elastic cartilage</li> <li>● Features of skeletal, smooth and cardiac muscle</li> <li>● Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>● Anatomical planes (axial/transverse/ horizontal, sagittal/vertical plane and coronal/frontal/oblique plane)</li> </ul>	<ul style="list-style-type: none"> <li>● Movements (flexion, extension, abduction, adduction, medial rotation, lateral rotation, inversion, eversion, supination, pronation, plantar flexion, dorsal flexion and circumduction)</li> </ul>
2	6	The Respiratory system	<ul style="list-style-type: none"> <li>● Structure of the organs of respiration</li> <li>● Application and implication in nursing</li> </ul>	Muscles of respiration	

3	6	The Digestive system	<ul style="list-style-type: none"> <li>● Structure of alimentary canal and accessory organs of digestion</li> <li>● Application and implications in nursing</li> </ul>		
4	6	The Circulatory and Lymphatic system	<ul style="list-style-type: none"> <li>● Structure of blood components, blood vessels – Arterial and venous system</li> <li>● Veins used for IV injections</li> <li>● Chambers of heart and layers of heart</li> <li>● Nerve and blood supply to heart</li> <li>● Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>● Lymphatic tissue</li> <li>● Heart valves and coronary arteries</li> </ul>	<ul style="list-style-type: none"> <li>● Position of heart relative to the associated structures</li> <li>● Important arteries in each region</li> </ul>
5	4	The Endocrine system	<ul style="list-style-type: none"> <li>● Structure of thyroid, parathyroid, pancreas and adrenal glands</li> <li>● Application and implications in nursing</li> </ul>		Structure of hypothalamus, pineal gland, pituitary gland ,thymus
6	4	The Sensory organs	<ul style="list-style-type: none"> <li>● Structure of skin, eye</li> </ul>	<ul style="list-style-type: none"> <li>● Structure of ear, nose and tongue</li> </ul>	
7	10	The Musculoskeletal system: The Skeletal system The Muscular system	<ul style="list-style-type: none"> <li>● Anatomical positions</li> <li>● Types and structure of muscles</li> <li>● Joints – classification, major joints and structure</li> <li>● Major muscles involved in nursing procedures</li> <li>● Application and implications in nursing</li> </ul>	<ul style="list-style-type: none"> <li>● Principal muscles – Deltoid, biceps, triceps, respiratory, abdominal, pelvic floor, pelvic floor muscles, gluteal muscles and vastus lateralis</li> </ul>	<ul style="list-style-type: none"> <li>● Axial and appendicular skeleton</li> <li>● Bones – types, structure, growth and ossification</li> <li>● Muscle groups – Muscles of the head, neck, thorax, abdomen, pelvis, upper limb and lower limbs</li> </ul>
8	5	The Renal system	<ul style="list-style-type: none"> <li>● Structure of kidney, ureters, bladder and urethra</li> </ul>		

			<ul style="list-style-type: none"> <li>● Application and implication in nursing</li> </ul>		
9	5	The Reproductive system	<ul style="list-style-type: none"> <li>● Structure of female reproductive organ</li> <li>● Structure of breast</li> <li>● Structure of male reproductive organs</li> </ul>		
10	6	The Nervous system	<ul style="list-style-type: none"> <li>● Review structure of neurons</li> <li>● Structure of brain</li> <li>● Structure of spinal cord, cranial nerves, spinal nerves, peripheral nerves and functional areas of cerebral cortex</li> <li>● Blood supply of brain</li> <li>● Application and implication in nursing</li> </ul>	<ul style="list-style-type: none"> <li>● Ventricular system – formation, circulation and drainage</li> </ul>	<ul style="list-style-type: none"> <li>● CNS, ANS and PNS (Central, Autonomic and Peripheral)</li> </ul>