

## **1. PREAMBLE**

Anatomy is a study of the structural organization and development of man from gross to cellular aspects along with exploring the interrelationship of different tissues, organs and systems.

An important aspect for the homoeopathic student to grasp is the essentially holistic approach emphasized by Hahnemann. From that perspective, study of anatomy is not a study of isolated organs, parts or tissues but that of a hierarchical system which is intimately interconnected and functions with a purpose of striking balance when in a state of adaptation. The subtle ways in which this balance is lost through a malfunctioning of the vital force needs to be appreciated. This can occur when anatomy is taught with applied anatomy in the background.

While anatomy explores the structural organization of man, physiology gives us an understanding of the functional organization of the human being. These subjects, which are in reality the two sides of the coin, need to be taught interdependently. This enables the student to develop an insight into the essential interconnection of both in normal health and how both these alter when the disease process gets initiated in the system. This will also reduce the number of teaching hours due to avoiding duplication of information. While the clinical integration is taking place, homoeopathic connection is emphasized when the relevance of the Homoeopathic subjects being taught in the 1<sup>st</sup> year (Philosophy, Materia Medica, Pharmacy and Repertory), is simultaneously brought to the forefront and hence student-centered teaching of the first BHMS year be achieved.

Advances in the understanding of tissues and cell structures which subsume functions of the organs and systems can afford a fertile area for exploring the action of drugs of Materia medica.

## **2. PROGRAMME OUTCOMES**

At the end of BHMS program, a student should;

1. Develop the competencies essential for primary health care in clinical diagnosis and treatment of diseases through the judicious application of homoeopathic principles.
2. Recognize the scope and limitation of homoeopathy and to apply the Homoeopathic Principles for curative, prophylactic, promotive, palliative, and rehabilitative primary health care for the benefit of the individual and community.
3. Discern the relevance of other systems of medical practice for rational use of cross referral and life saving measures, so as to address clinical emergencies.
4. Develop capacity for critical thinking and research aptitude as required for evidence based homoeopathic practice.
5. Demonstrate aptitude for lifelong learning and develop competencies as and when conditions of practice demand.
6. Be competent enough to practice homoeopathy as per the medical ethics and professionalism.
7. Develop the necessary communication skills to work as a team member in various healthcare setting and contribute towards the larger goals of national policies such as school health, community health, environmental conservation.
8. Identify and respect the socio-demographic, psychological, cultural, environmental & economic factors that affect health and disease and plan homoeopathic intervention to achieve the sustainable development Goal.

## **3. COURSE OUTCOMES**

At the end of the I BHMS course, I BHMS student should be able to;

1. Discuss the evolution of life and the developmental anatomy and genetics of human.
2. Explain the ethics of Anatomy, such as Anatomy act, Body donation & receiving procedure and its legal aspects, develop respect to the human cadaver.
3. Differentiate the structural organization of man from micro to macro and its evolution from embryo.

4. Correlate the structural organization of man with functional organization and its applied aspect.
5. Apply anatomy knowledge to achieve vertical integration with clinical subjects.
6. Correlate structural organization of man with Homeopathic Philosophy and concept of man, Homoeopathic Materia Medica, Repertory and Pharmacy.
7. Correlate structural organization in interpreting different investigations.

#### 4. TEACHING HOURS

Sl. No.	Subject	Theoretical Lecture	(Non – Lecture hours) Practical / Tutorials / Seminars / Clinical Postings
01	Anatomy	325 hrs.	330hrs.

Theory (hrs)	Non-lecture (hrs)	
325	Practical	Non-lecture activities
	250	80
<b>Total – 655 hours</b>		

##### a. TEACHING HOURS (THEORY)

<b>Paper-I</b>
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<b>Sl. No</b>	<b>List of Topics</b>	<b>Term</b>	<b>Teaching Hours</b>
1	General Anatomy	I	32
2	Head, Neck & Face	II	50
3	Central Nervous System	II	30
4	Upper Extremities	I	35
5	Embryology	I	20

<b>Paper-II</b>			
<b>Sl. No</b>	<b>List of Topics</b>	<b>Term</b>	<b>Teaching Hours</b>
1	Thorax	II	28
2	Abdomen & Pelvis	III	70
3	Lower Extremities	III	40
4	Histology	I	20

**b. TEACHING HOURS (PRACTICAL)**

Sl. No	List of Topics	Term	Teaching Hours
1	Head, Neck & Face	II	56
2	Central Nervous System	II	16
3	Upper Extremities	I	34
4	Thorax	II	30
5	Abdomen & Pelvis	III	50
6	Lower Extremities	III	40
7	Histology	I	24

**5. COURSE CONTENT: Syllabus Planning**

**a. Theory:**

- a. Syllabus should start with revision of some of important topics of BIOLOGY (To connect Biology to Medical Science), origin of Earth and Environment, Origin of LIFE-Evolution of Human Lives.
- b. The complete course of Human Anatomy should be subdivided in number of modules according to topics/regions/systems.
- c. Syllabus of other subjects of same course should be planned out where the maximum integration (Vertical & Horizontal) of topics is possible.
- d. Theory/Practical/Tutorial/Case based learning should be arranged in parallel.
- e. Each module should be planned according to the need of system-Co-relation with Homoeopathy & time dimension (number of hours).
- f. At the end of each module knowledge should be assessed by arranging joint seminars (application of classroom knowledge to practical understanding).

**g.** The curriculum includes the following;

1. Anatomy Act.
2. Body donation procedure and its legal aspects.
3. Develop respect to the human cadaver, empathy towards diseased and sense of gratification for the voluntary body donors and their families.
4. Anatomy and Ethics.

**b. Practical**

- a. Dissection of whole Human Body, Demonstration of dissected parts and small group discussions.
- b. Identification of histological slides, related to tissue & organs.
- c. Students shall maintain Practical/Dissection & Histology record.

**THEORY**

Sl. No.	Topics	No. of hours	Term
<b>1.</b>	<b>GENERAL ANATOMY</b>		<b>I</b>
	1. Modern concepts of cell and its components; cell division, types with their significance	2	
	2. Basic tissues	2	
	3. Genetics i. DNA & RNA ii. Chromosomes iii. Genes iv. Inheritances	6	

Sl. No.	Topics	No. of hours	Term
	v. Genetic basis of diseases and Integration with homoeopathic concept of miasmatic influence		
	4. Basics of General Anatomy- i. Definition and subdivisions of Anatomy ii. History of Anatomy iii. Anatomical terms of position & movement iv. Skin, superficial and deep fasciae v. Muscles vi. Bones vii. Joints viii. Blood vessels ix. Lymphatic system x. Nerves xi. Glands: types and classification	1 1 2 2 2 2 2 2 2 2 2	
	5. Revision	2	
	<b>Total Hours</b>	<b>32</b>	
<b>2.</b>	<b>DEVELOPMENTAL ANATOMY (EMBRYOLOGY)</b>		<b>I</b>
	1. Introduction 2. Spermatogenesis 3. Oogenesis 4. Fertilization 5. Cleavage and implantation 6. Bilaminar germ disc formation 7. Gastrulation: Germ layers & Derivatives	1 1 1 1 2 2 3 1	

Sl. No.	Topics	No. of hours	Term
	8. Intraembryonic mesoderm derivatives: Somites	1	
	9. Ossification	1	
	10. Notochord	1	
	11. Folding of the embryonic: formation of primitive gut	2	
	12. Placenta	1	
	13. Revision	2	
	<b>Total Hours</b>	<b>20</b>	
<b>3.</b>	<b>HISTOLOGY (General)</b>		<b>I</b>
	1. Introduction	1	
	2. Epithelial tissue	2	
	3. Connective tissue	2	
	4. Cartilage	1	
	5. Bone	1	
	6. Muscle	2	
	7. Nervous tissue	1	
	8. Skin	2	
	9. Lymphoid organs	2	
	10. Blood vessels	2	



Sl. No.	Topics	No. of hours	Term
	11. Glands	2	
	12. Revision	2	
	<b>Total Hours</b>	<b>20</b>	
<b>4.</b>	<b>UPPER EXTREMITY</b>		<b>I</b>
	1. Introduction	1	
	2. Pectoral region and axilla	2	
	3. Mammary Gland	2	
	4. Brachial plexus	2	
	5. Axillary artery	1	
	6. Back and Intermuscular spaces around scapula	2	
	7. Shoulder Joint	2	
	8. Musculocutaneous and axillary nerves	1	
	9. Arm and cubital fossa; brachial artery	2	
	10. Fore arm: Muscles, nerves and blood vessels (Superficial and Deep Flexors and Extensors)	4	
	11. Radial artery	1	
	12. Ulnar artery	1	

Sl. No.	Topics	No. of hours	Term
	13. Median nerve	2	
	14. Ulnar nerve	1	
	15. Radial nerve	2	
	16. Elbow joint and radio-ulnar articulations	2	
	17. Wrist joint	1	
	18. Flexor and extensor retinacula	1	
	19. Palmar aponeurosis and spaces in palmar spaces	2	
	20. Venous drainage of upper extremity	1	
	21. Revision	2	
	<b>Total Hours</b>	<b>35</b>	
<b>5.</b>	<b>LOWER EXTREMITY</b>		
	1. Introduction	1	
	2. Lumbar plexus and femoral nerve	2	
	3. Front of thigh	2	
	4. Femoral Triangle and Femoral artery	2	
	5. Median compartment of thigh and obturator nerve	2	

Sl. No.	Topics	No. of hours	Term	
	6. Gluteal region	2		
	7. Sacral plexus and sciatic nerve, tibial and common peroneal nerves	4		
	8. Back of the thigh Popliteal fossa	2		
	9. Hip joint	2		
	10. Front of the leg and dorsum of the foot: Anterior tibial artery, deep peroneal nerve	4		
	11. Back of the leg: Tibial nerve and posterior tibial artery	3		
	12. Side of the leg: Superficial peroneal nerve	2		
	13. Retinacula around the ankle	1		
	14. Sole of foot	2		
	15. Knee Joint	2		
	16. Ankle joint	1		
	17. Arches of foot	2		
	18. Venous drainage of lower extremity	2		
	19. Revision	2		
	<b>Total Hours</b>	<b>40</b>		
<b>6.</b>	<b>THORAX</b>			<b>II</b>

Sl. No.	Topics	No. of hours	Term
	1. Introduction	1	
	2. Trachea	1	
	3. Pleura	1	
	4. Lungs	3	
	5. Mediastinum	2	
	6. Pericardium and Heart	4	
	7. Blood supply of heart	2	
	8. Superior mediastinum: Arch of aorta	1	
	9. Superior mediastinum: Superior Vena cava	1	
	10. Inferior Vena Cava	1	
	11. Posterior mediastinum: Azygous vein & Thoracic duct	2	
	12. Posterior mediastinum: Oesophagus & Descending thoracic aorta	2	
	13. Diaphragm	1	
	14. Systemic embryology: Development of Heart and lung	3	
	15. Systemic histology: Trachea and Lung	1	
	16. Revision	2	
	<b>Total Hours</b>	<b>28</b>	

Sl. No.	Topics	No. of hours	Term
<b>7.</b>	<b>ABDOMEN, PELVIS &amp; PERINEUM</b>		<b>III</b>
	1. Introduction	1	
	2. Anterior Abdominal wall	2	
	3. Peritoneum	2	
	4. Stomach	2	
	5. Liver	2	
	6. Gall bladder and Extrahepatic biliary apparatus	2	
	7. Spleen	1	
	8. Duodenum	1	
	9. Pancreas	2	
	10. Jejunum and Ileum, Superior mesenteric artery	2	
	11. Caecum & appendix	2	
	12. Large intestine	2	
	13. Portal venous system	2	
	14. Kidney	2	
	15. Supra renal glands	1	

<b>Sl. No.</b>	<b>Topics</b>	<b>No. of hours</b>	<b>Term</b>
	16. Abdominal aorta	1	
	17. Posterior abdominal wall	1	
	18. Urinary bladder	2	
	19. Ureter	1	
	20. Prostate gland	2	
	21. Ovary	1	
	22. Uterus	2	
	23. Fallopian tube	1	
	24. Scrotum and testis	2	
	25. Vas deferens	1	
	26. Rectum	1	
	27. Anal canal	1	
	28. Walls of pelvis including pelvic diaphragm	2	
	29. Perineum: superficial and deep perineal pouches	3	
	30. Ischiorectal fossa	1	
	31. Systemic embryology: Development of digestive system	4	
	32. Systemic embryology: Development of urogenital organs	2	

Sl. No.	Topics	No. of hours	Term
	33. Systemic histology: Digestive system	4	
	34. Systemic histology: Urinary system & supra renal gland	2	
	35. Systemic histology: Male reproductive system	2	
	36. Systemic histology: Female reproductive system	2	
	37. Revision	6	
	<b>Total Hours</b>	<b>70</b>	
<b>8.</b>	<b>HEAD, NECK &amp; FACE</b>		<b>II</b>
	1. Introduction	1	
	2. Scalp	2	
	3. Face: muscles, nerves and blood vessels	2	
	4. Lachrymal apparatus	1	
	5. Side of the neck: Posterior triangle	1	
	6. Front of the neck: Anterior triangle and its subdivisions	3	
	7. Deep cervical fascia	1	
	8. Back of the neck: Suboccipital triangle	1	
	9. Contents of vertebral canal	1	

<b>Sl. No.</b>	<b>Topics</b>	<b>No. of hours</b>	<b>Term</b>
	10. Parotid gland	1	
	11. Submandibular gland	1	
	12. Muscles of mastication	1	
	13. Temporomandibular joint	1	
	14. Thyroid gland	2	
	15. Cranial cavity: Dura mater, Dural venous sinuses & Pituitary gland	3	
	16. Contents of the orbit	1	
	17. Extraocular muscles	1	
	18. Oral cavity	1	
	19. Soft palate and palatine tonsil	1	
	20. Tongue	1	
	21. Pharynx	2	
	22. Larynx	2	
	23. Nose and paranasal air sinuses	2	
	24. Ear: EAC & middle ear, inner ear	2	
	25. Eustachian tube	1	
	26. Eyeball	2	



Sl. No.	Topics	No. of hours	Term
	27. Common & Internal carotid artery	1	
	28. External carotid artery	2	
	29. Vertebral artery	1	
	30. Internal Jugular vein	1	
	31. Systemic histology: Thyroid gland, Pituitary gland and Tongue	3	
	32. Systemic embryology: Pharyngeal arches: derivatives	1	
	33. Revision	3	
	<b>Total Hours</b>	<b>50 hrs</b>	
<b>9.</b>	<b>CENTRAL NERVOUS SYSTEM: BRAIN</b>		<b>II</b>
	1. Introduction	1	
	2. Meninges & CSF	1	
	3. Spinal cord	1	
	4. Medulla oblongata	1	
	5. Pons	1	
	6. Cerebellum	1	
	7. Fourth ventricle	1	

Sl. No.	Topics	No. of hours	Term
	8. Mid-brain	1	
	9. Diencephalon: Thalamus & Hypothalamus	2	
	10. Third Ventricle	1	
	11. Lateral Ventricle	1	
	12. Cerebrum: external features	2	
	13. Functional areas of cerebral cortex	1	
	14. Basal ganglia	1	
	15. White matter of cerebrum: Corpus callosum & Internal capsule	2	
	16. Blood supply of brain	2	
	17. Cranial nerves	6	
	18. Systemic embryology: Development of Brain	2	
	19. Revision	2	
	<b>Total Hours</b>	<b>30</b>	

**Total – 325 hrs**

**PRACTICAL**

Sl. No.	Topics	No. of hours	Term
<b>1.</b>	<b>GENERAL HISTOLOGY</b>		<b>I</b>
	1. Epithelial tissue: Simple & Stratified	4	
	2. Connective tissue: Loose/Areolar & Adipose	2	
	3. Connective tissue: Cartilages	2	
	4. Connective tissue: Compact bone (L.S, T.S) and Spongy bone	2	
	5. Muscle tissue: Skeletal (L.S, T.S), Smooth and Cardiac	2	
	6. Nervous tissue: Peripheral nerve (T.S) & Nerve fibre (L.S)	2	
	7. Skin: Thick & Thin	2	
	8. Lymphoid organs: Lymph node, Spleen, Thymus & Tonsil	4	
	9. Blood vessels: Large artery, Medium sized artery & Large vein	2	
	10. Glands: Serous, Mucous & Mixed	2	
	<b>Total Hours</b>	<b>24</b>	
<b>2.</b>	<b>UPPER EXTREMITY</b>		<b>I</b>
	1. Introduction	2	
	<b>Osteology</b>		
	2. Clavicle	2	
	3. Scapula	2	

Sl. No.	Topics	No. of hours	Term
	4. Humerus	2	
	5. Radius	2	
	6. Ulna	2	
	7. Articulated hand	2	
	8. Surface Markings in upper extremity	2	
	<b>Dissection</b>		
	9. Pectoral region	2	
	10. Axilla	2	
	11. Back & Shoulder	2	
	12. Arm: Front & Cubital fossa and Back of the arm	2	
	13. Front of Forearm & palm of hand	4	
	14. Back of Forearm & Dorsum of Hand	2	
	15. Joints of upper extremity	2	
	16. Radiology of upper extremity	2	
	<b>Total Hours</b>	<b>34</b>	
<b>3.</b>	<b>HEAD, NECK &amp; FACE</b>	<b>II</b>	
	1. Introduction	2	

Sl. No.	Topics	No. of hours	Term
	<b>Osteology</b>		
	2. Skull	6	
	3. Mandible	2	
	4. Hyoid bone	2	
	5. Cervical vertebrae: Typical & Atypical	2	
	6. Surface Markings in head, neck & face.	2	
	<b>Dissection</b>		
	7. Scalp	2	
	8. Face	2	
	9. Posterior triangle of neck	2	
	10. Anterior triangle of neck	2	
	11. Back of neck	2	
	12. Cranial cavity & Contents of vertebral canal	4	
	13. Deep dissection of neck	2	
	14. Orbit & Eyeball	2	
	15. Ear	2	
	16. Parotid region	2	

Sl. No.	Topics	No. of hours	Term	
	17. Temporal & infratemporal region	2		
	18. Sub mandibular region	2		
	19. Mouth, Tongue & Pharynx	2		
	20. Nose & Larynx	2		
	21. Temporo-Mandibular joint & joints of Neck	2		
	22. Radiological anatomy of Head, Neck and Face	2		
	<b>Systemic Histology-</b>			
	23. Thyroid gland (including parathyroid)	2		
	24. Pituitary gland	2		
	25. Revision	2		
	<b>Total Hours</b>			<b>56</b>
	<b>4.</b>	<b>CENTRAL NERVOUS SYSTEM</b>		<b>II</b>
	1. Introduction	2		
	<b>Demonstration</b>			
	2. Parts of the brain	4		
	3. Spinal cord	2		

Sl. No.	Topics	No. of hours	Term	
	4. Ventricles (model)	2		
	5. Radiology of brain	2		
	<b>Systemic Histology</b>			
	6. Nervous tissue: Cerebrum & Cerebellum	2		
	7. Revision	2		
	<b>Total Hours</b>	<b>16</b>		
<b>5.</b>	<b>THORAX</b>		<b>II</b>	
	1. Introduction	2		
	<b>Osteology</b>			
	2. Sternum. Ribs: Typical & Atypical	2		
	3. Thoracic vertebrae: Typical & Atypical	2		
	<b>Surface Marking</b>	4		
	<b>Dissection</b>			
	4. Anterior Thoracic wall, Intercostal space & contents	2		
	5. Pleura & Lungs	4		
	6. Contents of superior mediastinum & Pericardium	2		
7. Heart: External features	2			

Sl. No.	Topics	No. of hours	Term	
	8. Interior of Heart with valves of heart	2		
	9. Contents of posterior Mediastinum	2		
	10. Radiological anatomy	2		
	<b>Systemic Histology</b>			
	11. Trachea & Lung	2		
	12. Revision	2		
	<b>Total Hours</b>			<b>30</b>
<b>6.</b>	<b>LOWER LIMB</b>		<b>III</b>	
	1. Introduction	2		
	<b>Osteology</b>			
	2. Hip Bone	2		
	3. Femur & Patella	2		
	4. Tibia	2		
	5. Fibula	2		
	6. Articulated Foot	2		
	7. Surface Marking	2		
	<b>Dissection</b>			



Sl. No.	Topics	No. of hours	Term
	8. Front of thigh	4	
	9. Medial side of thigh	2	
	10. Gluteal region	2	
	11. Back of thigh & Popliteal fossa	2	
	12. Front of Leg & Dorsum of Foot	2	
	13. Leg: Medial, Lateral & Back of Leg	4	
	14. Sole of Foot	4	
	15. Joints of the lower extremity	2	
	16. Radiology lower extremity	2	
	17. Revision	2	
	<b>Total Hours</b>	<b>40</b>	
<b>7.</b>	<b>ABDOMEN &amp; PELVIS</b>		
	1. Introduction	2	
	2. <b>Osteology</b>		
	3. Lumbar Vertebrae	2	
	4. Sacrum and joints	2	
	5. Articulated Pelvis: Male & female	2	

Sl. No.	Topics	No. of hours	Term
	6. <b>Surface Marking</b>	4	
	<b>Dissection</b>		
	7. Anterior abdominal wall	2	
	8. External genitalia of Male	2	
	9. Abdominal cavity: Positions & Relations of viscera, Peritoneum, Greater & Lesser sac	2	
	10. Stomach & Spleen	2	
	11. Small intestine (Jejunum & Ileum) & Large intestine	2	
	12. Duodenum & Pancreas	2	
	13. Liver, Gall bladder & blood vessels of Digestive system	2	
	14. Kidney & Suprarenal gland	2	
	15. Posterior Abdominal wall & Diaphragm	2	
	16. Walls of the pelvis & Pelvic cavity : position & relations of viscera, Perineum	2	
	17. Urinary bladder, Urethra & Prostate	2	
	18. Ovary, Uterus, Fallopian tubes, Vagina	2	
	19. Sigmoid colon, Rectum & Anal canal	2	

Sl. No.	Topics	No. of hours	Term
	20. Radiological anatomy	2	
	<b>Systemic Histology</b>		
	21. Digestive system: Basic structure of GIT	2	
	22. Digestive system: Liver & Gall bladder, Pancreas	2	
	23. Urinary system: Kidney, Ureter & Suprarenal gland	2	
	24. Male Reproductive system: Testis & Prostate	2	
	25. Female Reproductive system: Ovary & Uterus	2	
	<b>Total Hours</b>	<b>50</b>	
<b>Total Practical hours</b>		<b>250 Hours</b>	

#### Non-Lecture activities

Sl. No	Non-Lecture Teaching Learning methods	Time Allotted per Activity (in Hours)
1.	Seminars/ Workshops	10
2.	Group Discussions	10
3.	Problem based learning	10

4.	Integrated Teaching	15
5.	Case Based Learning	10
6.	Self-directed Learning	15
7.	Tutorials, Assignments and projects	10
Sub total		80
8.	Practical	250
<b>Total</b>		<b>330</b>

#### Description of Non-Lecture Activities

Sl. No	Non-Lecture Teaching Learning methods	Time Allotted per Activity (in Hours)	Topics
1.	Seminars/ Workshops	10	Seminars: Guest Seminars, Student Seminars of Fast Learners can be conducted on any topic of Anatomy. E.g.: Shoulder joint, Liver etc.  Workshop: Workshop can be arranged on important topics of Anatomy. E.g.: Abdomen, Thorax, CNS etc.
2.	Group Discussions	10	Group discussions can be conducted during practical hours on any topic of Practical and dissection. E.g.: Heart, Lungs, actions of joints etc.
3.	Problem based learning	10	Problem based learning can be conducted on any applied anatomy topic. E.g.: Bell's palsy, Frozen shoulder, Varicose veins etc.
4.	Integrated Teaching	15	<b>A] Horizontal Integration</b>

			<p>Physiology: Any topic related to Physiology can be conducted. E.g.: Anatomy: Physiology Seminar on Respiratory System.</p> <p>Homoeopathic Subjects: Any topic related to Homoeopathic Materia Medica, Repertory, Organon of Medicine. E.g.:</p> <p>a) Integrated lecture with HMM - Homoeopathic drugs related to organs of Abdomen.</p> <p>b) Integrated lecture with Repertory – Rubrics related to structures of Thorax.</p> <p>c) Integrated lecture with Organon –Miasmatic influence on heredity.</p> <p>d) Integrated lecture with Homoeopathic Pharmacy - Action of Homoeopathic drugs on cellular level.</p> <p><b>B] Vertical Integration</b></p> <p>Gynecology – E.g.: Any topic related on female reproductive System.</p> <p>Surgery – E.g.: Integrated lecture on radiology.</p> <p>Medicine – E.g.: Embryological basis of major congenital anomalies of heart</p>
5.	Case Based Learning	10	Case Based Learning can be conducted on any clinical topic of anatomy by presenting a case scenario with the help of Simulation or Audiovisual aid in the classroom. E.g.: A case of Bell’s Palsy for the topic Facial Nerve, A case of Wrist drop for the topic Radial Nerve etc.

6.	Self-Directed Learning	15	Self-Directed Learning can be conducted for any topic of Anatomy. E.g.: Functional areas of cerebrum, Actions of Facial muscles.
7.	Tutorials, Assignments, Projects	10	Tutorials, Assignments, projects can be conducted on any topic of anatomy at the end of the topic.

## 6. TEACHING LEARNING METHODS

### General Instructions

- (a) Instructions in anatomy should be so planned as to present a general working knowledge of the structure of the human body both at micro and macro level and should correlate with function. Topics/syllabus should be planned out in parallel with other subjects for better understanding & to achieve integration.
- (b) The amount of detail which a student is required to memorise should be reduced to the minimum but should connect to syllabus of other subjects and applied anatomy.
- (c) Major emphasis should be laid on functional anatomy of the living subject rather than on the static structures of the cadaver and on general anatomical positions and broad relations of the viscera, muscles, blood vessels, nerves and lymphatics and study of the cadaver is the only means to achieve this.
- (d) Students should know the basic applied anatomy & should not be burdened with minute anatomical details which have no clinical significance.
- (e) Only such details which have professional or general educational value for the Homoeopathic medical students need to be focused.
- (f) Normal radiological anatomy may also form part of practical or clinical training and the structure of the body should be presented linking functional aspects.
- (g) A good part of theoretical lectures on anatomy can be transferred to tutorial classes with the demonstrations/ Projection / Dissection.
- (h) Case based learning should be conducted for the students on various clinical conditions with the help of case scenario, simulation or Audiovisual aids as a Non-Lecture activity.
- (i) Seminars and group discussions to be arranged periodically with view of presenting these subjects in an integrated manner.

- (j) More stress on demonstrations and tutorials should be given. Emphasis should be laid on the general anatomical positions and broad relations of the viscera, muscles, blood vessels, nerves and lymphatics.
- (k) There should be joint seminars with the departments of Physiology and Biochemistry, Repertory, HMM, Philosophy and Pharmacy which should be organized wherever necessary as per the topic.
- (l) There should be a close correlation in the teaching of gross Anatomy, Histology, Embryology and Genetics and the teaching of Anatomy, Physiology including Biochemistry along with Homoeopathic subjects shall be integrated.

Though dissection of the entire body is essential for the preparation of the student for his clinical studies, the burden of dissection can be reduced and much saving of time can be affected with considerable reduction of the number of topographical details while following the above points.

The purpose of dissection is to give the student an understanding of the body-Structure from Macro to Micro correlate to its function- Functional anatomy to integrate with Physiology and the dissection should be designed to achieve this goal.

Dissection should be preceded by a course of lectures on the general structure of the organ or the system under discussion and then its function. In this way anatomical and physiological knowledge can be presented to students in an integrated form and the instruction of the whole course of anatomy and physiology made interesting, lively practical or clinical. Syllabus of all the subjects of First BHMS course should be structured to run parallel, horizontally & vertically as far as possible to achieve maximum integration.

Students should be able to identify anatomical specimens and structures displayed in the dissection. Teaching and Demonstration methods should be supported with latest software/Practical/Charts/slides/Working or 3D Diagrams, Audio-Visual/ Multimedia presentation/Simulation to train clinical application.

The Teaching Learning activities in Anatomy requires change in structure & process in order to be more skill based & providing hands on experience.

The Teaching Learning methods with respect to Anatomy may be covered in the following manner:

- a. **Class Room Lectures** – Oral Presentation, Board Work, Power point Presentation. **Tutorials** on the topics covered.
- b. **Assignments** – For Slow Learners

- c. **Practical Class** – Demonstration, Dissection, Surface Marking, Histology, Radiology
- d. **Student Activities** – Working out the Assignments, Projects, PowerPoint presentations as assigned
- e. **Case based Learning & Problem Based Learning (CBL & PBL)** for students to understand the application of knowledge of Anatomy with Clinical subjects.
- f. **DOAP (Demonstration – Observation – Assistance – Performance)** For Clinical Anatomy.

## **7. CONTENT MAPPING (COMPETENCY TABLE)**

- 1. General Anatomy
- 2. Developmental anatomy (Embryology)
- 3. Regional anatomy (Upper and Lower Extremities, Thorax, Abdomen, Pelvis & Perineum, Head, Neck & Face and Brain)
  - 3.1 Each of the region will be studied under the following headings
    - (a) Osteology
    - (b) Syndesmology and Arthrology (Joints)
    - (c) Myology
    - (d) Angiology
    - (e) Neurology
    - (f) Splanchnology (Viscera/Organ)
    - (g) Histology
    - (h) Surface anatomy
    - (i) Applied anatomy
    - (j) Radiographic anatomy
    - (k) Correlation with homoeopathic subjects