

Teaching Syllabus of human anatomy

(For MBBS Students)

I. Basic information of the course

Course Name	Human Anatomy				
Course Code					
Teaching Department	Department of Anatomy				
Experiment Type	<input checked="" type="checkbox"/> Professional basic experiment <input type="checkbox"/> Professional experiment <input type="checkbox"/> Comprehensive experiment <input type="checkbox"/> Innovative experiment <input type="checkbox"/> Open experiment				
Course Type	√Compulsory <input type="checkbox"/> Elective				
Experimental Type	<input type="checkbox"/> Independent course <input checked="" type="checkbox"/> Non-independent course				
For Which Major	MBBS Students				
Credits		Lecture Hours	96	Experiment Hours	96
Prerequisite course					

II. Description of the course

Human anatomy is the science that deals with the morphology of the organs, their position and relationship, development and basic functions. It is also the fundamental subject to study other pre-clinic and clinic medicine. By the lectures and practice lessons, the students should master the basic theory, basic knowledge of human anatomy, and basic skill of practice.

III. Learning objectives and Teaching requirements

Learning objectives: ①to understand the basic structure of human body and

provide anatomical basis for follow-up courses and clinical application. ②to develop the self-study ability, the practical ability, and the team cooperation ability of the students. ③to develop the innovative spirit and professional ethics of the students.

Teaching requirements: ①to do the anatomical dissection according to the regions of the human body. ②to do the dissections of each part from superficial to deep and observe the structural characteristics and relationships.③to observe the relationship of organs and structures and analyze its importance in clinical application. ④to learn the surface markers and projections of important structures, and provide important support and help for the practical operation of some clinical diagnosis and treatment.

IV. Teaching schedule

Contents	Total hours	Lecture hours	Practice hours
General Introduction	4	4	
Upper limb	36	16	20
Lower limb	36	18	18
Head	20	10	10
Neck	20	10	10
Thorax	24	12	12
Abdomen	32	16	16
Pelvis	12	6	6
Perineum	8	4	4
Total	192	96	96

General introduction

【Objectives】

1. Mastering the terms of position.
2. Mastering the terms of movement.
3. Understanding the structures met in dissection.
4. Mastering the classification of bones.
5. Mastering the general structure of bone.
6. Mastering the features of synovial joints.
7. Understanding the blood vessels, anastomoses, and collateral circulation.
8. Understanding the composition of the lymphatic system.

9. Mastering the main divisions of the nervous system.

【Contents】

1. Basic concepts of human anatomy.
2. Concepts of the parts of the body.
3. Concepts of the systems of the body.
4. Important anatomical terms: The anatomical position, the anatomical axes and planes, the terms of the direction.
5. Joint movement terminology.
6. Basic structures of the human body.
7. General classification of the synovial joints.
8. Basic concepts of the blood vessels.
9. Basic composition of the lymphatic system.
10. Basic concepts and divisions of nervous system.

The upper limb

The bones and joints of upper limb

【Objectives】

1. Understanding the names and arrangement of the bones of the upper limb.
2. Mastering the bone markings of scapula, humerus, ulna, and radius.
3. Mastering the composition, structural features, and movement of the shoulder joint, elbow joint, and wrist joint.
4. Understanding the composition of sternoclavicular joint, intercarpal joints, carpometacarpal joints, intermetacarpal joints, metacarpophalangeal joints, and interphalangeal joints.

【Contents】

1. Composition and arrangement of the bones of the upper limb.
2. General features of the clavicle, scapula, humerus, radius, ulna, carpal bones, metacarpal bones, and phalanges of fingers.
3. Composition and movements of the sternoclavicular joint, shoulder joint, elbow joint, radiocarpal joint (wrist joint), carpometacarpal joint of thumb,

metacarpophalangeal joints, and interphalangeal joints.

The pectoral region and axilla

【Objectives】

1. Mastering the composition of the breast.
2. Mastering the lymph drainage of the breast.
3. Understanding the name, position, and nerve supply of muscles connecting the upper limb to the thoracic wall.
4. Understanding the name, position, and nerve supply of muscles connecting the scapula to the humerus.
5. Mastering the origin, insertion, action and nerve supply of pectoralis major, trapezius, latissimus dorsi, and deltoid muscles.
6. Mastering the boundaries and contents of the axilla.
7. Mastering the beginning, ending, and branches of the axillary artery.
8. Mastering the formation, position, and main branches of the brachial plexus.
9. Mastering the groups, area of drainage of the axillary lymph nodes.

【Contents】

1. The superficial structures of the pectoral region.
2. Location and features of the breast.
3. The lymph drainage of the breast.
4. The extrinsic muscles of the thorax.
5. The boundaries of the axilla.
6. The contents of the axilla.
7. The beginning, ending, and branches of the axillary artery.
8. The formation, position, and main branches of the brachial plexus.
9. The groups, area of drainage of the axillary lymph nodes.

The arm

【Objectives】

1. Mastering the beginnings, course, and endings of superficial veins of the free

upper limb.

2. Understanding the lymphatic drainage of upper limb.
3. Understanding the name and arrangement of muscles of arm.
4. Mastering the origin, insertion, action, and nerve supply of biceps brachii and triceps brachii.
5. Mastering the beginning, ending, and branches of the brachial artery.
6. Mastering the distributions of the musculocutaneous, axillary, and radial nerves.
7. Mastering the innervation of the muscles of the arm.

【Contents】

1. The superficial veins of the upper limb.
2. The cutaneous nerves of the upper limb.
3. The lymphatic drainage of upper limb.
4. The deep fascia of the arm.
5. The contents of anterior osseofascial compartment of the arm.
6. The contents of posterior osseofascial compartment of the arm.

The forearm

【Objectives】

1. Mastering the boundaries and contents of the cubital fossa.
2. Understanding the name and arrangement of the muscles of forearm.
3. Mastering the beginning, ending, and branches of the radial and ulnar arteries.
4. Mastering the innervation of the muscles of the forearm.

【Contents】

1. The boundaries and contents of cubital fossa.
2. The contents of anterior osseofascial compartment of the forearm.
3. The contents of posterior osseofascial compartment of the forearm.

Hand

【Objectives】

1. Understanding the boundaries and contents of the anatomical “snuff box”.

2. Mastering the composition and contents of the carpal tunnel.
3. Understanding the groups of the muscles of hand.
4. Mastering the formation of the superficial and deep palmar arches.
5. Mastering the innervation of the muscles and skin of the hand.
6. Understanding the position of the fascial spaces of the palm.
7. Understanding the pulp space of the fingers.

【Contents】

1. The surface anatomy of wrist and hand.
2. The superficial fascia of the palm.
3. The deep fascia of the palm.
4. The muscles of the hand.
5. The osseofascial compartments of the palm.
6. The fascial spaces of the palm.
7. The superficial and deep palmar arch.
8. The fascia of the dorsum of hand.
9. The dorsal subcutaneous space and the dorsal subaponeurotic space.
10. The extensor tendons of the hand.
11. The composition of the fingers.

The lower limb

The bones and joints of lower limb

【Objectives】

1. Understanding the names and arrangement of the bones of the lower limb.
2. Mastering the bone markings of the hip bone, femur, tibia, and fibula.
3. Understanding the ligaments and foramina of the gluteal region.
4. Mastering the composition, structural features, and movements of the hip joint, knee joint, and ankle joint.
5. Understanding the composition of the arches of the foot.

【Contents】

1. Composition and arrangement of the bones of the lower limb.

2. General features of the hip bone, scapula, femur, patella, tibia, fibula, tarsal bones, metatarsal bones, and phalanges of the toes.
3. Formation of the pelvis.
4. Formation of the greater sciatic foramen and lesser sciatic foramen.
5. Composition and movements of the hip joint, knee joint, and talocrural joint (ankle joint).
6. Composition of intertarsal joints, tarsometatarsal joints, metatarsophalangeal joints, and interphalangeal joints of the toes.

The gluteal region

【Objectives】

1. Understanding the name, position, and nerve supply of muscles gluteal region.
2. Mastering the origin, insertion, action, and nerve supply of gluteus maximus and piriformis.
3. Mastering the structures passing through the greater sciatic foramen.
4. Mastering the structures passing through the lesser sciatic foramen.
5. Mastering the origin, course, and distribution of the sciatic nerve.

【Contents】

1. The superficial structures of the gluteal region.
2. The deep structures of the gluteal region.
3. The formation of the suprapiriform foramen and infrapiriform foramen.
4. The structures passing through the suprapiriform foramen and infrapiriform foramen.
5. The relationship of sciatic nerve to the piriformis.
6. The origin, course, and distribution of the sciatic nerve.

The thigh

【Objectives】

1. Mastering the beginnings, course, and endings of superficial veins of the free lower limb.

2. Understanding the position and area drainage of the superficial and deep inguinal lymph nodes.
3. Understanding the structures formed by the deep fascia of the thigh (saphenous hiatus and iliotibial tract).
4. Mastering the name and arrangement of muscles of the thigh.
5. Mastering the origin, insertion, action, and nerve supply of sartorius and quadriceps femoris.
6. Mastering the composition and contents of the femoral sheath.
7. Mastering the boundaries of the femoral ring.
8. Mastering the beginning, ending, and branches of the femoral artery.
9. Mastering the beginning, branches, and distribution of the femoral nerve.
10. Mastering the boundaries and contents of the femoral triangle.
11. Mastering the boundaries and contents of the adductor canal.
12. Understanding the beginning, branches, and distribution of the obturator nerve and artery.

【Contents】

1. The superficial structures of the thigh.
2. The deep fascia of the thigh.
3. The muscles of the thigh.
4. The position and the boundaries of the femoral triangle.
5. The contents of the femoral triangle.
6. The contents of the femoral sheath.
7. The position of the femoral canal and the boundaries of femoral ring.
8. The femoral artery, femoral vein, femoral nerve, and the deep inguinal lymph nodes.
9. The position, boundaries, and contents of the adductor canal.
10. The blood vessels and nerves of medial side of the thigh.
11. The contents of the posterior osseofascial compartment of the thigh.

The leg and foot

【Objectives】

1. Mastering the boundaries and contents of the popliteal fossa.
2. Mastering the beginning and ending of the popliteal artery.
3. Understanding the names and arrangement of muscles of the leg.
4. Mastering the origin, insertion, action, and nerve supply of tibialis anterior, gastrocnemius, and soleus, and tibialis posterior.
5. Mastering the beginning and ending of the anterior and posterior tibial arteries.
6. Mastering the distributions of the tibial nerve, superficial and deep peroneal nerves.
7. Mastering the innervation of the muscles of the leg.
8. Understanding the beginning, ending, and branches of the dorsalis pedis artery.
9. Mastering the structures that pass behind the medial malleolus beneath the flexor retinaculum from medial to lateral.

【Contents】

1. The boundaries of the popliteal fossa.
2. The contents of the popliteal fossa.
3. The superficial structures of the leg.
4. The deep fascia of the leg.
5. The contents of the anterior osseofascial compartments of the leg.
6. The contents of the lateral osseofascial compartments of the leg.
7. The contents of the posterior osseofascial compartment of the leg.
8. The boundaries of the malleolar canal.
9. The structures passing through the malleolar canal.
10. The arches of the foot.

Head and neck

The skull and joints of skull

【Objectives】

1. Know the main component of the skull.
2. Master the names of the skull bones and the principal features of the mandible,

and the position of the pterion.

3. Master the names, boundaries and important structures of the three cranial fossae.
4. Know the main structures of the skull on the superior, inferior, anterior, posterior and lateral view.
5. Know the component of the orbit and bony nasal cavity.
6. Master the characteristics of the lateral wall of the bony nasal cavity. Master the position of paranasal sinuses and their site of drainage into the nose.
7. Know the general characters of the neonatal skull.
8. Master the surface landmarks of the skull.
9. Know the joints of skull. Master the composition, structural features and movement of the temporomandibular joint.

【Contents】

1. The main component of the skull and the principal features of the separated skull bone.
2. The skull as a whole: the skull viewed from above, viewed from behind, viewed from lateral and viewed from below.
3. The internal surface of the base of skull: the names, boundaries and important structures of the three cranial fossae.
4. The front aspect of skull: component of the orbit and bony nasal cavity. The position of paranasal sinuses and their site of drainage into the nose.
5. The general characters of the neonatal skull.
6. The joints of skull: the composition, structural features and movement of the temporomandibular joint.

The viscera of the head and neck

【Objectives】

1. Know the boundaries and parts of the mouth. Know the general features of the palate. Master the formation of the isthmus of fauces. Master the general features of the teeth. Master the general features of the tongue. Master the characteristic of lingual mucous membrane. Know the muscles of tongue. Master the origin,

insertion, action and nerve supply of the genioglossus. Master the position of major salivary gland their site of drainage into the mouth.

2. Master the position, division and basic construction of the pharynx.
3. Know the parts and boundaries of the nasal cavity. Master the principal features of the lateral wall of the cavity. Master the position of paranasal sinuses and their site of drainage into the nose.
4. Master the position, construction, function of the larynx. Master the division, feature of the laryngeal cavity.
5. Master the location, general features and relations of cervical part of trachea.
6. Master the location, general features of the pineal body, thyroid gland and parathyroid gland. Master the blood supply and relations of the thyroid.

【Contents】

1. The oral cavity: The boundaries and parts of the mouth. The formation of the isthmus of fauces. The general features of the palate, the teeth, the tongue. The position of major salivary gland their site of drainage into the mouth.
2. The pharynx: the position, division and basic construction of the pharynx.
3. The nasal cavity: the parts and boundaries of the nasal cavity. The principal features of the lateral wall of the cavity. The position of paranasal sinuses and their site of drainage into the nose.
4. The laryngeal cavity: the position, constructions, and function of the larynx. The division, feature of the laryngeal cavity.
5. The cervical part of trachea: location, general features and relations.
6. The location, general features of the pineal body, thyroid gland and parathyroid gland. The blood supply and relations of the thyroid.

The head

【Objectives】

1. Know the boundaries, parts and landmarks of the head.
2. Know the name of the facial muscles. Master the composition and function of masticatory muscles.

3. Master the origin, course and distribution of facial artery. Know the origin, branches and distribution of maxillary artery. Know the origin and distribution of superficial temporal artery.
4. Master the facial vein connections with cavernous sinus. Know the position of the “Danger triangle of the face”.
5. Know the name, position and area drainage of the lymph nodes of the head. Master the position of submandibular lymph nodes.
6. Master the branches and distribution of facial nerve in face.
7. Master the branches of trigeminal nerve in face.
8. Master the structures vertical and transversal passing through the parotid gland.
9. Master the boundaries and layers of the fronto-parieto-occipital region.
10. Know the boundaries and layers of the temporal region.

【Contents】

1. The boundaries, parts and landmarks of the head.
2. The superficial part of the face:
 - a) The facial muscles: the composition and function.
 - b) The origin, course and distribution of facial artery, the maxillary artery, and the superficial temporal artery.
 - c) The facial vein connections with cavernous sinus and the position of the “Danger triangle of the face”.
 - d) The lymphatic drainage of the head.
 - e) The branches and distribution of the facial nerve and the trigeminal nerve in face.
3. The region of parotid gland and masseter: The position and adjacent structures of parotid gland. The structures vertical and transversal passing through the parotid gland.
4. The deep part of lateral face: the position and main contents. The masticatory muscles: the composition and function.
5. The boundaries and layers of the fronto-parieto-occipito-temporal region.

The neck

【Objectives】

1. Know the landmarks of the neck. Know the parts, regions and triangles of the neck.
2. Know the name and arrangement of muscles of the neck. Master the origin, insertion, action and nerve supply of sternocleidomastoid and scalenus anterior.
3. Master the fascial layers: investing layer, pretracheal layer, prevertebral layer and carotid sheath. Master the contents of carotid sheath.
4. Know the boundaries and contents of posterior and anterior triangles of the neck.
5. Master the beginning, ending of the common carotid artery; the position and function of carotid sinus, carotid glomus; the branches and distribution of the external carotid artery.
6. Master the beginning, ending, branches and distribution of the subclavian artery.
7. Master the position of external jugular vein. Master the beginning, ending and tributaries of the internal jugular vein. Know the beginning and ending of the subclavian vein. Master the concept of venous angle.
8. Know the main lymph nodes of the neck. Master the position and area drainage of the superficial and deep lateral cervical lymph nodes.
9. Master the formation, position and main branches of the cervical plexus. Master the formation and course of phrenic nerve in the neck.
10. Know the formation of the ansa cervicalis. Know the course of the hypoglossal nerve in neck. Master the distribution of the accessory nerve.
11. Master the course and branches of the vagus nerve in the neck. Master the branches and distribution of superior laryngeal nerve. Master the relationship between the external branch of superior laryngeal nerve and superior thyroid artery. Master the origin, course and distribution of recurrent laryngeal nerve. Master the relationship between the recurrent laryngeal nerve and inferior thyroid artery.
12. Know the position of cervical part of the sympathetic trunk.

【Contents】

1. The boundaries, the divisions, and the landmarks of the neck.
2. The muscles of the neck: the name and arrangement. The origin, insertion, action and nerve supply of sternocleidomastoid and scalenus anterior.
3. The cervical fascia and spaces: the position of investing layer, pretracheal layer, prevertebral layer and carotid sheath. The contents of carotid sheath. The position of fascial spaces.
4. The anterior region of the neck: The boundaries and divisions.
5. The carotid triangle and the muscular triangle: the boundaries and contents.
6. The sternocleidomastoid region: the boundaries and contents.
7. The root of the neck: the boundaries and contents.
8. The thyroid gland and parathyroid gland: the position, relationships and vessels.

Thorax

Bones and joints of thorax

【Objectives】

1. Know the composition of vertebral column. Master the general characteristics of a typical vertebra. Master the characteristics of typical cervical, thoracic, and lumbar vertebrae. Master the characteristics of sacrum. Know the important variations in the vertebrae.
2. Know the joints of the vertebral column. Master the joints of the vertebral bodies. Master the structure and function of the intervertebral discs, the position and function of anterior and posterior longitudinal ligaments. Know the joints of vertebral arches. Master the position and function of the ligamenta flava. Know the general aspect (anterior, dorsal and lateral view) of vertebral column. Master the curves in the sagittal plane. Master the movements of vertebral column.
3. Know the classification of the ribs. Master the characteristics of typical ribs. Know the characteristics of atypical ribs.

4. Master the characteristics of the sternum. Master the landmarks of the sternal angle.
5. Know how the ribs articulate with vertebrae and sternum. Master the composition, shape and function of thoracic cage. Master the boundaries of the upper and lower openings of thorax.

【Contents】

1. Composition of vertebral column.
2. General characteristics of a typical vertebra.
3. Characteristics of typical cervical, thoracic, lumbar vertebrae, characteristics of sacrum, and the important variations in the vertebrae.
4. Joints of the vertebral column.
5. General aspect (anterior, dorsal and lateral view) of vertebral column. Master the curves in the sagittal plane.
6. Movements of vertebral column.
7. Classification of the ribs.
8. Characteristics of typical ribs, characteristics of atypical ribs.
9. Characteristics of the sternum. Landmarks of the sternal angle.
10. Ribs articulate with vertebrae and sternum.
11. Composition, shape and function of thoracic cage. Boundaries of the upper and lower openings of thorax.

Thoracic wall

【Objectives】

1. Know the landmarks of thorax. Master lines of orientation of thorax.
2. Master the position, origin, insertion and action of the external and internal intercostals muscles.
3. Master position, shape of the diaphragm. Master openings in the diaphragm. Know action of the diaphragm.
4. Master the structure and contents of intercostals spaces. Know the layers of thoracic wall. Master the arteries, veins, and nerves supplying thoracic wall.

5. Master the concept of dermatomes.

【Contents】

1. Landmarks of thorax. Lines of orientation of thorax.
2. Position, origin, insertion and action of the external and internal intercostals muscles.
3. Position, shape, openings in the diaphragm and action of the diaphragm.
4. Structure and contents of intercostals spaces. Layers of thoracic wall. Arteries, veins, and nerves supplying thoracic wall.
5. Concept of dermatomes.

Thoracic cavity

【Objectives】

1. Know the concept of the pleura and pleural cavities. Master the parts of parietal pleura, the positions of the pleural recesses. Master the surface markings of lower border of the lung and pleura.
2. Know the structure of the tracheobronchial tree. Master the position and structure characteristics of trachea and principal bronchi.
3. Master the shape, location and structures of lung. Know the concept of the bronchopulmonary segments for each lung. Know the lymph drainage of the lungs.
4. Know the concept of mediastinum. Master the subdivisions and contents of the mediastinum. Know the visible structures of the right and left side of mediastinum.
5. Master the concept of pericardium. Know the position of pericardial sinuses.
6. Master the location, surfaces of the heart. Master the principle features of four chambers of heart. Master the composition and location of conduction system of the heart. Know the structure of the heart. Master the principle features of interatrial and interventricular septums. Master the origin, course, main branches and distribution of right and left coronary artery. Know the venous drainage of the heart. Know the structures of the cardiac walls. Know the surface marking of

the heart.

7. Know the location of esophagus. Master three constrictions of esophagus. Master the relations of the thoracic part of the esophagus.
8. Master the beginning, ending and parts of aorta. Master the beginning, ending and branches of ascending aorta. Master the beginning, ending and branches of the aortic arch. Master the beginning, ending and branches of the thoracic aorta.
9. Know the pulmonary trunk, left and right pulmonary artery. Master the location of ligamentum arteriosum. Master the beginning, ending, and drainage of the superior vena cava. Master the beginning, ending, and drainage of the left and right brachiocephalic vein. Master the beginning, ending, and drainage of the azygos vein.
10. Master the lymph nodes and vessels of the thorax. Master the beginning, course, opening, and areas of drainage of thoracic duct and right lymphatic duct.
11. Master the formation, courses and function of vagus nerve and branches in thorax. Master the formation, courses and function of phrenic nerve. Master the basic anatomy of the thoracic part of sympathetic trunk.
12. Know the position and shape of the thymus.

【Contents】

1. Concept of the pleura and pleural cavities. Parts of parietal pleura, the positions of the pleural recesses. Surface markings of lower border of the lung and pleura.
2. Structure of the tracheobronchial tree. Position and structure characteristics of trachea and principal bronchi.
3. Shape, location and structures of lung. Concept of the bronchopulmonary segments for each lung. Lymph drainage of the lungs.
4. Concept of mediastinum. Subdivisions and contents of the mediastinum. Visible structures of the right and left side of mediastinum.
5. Concept of pericardium. Position of pericardial sinuses.
6. Location, surfaces of the heart. Principle features of four chambers of heart. Composition and location of conduction system of the heart. Structure of the heart. Principle features of interatrial and interventricular septums. The origin,

course, main branches and distribution of right and left coronary artery. Venous drainage of the heart. Structures of the cardiac walls. Surface marking of the heart.

7. Location of esophagus. Constrictions of esophagus. Relations of the thoracic part of the esophagus.
8. Beginning, ending and parts of aorta. Beginning, ending and branches of ascending aorta. Beginning, ending and branches of the aortic arch. Beginning, ending and branches of the thoracic aorta.
9. Pulmonary trunk, left and right pulmonary artery. Location of ligamentum arteriosum. Beginning, ending, and drainage of the superior vena cava. Beginning, ending, and drainage of the left and right brachiocephalic vein. Beginning, ending, and drainage of the azygos vein.
10. Lymph nodes and vessels of the thorax. Beginning, course, opening, and areas of drainage of thoracic duct and right lymphatic duct.
11. Formation, courses and function of vagus nerve and branches in thorax. Formation, courses and function of phrenic nerve. Basic anatomy of the thoracic part of sympathetic trunk.
12. Position and shape of the thymus.

Abdomen

Abdominal wall

【Objectives】

1. Master the layers of anterior and lateral wall of abdomen. Know the posterior abdominal wall. Know the artery, vein and nerves supplying the abdominal wall.
2. Master the location, composition and contents of sheath of rectus.
3. Master the location, composition and contents of inguinal canal.
4. Know the location and boundaries of inguinal region and inguinal triangle

【Contents】

1. Layers of anterior and lateral wall of abdomen. The arteries, veins and nerves

supplying the abdominal wall.

2. Sheath of rectus, inguinal canal, inguinal region and inguinal triangle.

Abdominal cavity

【Objectives】

1. Know the definitions of peritoneum and peritoneal cavity.
2. Know the structures formed by peritoneum; Master the lesser omentum, greater omentum, mesentery, mesoappendix, transverse mesocolon, sigmoid mesocolon, ligaments of liver, omental bursa, omental foramen, and pouches.
3. Master the location, relationship, shape and structures of stomach. Master the blood vessels of stomach.
4. Know the portions of small and large intestine.
5. Master the location, shape, divisions and relationship of duodenum.
6. Know the location of jejunum and ileum.
7. Master the features of colon and caecum.
8. Master the location and structures of the caecum.
9. Master the location of the vermiform appendix, and surface marking of the root of vermiform appendix.
10. Master the location, relationship, shape and structures, and surface markings of liver.
11. Master the location, portions and structures of gallbladder, and surface markings of fundus of gallbladder.
12. Master the location and shape of pancreas. Know the relationship of pancreas.
13. Master the composition of extrahepatic parts of biliary system.
14. Master the location, shape and features of spleen.

【Contents】

1. Peritoneum and peritoneal cavity
2. Structures formed by peritoneum: lesser omentum, greater omentum, mesentery, mesoappendix, transverse mesocolon, sigmoid mesocolon, ligament of liver,

omental bursa, omental foramen, and pouches.

3. Stomach: location, relationship, shape, blood vessels.
4. Small and large intestine, features of colon and caecum.
5. Duodenum: location, shape, divisions and relationship.
6. Location of jejunum and ileum.
7. Caecum. Vermiform appendix: location, surface marking of the root of vermiform appendix.
8. Location, relationship, shape, and surface markings of liver.
9. Gallbladder and surface markings of fundus of gallbladder.
10. Location, shape, and relationship of pancreas.
11. The composition of extrahepatic parts of biliary system. Divisions and relationship of common bile duct.
12. Spleen: location, shape and features.

Retroperitoneal space

【Objectives】

1. Master the shape, location and relationship of kidney, structures passing through the hilus of kidney, internal structure of kidney; structures in renal sinus, and capsules enclosing the kidney.
2. Know the location and blood vessels of suprarenal glands.
3. Know the course of ureter.
4. Master the location of abdominal aorta; know the relationship of abdominal aorta; Know the branches of abdominal aorta to the abdominal wall; Master the branches of abdominal aorta to the abdominal viscera; Master the branch supplying of the celiac trunk, superior and inferior mesenteric artery.
5. Master the location of inferior vena cava; Master the main tributaries of inferior vena cava.
6. Master the formation and tributaries of portal vein, and the places of portal-systemic venous anastomoses.
7. Master the locations of lumbar sympathetic trunk, know the distributions of

sympathetic nerve and parasympathetic nerve in the abdomen.

8. Know the locations and branch distributions of lumbar plexuses.

【Contents】

1. Shape, location and relationship of kidney, hilus of kidney, internal structure of kidney; renal sinus, and capsules of the kidney.
2. Location and blood vessels of suprarenal glands.
3. The course of ureter.
4. Location and relationship of abdominal aorta; Branches of abdominal aorta and distributions: celiac trunk, superior and inferior mesenteric artery.
5. Location and main tributaries of inferior vena cava.
6. Formation and tributaries of portal hepatic vein, portal-systemic venous anastomoses.
7. Locations and distributions of sympathetic nerve and parasympathetic nerve in the abdomen.
8. Locations and branch distributions of lumbar plexuses.

Pelvis

Pelvic wall

【Objectives】

1. Master the composition, parts and apertures of pelvis. Know the differences of pelvis between male and female. Know the joints, ligaments and muscles of the pelvis.
2. Master the formation of pelvic diaphragm. Know the disposition of the pelvic fascia.

【Contents】

3. Composition, parts and apertures of pelvis. Differences of pelvis between male and female. Joints, ligaments and muscles of the pelvis.
4. Formation of pelvic diaphragm. Disposition of the pelvic fascia.

Pelvic cavity

【Objectives】

1. Master the location and general feature of the rectum. Know the blood supply and lymph drainage of the rectum. Master the main relations of the rectum.
2. Master the general feature of the anal canal. Know the composition of anal sphincters.
3. Master the location, general features of urinary bladder. Master the place of trigone of bladder. Know the main relations of the bladder.
4. Know the location and general feature of the ductus deferens, seminal vesicles, ejaculatory ducts and prostate. Know the structure of the prostate.
5. Master the location, general feature and ligaments of ovary. Master the location, general feature and parts of uterine tubes. Master the position, general feature and parts of the uterus and the factors responsible for its support. Know the location and general feature of vagina. Master the relationship between the fornix of vagina and the rectouterine pouch.
6. Master the beginning and ending of common iliac artery and vein; Master the beginning and ending of external and internal iliac artery and vein. Know the branches of internal iliac artery. Master the relationship between uterine artery and ureter. Know the lymph nodes of the pelvis.
7. Know the formation, position and main branches of sciatic plexuses.
8. Know the arrangement of the autonomic nerves.

【Contents】

1. Location and general feature of the rectum. Blood supply and lymph drainage of the rectum. Main relations of the rectum.
2. Feature of the anal canal. Composition of anal sphincters.
3. Location, general features of urinary bladder. Place of trigone of bladder. Main relations of the bladder.
4. Location and general feature of the ductus deferens, seminal vesicles, ejaculatory ducts and prostate. Structure of the prostate.
5. Location, general feature and ligaments of ovary. Location, general feature and parts of uterine tubes. Position, general feature and parts of the uterus and the

factors responsible for its support. Location and general feature of vagina. Relationship between the fornix of vagina and the rectouterine pouch.

6. Beginning and ending of common iliac artery and vein; Beginning and ending of external and internal iliac artery and vein. Know the branches of internal iliac artery. Master the relationship between uterine artery and ureter. Lymph nodes of the pelvis.
7. Formation, position and main branches of sciatic plexuses.
8. Arrangement of the autonomic nerves.

Perineum

【Objectives】

1. Master the concept, boundary and parts of perineum.
2. Master the location, boundaries and contents of ischiorectal fossa.
3. Know the composition of male and female external genital organs. Master the general features of the urethra in the male and female.
4. Know the disposition of the fascia of urogenital region. Master the formation of pelvic diaphragm. Master the location and contents of superficial and deep perineal spaces.
5. Know the course and branches of the pudendal nerve and internal pudendal artery.

【Contents】

1. Concept, boundary and parts of perineum.
2. Location, boundaries and contents of ischiorectal fossa.
3. Composition of male and female external genital organs. General features of the urethra in the male and female.
4. Disposition of the fascia of urogenital region. Formation of pelvic diaphragm. Location and contents of superficial and deep perineal spaces.
5. Course and branches of the pudendal nerve and internal pudendal artery.

V. Exam

1. Specimen exam (25%) to check the learning of specimens.
2. Final exam (55%), using computers to assess the anatomical knowledge.
3. Others (20%), including attendance, homework, and presentation, etc.

VI. Reference books

1. G.J. Romanes. Cunningham's Manual of practical anatomy. Oxford medical publications. Wolters Kluwer Lippincott Williams & Wikins.
2. Richard L. Drake, et al. Grey's Anatomy for students.
3. Richard S. Snell. Clinical anatomy by regions. Wolters Kluwer Lippincott Williams & Wikins.
4. Alan J. Detton. Grant's Dissector. Wolters Kluwer