

General Embryology

Professor	Teaching Method	Learners' Activity	Title	Date	Session
Dr. Razee	Speech, Question And Answer-Slide, Board And Marker	Research And Answer To The Questions	Introduction To Embryology, Primordial Germ Cells (PGC)And, Mitosis, Meiosis, Oogenesis And Spermatogenesis		1
Dr. Razee	Speech, Question And Answer-Slide, Board And Marker	Research And Answer To The Questions	Ovulation, Hormonal Regulation Of Reproduction, Menstrual Cycle, Corpus Luteum, Oocyte Transport		2
Dr. Razee	Speech, Question And Answer-Slide, Board And Marker	Research And Answer To The Questions	Sperm Transport, Capacitation, Acrosomal Reaction, Phases Of Fertilization, Cleavage Divisions		3
Dr. Razee	Speech, Question And Answer-Slide, Board And Marker	Research And Answer To The Questions	Implantation , Events Of Second Week Of Development(Epiblast And Hypoblast Cells, Cytotrophoblast, , Syncytiotrophoblast, , Amniotic Cavity, Yolk Sac, Chorionic Cavity, Uteroplacental Circulation , Primary Villi. Decidua Reaction) Abnormal Implantation,		4
Dr. Razee	Speech, Question And Answer-Slide, Board And Marker	Research And Answer To The Questions	Gastrulation, Notochord , Paraaxial, Intermediate And Lateral Plate Mesoderm Formation, Teratogenesis And Tumors Associated With Gastrulation, Secondary And Tertiary Villus, Derivatives Of The Ectodermal Germ Layer, Neurulation		5
Dr. Razee	Speech, Question And Answer-Slide, Board And Marker	Research And Answer To The Questions	Third To Eighth Weeks: Derivatives Of The Endodermal And Mesodermal Germ Layers, Somites , Gut , Body Wall Formation, External Appearance During The Second Month		6
Dr. Razee	Speech, Question And Answer-Slide, Board And Marker	Research And Answer To The Questions	Third Month To Birth: Monthly Changes , Structure Of The Placenta , Chorion Frondosum And Decidua Basalis, Circulation Of The Placenta, Function Of The Placenta, Placental Changes At The End Of Pregnancy, Amniotic Fluid, Fetal Membranes In Twin		7

Lesson plan Basic Histology

Lecturer	Date	Student evaluation	Presentation	Subtitle	Session/Subject	No.
		Short questions	Powerpoint /Talk	General/cell membrane	1 st /The cell	1
				Organelles	2 nd /The cell	2
				Nucleus	3 rd /The cell	3
				Characteristics /types	Epithelial tissue	4
				Glandular tissue	Epithelial tissue	5
				General/Components of C.T	1 st /Connective tissue	6
				Components/Types of C.T	2 nd /Connective T.	8
				Adipose	1 st /Adipose T.	9
				Types/Cartilage	1 st /Cartilage T.	10
		Midterm	Midterm Exam	Midterm Exam	Midterm Exam	NOTE
				Bone tissue structure	1 st /Bone T.	11
				Osteogenesis and remodeling	2 nd /Bone T.	12
				General/Skeletal tissue	1 st /Muscular tissue	13
				Cardiac and smooth muscle	2 nd /Muscular tissue	14
				General structure and components	1 st /Nervous tissue	15
				Central &Peripheral nervous system	2 nd /Nervous tissue	16
				Blood cells	1 st /Blood	17
				Hematopoiesis	2 nd /Blood	18
			Final Exam	Final Exam	Final Exam	19
						20

Musculoskeletal system

	Session	Titles	Teacher
Upper Limb Anatomy	1	Osteology of pectoral girdle Osteology of humerus bone	Dr. Vahid Bayati
	2	Axilla definition Axillary contents Brachial plexus	Dr. Vahid Bayati
	3	Proximal musculature	Dr. Vahid Bayati
	4	Proximal musculature Arm area	Dr. Vahid Bayati
	5	Anterior forearm compartment (musculature and nerves and vessels)	Dr. Vahid Bayati
	6	Posterior forearm compartment (musculature and nerves and vessels) Hand area	Dr. Vahid Bayati
	Lower Limb Anatomy	1	Anatomy of hip, thigh bones and their joints
2		Macroscopic anatomy of Anterior and Medial region of thigh	Dr.Hemadi
3		Macroscopic anatomy of Gluteal region of thigh	Dr.Hemadi
4		Macroscopic anatomy of Posterior region of thigh and Popliteal fossa	Dr.Hemadi
5		Anatomy of Leg and Foot bones and their joints	Dr.Hemadi
6		Macroscopic anatomy of Anterior and Lateral region of leg	Dr.Hemadi
7		Macroscopic anatomy of Posterior region of leg and foot	Dr.Hemadi
8		Blood vessels of the Lower limbs: arteries and veins and their branches and their surface anatomy	Dr.Hemadi

HEAD AND NECK

teacher's name	teaching method	students' activity	outline of contents (expected concepts of teaching)	Date of meeting	Section
Dr Razee	questions and answers, and speech	answers to questions and explanation of tissue photos	Skull,neurocranium,viscocranium,sutures,cranial fossa, frontal & ethmoid		1
Dr Razee	questions and answers, and speech	answers to questions and explanation of tissue photos	Sphenoid & parietal		2
Dr Razee	questions and answers, and speech	answers to questions and explanation of tissue photos	Temporal & occipital		3
Dr Razee	questions and answers, and speech	answers to questions and explanation of tissue photos	Mandible & maxilla		4
Dr Razee	questions and answers, and speech	answers to questions and explanation of tissue photos	Zygomatic, palatine,lacrimal		5
Dr Razee	questions and answers, and speech	answers to questions and explanation of tissue photos	Neck boundaries.neckfascia, cutaneous nerves and veins,SCM,platysma,trapezius		6
Dr Razee	questions and answers, and speech	answers to questions and explanation of tissue photos	Ant & post triangles,sup & inf hyoid muscles and subdivision		7
Dr Razee	questions and answers, and speech	answers to questions and explanation of tissue photos	Content of post triangle, cervical plexus,subclavian artery		8
Dr Razee	questions and answers, and speech	answers to questions and explanation of tissue photos	Content of anterior triangles, carotid sheath and its content		9
Dr Razee	questions and answers, and speech	answers to questions and explanation of tissue photos	Suboccipital triangle , prevertebral muscle		10

Dr Razee	questions and answers, and speech	answers to questions and explanation of tissue photos	Face (nerve & muscles), facial nerve		11
Dr Razee	questions and answers, and speech	answers to questions and explanation of tissue photos	Infratemporal fossa and its contents, (muscle, nerve, vessel ves)		12
Dr Razee	questions and answers, and speech	answers to questions and explanation of tissue photos	Parotid gland (branches of facial nerve)		13
Dr hashemitabar	questions and answers, and speech	answers to questions and explanation of tissue photos	embryology		14
Dr hashemitabar	questions and answers, and speech	answers to questions and explanation of tissue photos	embryology		15

CARDIOVASCULAR SYSTEM

teacher's name	teaching method	students' activity	outline of contents (expected concepts of teaching)	Date of meeting	Section
Dr orazizadeh (Histology)	questions and answers, and speech	answers to questions and explanation of tissue photos	Histology of cardiovascular system & lymphoid system		1
Dr orazizadeh (Histology)	questions and	answers to questions and	Histology of cardiovascular system & lymphoid system		2

	answers, and speech	explanation of tissue photos			
Dr orazizadeh (Histology)	questions and answers, and speech	answers to questions and explanation of tissue photos	Histology of cardiovascular system & lymphoid system		3
Dr orazizadeh (Histology)	questions and answers, and speech	answers to questions and explanation of tissue photos	Histology of cardiovascular system & lymphoid system		4
Dr bijannejad (Anatomy)	questions and answers, and speech	answers to questions and explanation of tissue photos	Chest wall Skeleton of the thorax Sternum, typical and atypical ribs, thoracic vertebra		5
Dr bijannejad (Anatomy)	questions and answers, and speech	answers to questions and explanation of tissue photos	Intercostal muscles and their functions Intercostal vessels and nerves Diaphragm(origins, insertion, function, innervation)		6
Dr bijannejad (Anatomy)	questions and answers, and speech	answers to questions and explanation of tissue photos	Mediastinum(boundaries, divisions, contents) Pericardium(fibrous and serous pericardium, blood supply, nerve supply) Sinuses of pericardium Clinical notes		7
Dr bijannejad (Anatomy)	questions and answers, and speech	answers to questions and explanation of tissue photos	Surface anatomy of the heart Borders of the heart Surfaces of the heart Heart chambers Heart valves Clinical notes		8
Dr bijannejad (Anatomy)	questions and answers, and speech	answers to questions and explanation of tissue photos	Fibrous skeleton Conducting system Coronary arteries Cardiac dominance Veins of the heart Nerve supply of the heart Clinical notes		9
Dr bijannejad (Anatomy)	questions and answers, and speech	answers to questions and explanation of tissue photos	Large blood vessels formation Superior vena cava(course, relations, tributaries and clinical anatomy) Aorta(course, relations, branches and clinical anatomy) Azygos, hemyazygos and accessory hemiazygos		10
Dr bijannejad (Embryology)	questions and	answers to questions	Heart field formation, role of lateral and head folding in heart		11

	answers, and speech	and explanation of tissue photos	tube formation, formation of cardiac wall and cardiac jelly, cardiac looping and subdivisions of the heart tube		
Dr bijannejad (Embryology)	questions and answers, and speech	answers to questions and explanation of tissue photos	Sinus venosus, fate of sinus venosus and its horns, endocardial cushions formation, development of the atria and ventricles, septation of cardiac outflow(conotruncal ridges) and its clinical notes		12
Dr bijannejad (Embryology)	questions and answers, and speech	answers to questions and explanation of tissue photos	Development of vasculature, vasculogenesis and angiogenesis, aortic arches and their fate, circulation before and after birth		13

**References: Junqueira's Basic Histology
, Gray's Anatomy, langman`s medical embryology**

Digestive system histology

teacher's name	teaching method	students' activity	outline of contents (expected (concepts of teaching	Date of meeting	Section
Taheri Moghadam	questions and answers, and speech	answers to questions and explanation of tissue photos	The general structure of the digestive tract, oral cavity, teeth, ,tongue, pharynx and esophagus		first
Taheri Moghadam	questions and answers, and speech	answers to questions and explanation of tissue photos	Stomach		second
Taheri Moghadam	questions and answers, and speech	answers to questions and explanation of tissue photos	Small intestine and large intestine		third
Taheri Moghadam	questions and answers, and speech	answers to questions and explanation of tissue photos	Salivary glands, pancreas, liver and gall bladder		forth

Urogenital and Reproductive system histology

teacher's name	teaching method	students' activity	outline of contents (expected concepts of teaching)	Date of meeting	Section
Taheri Moghadam	questions and answers, and speech	answers to questions and explanation of tissue photos	renal blood flow, renal blood filtration, distal and proximal convoluted tubules, proximal glomerular apparatus, collecting ducts, ,bladder, ureter		first
Taheri Moghadam	questions and answers, and speech	answers to questions and explanation of tissue photos	male reproductive system (testicular tissue, spermatogenesis, gonads and external genital (organs		second
Taheri Moghadam	questions and answers, and speech	answers to questions and explanation of tissue photos	female reproductive system (ovary structure, follicles, fallopian tubes, uterus, menstruation, secretory activity of female reproductive system, implantation, cervix, vagina, development of breasts and their structure		third

Student' activity: answer the questions in class and explain the tissue slides in class
How to evaluate the course unit: class questions after each session and end-of-semester exam

The main sources of the lesson and approved by the ministry: Basic Histology , Janqueira

Respiratory system

Professor	Teaching Method	Learners' Activity	Title	Date	Session
Dr Mansouri	Speech, Question And Answer-Slide, Board And Marker	Research And Answer To The Questions	Respiratory Epithelium,Nasal Cavities,Smell (Olfaction) ,Sinuses & Nasopharynx,Larynx, Trachea, Bronchial Tree & Lung, Bronchi,Bronchioles Reference: Junqueira's Basic Histology		1
Dr Mansouri	Speech, Question And Answer-Slide, Board And Marker	Research And Answer To The Questions	terminal bronchioles,Respiratory Bronchioles,AlveolarDuct, Alveoli,Alveolar macrophages, Regeneration in the Alveolar Lining, Pleura, Respiratory Movements Reference: Junqueira's Basic Histology		2
Dr. Ashtari	Speech, Question And Answer-Slide, Board And Marker PBL		Anatomy of the upper and lower airways - structure of the external nose and nasal cavity and its walls - conchae of the nose - paranasal sinuses - innervation and blood supply to the nasal cavity		3
Dr. Ashtari	Speech, Question And Answer-Slide, Board And Marker PBL		Larynx-cartilages of the larynx-membranes and ligaments of the larynx-pyramidal cavity- vestibular and vocal folds		4
Dr. Ashtari	Speech, Question And Answer-Slide, Board And Marker PBL .		Laryngeal inlet and outlet - cavity of the larynx - muscles of the larynx - movements of the vocal and respiratory cords - sound production in the larynx - nerves of the larynx - blood supply to the larynx		5
Dr. Ashtari	Speech, Question And Answer-Slide, Board And Marker PBL		Anatomical position of the lungs and their location - the sides and lobes of the lungs - the vicinity of the lungs - the pleura and its innervation of the trachea - the vicinity of the trachea in the neck - the vicinity of the trachea in the upper mediastinum - the bronchi - the nerves of the trachea - the blood supply of the trachea		6
دکتر هاشمی تبار			جینی شناسی تنفسی		7

<p>رشته و مقطع تحصیلی: پزشکی</p> <p>پیشنیاز:</p> <p>ترم تحصیلی:</p> <p>گروه مدرسین:</p> <p>روز و ساعت درس:</p> <p>پست الکترونیکی:</p>	<p>Anatomy of Digestive system</p> <p>عنوان درس:</p> <p>عمومی</p> <p>دانشکده: پزشکی</p> <p>کد درس:</p> <p>سال تحصیلی:</p> <p>تعداد واحد:</p> <p>میزان واحد به تفکیک:</p> <p>مدرس مسئول:</p> <p>روزهای حضور در دفتر کار:</p> <p>اهداف کلی درس:</p>
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Teacher	Subjects (expected teaching concepts)	Session
Dr. Ashtari	Anatomy of the oral cavity (tongue -palate), innervation and blood supply to the oral cavity-common oral lesions- anatomy of the pharynx (naso, oro and laryngopharynx)-tonsils- salivary glands-esophagus	1
Dr. Ashtari	Anatomical position of the abdomen and key landmarks- topographical division of abdomen- anterolateral abdominal wall (layers)-rectus sheath- abdominal hernias-innervation, blood supply and lymphatic drainage	2
Dr. Ashtari	Anatomy of the Inguinal canal (formation, boundaries and contents)- inguinal hernias (direct, indirect)- peritoneum- peritoneal cavity- omenta- mesenteries and ligaments	3
Dr. Ashtari	Anatomy of the abdominal organs (abdominal esophagus, stomach, small intestine, large intestine)- external anal sphincter- gastroesophageal reflux disease- McBurney's point- appendicitis- hemorrhoids	4
Dr. Ashtari	Anatomy of the liver, gall bladder, pancreas- duct system for bile- blood supply of abdominal viscera- portocaval anastomosis- cholelithiasis- cirrhosis	5
Dr. Ashtari	Abdominal innervation- anatomy of the posterior abdominal wall- anatomy of the diaphragm- lumbar plexus- referred pain	6

عنوان درس: Anatomy of urogenital system	رشته و مقطع تحصیلی: پزشکی
عمومی	دانشکده: پزشکی
کد درس:	پیشنیاز:
سال تحصیلی:	ترم تحصیلی:
تعداد واحد:	گروه مدرسین:
میزان واحد به تفکیک:	روز و ساعت درس:
مدرس مسئول:	پست الکترونیکی:
روزهای حضور در دفتر کار:	
اهداف کلی درس:	

Teacher	Subjects (expected teaching concepts)	Session
Dr. Ashtari	Anatomy of kidneys and supra renal glands (anatomical position, structure)- renal vasculature- ureter- ureteric vasculature- urinary tract stones- nephrostomy- kidney transplant- urinary bladder- urethra (male and female)	1
Dr. Ashtari	Anatomy of pelvic wall (outlet and inlet)- Difference between male and female pelvis- Ligaments of the pelvic wall- Muscles of the pelvic wall- Apertures- The pelvic diaphragm- The perineal membrane and deep perineal pouch- Perineal body- anatomy of Male Reproductive System- scrotum- Prostatic carcinoma	2
Dr. Ashtari	Anatomy of female reproductive system (ovaries- uterine- uterine tube- cervix- vagina)- Endometriosis- peritoneum in the pelvic cavity- Ectopic Pregnancy- Ovarian ligament and round ligament- Broad ligament- perineum- The superficial perineal pouch	3
Dr. Ashtari	Anatomy of pelvic innervation- somatic innervation (Sacral plexus- Coccygeal plexus)- Splanchnic innervation- pelvic blood supply (arteries- veins)- lymphatic drainage	4

Special Sense organ

Professor	Teaching Method	Learners' Activity	Title	Date	Session
Dr Mansouri	Speech, Question And Answer-Slide, Board And Marker	Research And Answer To The Questions	Eyes:(The Photoreceptor System) ,Fibrous Layer:(Sclera, Cornea, Limbus) Vascular Layer:(Choroid, Ciliary Body, Iris) Lens, Vitreous Body,Retina,Rod Cells, Cone Cells,Specialized Areas of the Retina		1
Dr Mansouri	Speech, Question And Answer-Slide, Board And Marker	Research And Answer To The Questions	Accessory Structures of the Eye Ears: (The Vestibuloauditory System) External Ear,Middle Ear,Internal Ear,Saccule and Utricle, Semicircular Ducts Vestibular Functions of the Ear Cochlear Duct and Auditory Functions		2

Reference: Junqueira's Basic Histology

Endocrine Glands

Professor	Teaching Method	Learners' Activity	Title	Date	Session
Dr Mansouri	Speech, Question And Answer-Slide, Board And Marker	Research And Answer To The Questions	Pituitary Gland (Hypophysis) Blood Supply & the Hypothalamo-Hypophyseal Portal System Pars Distalis,Pars Tuberalis ,Pars Intermedia ,Control of Secretion in the Adenohypophysis Neurohypophysis (Posterior Pituitary) Adrenal Glands		1

Dr Mansouri	Speech, Question And Answer-Slide, Board And Marker	Research And Answer To The Questions	Blood Supply Adrenal Cortex,Adrenal Medulla, Pancreatic Islets ,Thyroid Gland , Control of Thyroid Function ,Storage & Release of Thyroid Hormone Parathyroid Glands Pineal Gland		2
Dr fakhredini			Situation and Extent,Capsules of Thyroid,Surfaces, adjacent and Relations,Arterial Supply,Venous Drainage,Nerve Supply		3

Reference: Junqueira's Basic Histology