## Basrah university / College Of Medicine Department of Human Anatomy Syllabus of Anatomy 2 / 2<sup>nd</sup> semester / Second year / 2024-2025

Neurology Lec.	hrs	Objectives
Divisions of brain		Neurosurgeons
<ul> <li>Forebrain,</li> <li>midbrain</li> <li>and hindbrain</li> <li>Clinical notes</li> </ul>	1	At the end of these lectures the student should be able to  • Identify main divisions of brain Describe the gross anatomy of brain
Cerebrum		Neurosurgeons
<ul> <li>Definition</li> <li>External topography</li> <li>Surfaces ,borders . poles</li> <li>Cerebral cortex</li> <li>Lobes of cerebral hemisphere</li> <li>Main sulci and gyri</li> <li>Clinical notes</li> </ul>	1	At the end of these lectures the student should be able to  Describe gross anatomy  Mention Surfaces ,borders, and lobes  List main sulci and gyri
Functional areas of cerebrum		Neurosurgeons
<ul> <li>Anatomy</li> <li>Main area</li> <li>Location</li> <li>Important function</li> <li>Clinical notes</li> </ul>	1	At the end of these lectures the student should be able to  Describe their gross anatomy  Mention main functional area  What is their functional importance
Basal ganglia		Neurosurgeons
<ul> <li>Definition</li> <li>Location</li> <li>Their connection &amp; Clinical note</li> </ul>	1	At the end of these lectures the student should be able to  Name the basal ganglia in order  List clinical importance of each  Their functions
Internal capsule		Neurosurgeons
<ul> <li>white matter fibers</li> <li>Types</li> <li>Relation</li> <li>Connection</li> <li>Clinical notes</li> </ul>	1	<ul> <li>At the end of these lectures the student should be able to</li> <li>Identify the parts of the internal capsule</li> <li>Mention different types</li> <li>List clinical features of lesions associated with</li> <li>Relate their functional importance</li> </ul>

Diencephalon		Neurosurgeons
<ul> <li>Defintion</li> <li>Functions</li> <li>Classification</li> <li>Thalamus</li> <li>Anatomical features</li> <li>Thalamic nuclei</li> <li>Function of thalamus</li> <li>Clinical notes</li> </ul>	1	At the end of these lectures the student should be able to  • Mention parts of diencephalon • Main boundaries and contents • Mention arrangement of each part • Describe thalamic nuclei • Mention the main function of each • Describe the clinical signs and symptoms related to their lesions
Hypothalamus , metathalamus		Neurosurgeons  At the end of these lectures the student should be
<ul> <li>Epithalamus</li> <li>subthalamus</li> <li>Anatomy</li> <li>Functions</li> <li>Connections</li> <li>Pineal body</li> <li>Clinical importance and lesions</li> </ul>	1	<ul> <li>able to to describe the anatomy</li> <li>To list the hypothalamic nuclei</li> <li>To relate defect to clinicl backgrund</li> </ul>
Brain stem		Neurosurgeons
<ul> <li>Defintion</li> <li>Divisions</li> <li>Midbrain</li> <li>Anatomy .</li> <li>Structures related</li> <li>Clinical notes</li> </ul>	1	<ul> <li>At the end of these lectures the student should be able to</li> <li>Identify and locate the CN's associated with the medulla, pons and midbrain</li> <li>Recognize the major internal and external landmarks on the dorsal and ventral surface of the brain stem, so that you can determine if a gross or stained cross section is medulla, pons or midbrain.</li> <li>Identify on a typical cross section all the brain stem nuclei containing motor.</li> </ul>
Pons		Neurosurgeons
<ul> <li>External anatomy</li> <li>Internal structure</li> <li>Details of cross sections</li> <li>Clinical notes</li> </ul>	1	At the end of these lectures the student should be able to  • Mention gross anatomy of pons • Describe the cross section details • Name the cranial nerves associated

Medulla oblongata		Neurosurgeons
<ul> <li>Gross anatomy</li> <li>Internal structure</li> <li>Functions</li> <li>Sections</li> <li>Structures related</li> <li>Clinical notes</li> </ul>	1	At the end of these lectures the student should be able to  Define M.O  Name the vital centers related Describe a c/s Mention clinical points of view
Blood supply of the brain		Neurosurgeons
<ul> <li>Main arteries and connection</li> <li>Clinical points related to their impairment</li> </ul>	1	At the end of these lectures the student should be able to  • Define circle of willis  • Name arteries related  • Main branches and connections
Cerebellum		Neurosurgeons
<ul> <li>External structure</li> <li>Functions</li> <li>Divisions</li> <li>Anatomical ,functional</li> <li>Cerebellar peduncles and Nuclei</li> <li>Cerebellar cortex</li> <li>Internal structure</li> <li>Cerebellar dysfunctions</li> <li>Clinical notes</li> </ul>	2	At the end of these lectures the student should be able to  Describe the gross anatomy Surfaces, parts, Name main nuclei List important connections Recognize main lesion
Reticular formation, Hypocampus Limbic system		Neurosurgeons
<ul> <li>Anatomy</li> <li>Main connection</li> <li>Function</li> <li>Clinical points of view</li> </ul>	1	At the end of these lectures the student should be able to  • Mention the location, anatomical components and structure related  • Mention the neurotransmitters  • List the main functions  • Recognize the clinical relevant points
Cranial nerves	3	Neurosurgeons
<ul> <li>Name the cranial nerves</li> <li>Mention the type of each nerve</li> <li>Describe their connection</li> <li>Mention the lesions associated with each</li> </ul>		<ul> <li>Name the cranial nerves</li> <li>Mention the type of each nerve</li> <li>Describe their connection</li> <li>Mention the lesions associated with each</li> </ul>

Abdomen		Objectives
abdominal wall 5 lec		Dr. Saja M. Ali
Introduction / Abdomen  Surface land marks of anterior abdominal wall  Abdominal lines and planes  Vertical lines  Horizontal planes  Trans pyloric plane  Subcostal plane  Intertubercular plane  Regions of anterior abdominal wall  Clinical notes	1	Objective :At the end of this lecture the student must be able to :  *to know the surface land marks of abdomen  *To describe the regions of abdomen
Anterior abdominal wall  Skin  Texture & Natural cleavage lines  Nerve supply  Blood Supply  Lymphatics  Superficial fascia & divisions  Deep fascia  Muscles of anterior abdominal wall  External oblique(Superficial inguinal ring, Inguinal ligament, Lacunar Ligament & Pectineal ligament)  Internal oblique (Conjoint tendon)  Rectus abdominis (rectus sheath, Formation & its three distinct arrangements)  Pyramidalis  Cremaster muscle	1	Objectives: At the end of this lecture the student must be able to: *Describe the layers of anterior abdominal wall *Cutaneous innervation, blood supply & lymphatic drainage of abdomen * Identify muscles of anterior abdominal wall

Anterior abdominal wall	1	Objective :At the end of this lecture the student must
Function of abdominal muscles		be able to:
Neuro vascular plane of abdominal		*Describe the functions and neurovascular supply of
muscles		abdominal muscles
Deep lymphatics of anterior		*Know the inguinal canal boundaries, contents
abdominal wall		* Identify the spermatic cord structures and
Transversalis fascia		coverings
Extraperitoneal fat		
❖ Inguinal Canal		
❖ Walls		
Deep inguinal ring		
<ul><li>Functions of Inguinal canal</li></ul>		
Mechanics of inguinal canal		
❖ Spermatic Cord		
Coverings of the spermatic cord		
<ul> <li>Structures within the spermatic cord</li> </ul>		
<ul> <li>Clinical notes</li> </ul>		
* Chilical notes		
Posterior abdominal wall	1	Objectives: At the end of this lecture the student
Formation of posterior abdominal	_	must be able to:
wall		*Describe muscles, innervations and functions of
<ul> <li>Muscles of posterior abdominal wall</li> </ul>		posterior abdominal wall
Psoas major muscle		*Describe the lumbar fascia
		Describe the lumbar lastia
Quadratus lumborum		
❖ Facial lining of abdominal wall		
Lumber fascia		
Clinical notes		
Abdominal Hernia	1	Objective :At the end of this lecture the student must
Abdominal Hernia	1	Objective :At the end of this lecture the student must be able to :
	1	
Definition	1	be able to :
<ul><li>Definition</li><li>Common types of abdominal hernia</li><li>Indirect Inguinal hernia</li></ul>	1	be able to :  *to know what mean abdominal hernia and types of
<ul><li>Definition</li><li>Common types of abdominal hernia</li><li>Indirect Inguinal hernia</li></ul>	1	be able to :  *to know what mean abdominal hernia and types of
<ul> <li>Definition</li> <li>Common types of abdominal hernia</li> <li>Indirect Inguinal hernia</li> <li>Direct Inguinal hernia</li> <li>Femoral Hernia</li> </ul>	1	be able to :  *to know what mean abdominal hernia and types of
<ul> <li>Definition</li> <li>Common types of abdominal hernia</li> <li>Indirect Inguinal hernia</li> <li>Direct Inguinal hernia</li> <li>Femoral Hernia</li> <li>Umbilical hernia (Congenital &amp;</li> </ul>	1	be able to :  *to know what mean abdominal hernia and types of
<ul> <li>Definition</li> <li>Common types of abdominal hernia</li> <li>Indirect Inguinal hernia</li> <li>Direct Inguinal hernia</li> <li>Femoral Hernia</li> <li>Umbilical hernia (Congenital &amp; Acquired)</li> </ul>	1	be able to :  *to know what mean abdominal hernia and types of
<ul> <li>Definition</li> <li>Common types of abdominal hernia</li> <li>Indirect Inguinal hernia</li> <li>Direct Inguinal hernia</li> <li>Femoral Hernia</li> <li>Umbilical hernia (Congenital &amp; Acquired)</li> <li>Epigastric hernia</li> </ul>	1	be able to :  *to know what mean abdominal hernia and types of
<ul> <li>Definition</li> <li>Common types of abdominal hernia</li> <li>Indirect Inguinal hernia</li> <li>Direct Inguinal hernia</li> <li>Femoral Hernia</li> <li>Umbilical hernia (Congenital &amp; Acquired)</li> <li>Epigastric hernia</li> <li>Separation of recti</li> </ul>	1	be able to :  *to know what mean abdominal hernia and types of
<ul> <li>Definition</li> <li>Common types of abdominal hernia</li> <li>Indirect Inguinal hernia</li> <li>Direct Inguinal hernia</li> <li>Femoral Hernia</li> <li>Umbilical hernia (Congenital &amp; Acquired)</li> <li>Epigastric hernia</li> <li>Separation of recti</li> <li>Incisional hernia</li> </ul>	1	be able to :  *to know what mean abdominal hernia and types of
<ul> <li>Definition</li> <li>Common types of abdominal hernia</li> <li>Indirect Inguinal hernia</li> <li>Direct Inguinal hernia</li> <li>Femoral Hernia</li> <li>Umbilical hernia (Congenital &amp; Acquired)</li> <li>Epigastric hernia</li> <li>Separation of recti</li> <li>Incisional hernia</li> <li>Hernia through linea semilunaris</li> </ul>	1	be able to :  *to know what mean abdominal hernia and types of
<ul> <li>Definition</li> <li>Common types of abdominal hernia</li> <li>Indirect Inguinal hernia</li> <li>Direct Inguinal hernia</li> <li>Femoral Hernia</li> <li>Umbilical hernia (Congenital &amp; Acquired)</li> <li>Epigastric hernia</li> <li>Separation of recti</li> <li>Incisional hernia</li> <li>Hernia through linea semilunaris</li> <li>"Spigelian hernia"</li> </ul>	1	be able to :  *to know what mean abdominal hernia and types of
<ul> <li>Definition</li> <li>Common types of abdominal hernia</li> <li>Indirect Inguinal hernia</li> <li>Direct Inguinal hernia</li> <li>Femoral Hernia</li> <li>Umbilical hernia (Congenital &amp; Acquired)</li> <li>Epigastric hernia</li> <li>Separation of recti</li> <li>Incisional hernia</li> <li>Hernia through linea semilunaris         "Spigelian hernia"</li> <li>Lumber hernia "Hernia through</li> </ul>	1	be able to :  *to know what mean abdominal hernia and types of
<ul> <li>Definition</li> <li>Common types of abdominal hernia</li> <li>Indirect Inguinal hernia</li> <li>Direct Inguinal hernia</li> <li>Femoral Hernia</li> <li>Umbilical hernia (Congenital &amp; Acquired)</li> <li>Epigastric hernia</li> <li>Separation of recti</li> <li>Incisional hernia</li> <li>Hernia through linea semilunaris         "Spigelian hernia"</li> <li>Lumber hernia "Hernia through         Petit's triangle"</li> </ul>	1	be able to :  *to know what mean abdominal hernia and types of
<ul> <li>Definition</li> <li>Common types of abdominal hernia</li> <li>Indirect Inguinal hernia</li> <li>Direct Inguinal hernia</li> <li>Femoral Hernia</li> <li>Umbilical hernia (Congenital &amp; Acquired)</li> <li>Epigastric hernia</li> <li>Separation of recti</li> <li>Incisional hernia</li> <li>Hernia through linea semilunaris         "Spigelian hernia"</li> <li>Lumber hernia "Hernia through</li> </ul>	1	be able to :  *to know what mean abdominal hernia and types of
<ul> <li>Definition</li> <li>Common types of abdominal hernia</li> <li>Indirect Inguinal hernia</li> <li>Direct Inguinal hernia</li> <li>Femoral Hernia</li> <li>Umbilical hernia (Congenital &amp; Acquired)</li> <li>Epigastric hernia</li> <li>Separation of recti</li> <li>Incisional hernia</li> <li>Hernia through linea semilunaris         "Spigelian hernia"</li> <li>Lumber hernia "Hernia through         Petit's triangle"</li> </ul>	1	be able to :  *to know what mean abdominal hernia and types of
<ul> <li>Definition</li> <li>Common types of abdominal hernia</li> <li>Indirect Inguinal hernia</li> <li>Direct Inguinal hernia</li> <li>Femoral Hernia</li> <li>Umbilical hernia (Congenital &amp; Acquired)</li> <li>Epigastric hernia</li> <li>Separation of recti</li> <li>Incisional hernia</li> <li>Hernia through linea semilunaris         "Spigelian hernia"</li> <li>Lumber hernia "Hernia through         Petit's triangle"</li> </ul>	1	be able to :  *to know what mean abdominal hernia and types of

Abdominal cavity 12-15 lec Dr. Saja M. Ali		Dr. Saja M. Ali
Peritoneum:  Definition, classification ,types  omental bursa  Structure , contents ,boundaries  greater sac , peritoneal ligaments ,pouches, recess  Clinical notes Blood supply ,Nerve supply , lymphatic	2	Objective :At the end of this lecture the student mus be able to : *to describe Peritoneum ,their function ,types and neurovascular supply
Gastrointestinal tract Dr. Saja M. Ali		
■ Esophagus	1	Objective :At the end of this lecture the student must be able to:  *to identify the Abdominal esophagus, anatomical relations and its neurovascular supply  *to describe gross appearance of stomach, anatomical relations, peritoneal relations and its neurovascular supply  *to demonstrate some clinical notes
<ul> <li>duodenum</li> <li>Structure, parts ,relation and boundaries ,</li> <li>blood supply, nerve supply and lymphatic</li> <li>Function, Clinical notes</li> </ul>	1	Objective :At the end of this lecture the student must be able to :  *to describe duodenum parts ,functions , anatomica relations , peritoneal relations and its neurovascular supply  *to demonstrate some clinical notes
<ul> <li>jejunum and ileum</li> <li>gross appearance ,relation</li> <li>blood supply, nerve supply ,lymphatic and function</li> <li>Differences between jejunum and ileum</li> <li>Clinical notes</li> </ul>	1	Objective :At the end of this lecture the student must be able to :  *to jejunum and ileum structures , anatomical relations , peritoneal relations and its neurovascular supply  *how differentiates between jejunum and ileum macroscopically and microscopically  *to demonstrate some clinical notes

■ large intestine  Differences between large and small intestine  Cecum  Parts , description, relation  blood supply , nerve supply ,  iliocecal valve  appendix  structure, shape ,types  relation , blood supply  nerve supply and lymphatic  Clinical notes	1	Objective :At the end of this lecture the student must be able to :  *to describe cecum , anatomical relations , peritoneal relations and its neurovascular supply  * Identify the types of appendix , anatomical relations , peritoneal relations and its neurovascular supply  *to demonstrate some clinical notes  *how differentiates between small and large intestines macroscopically and microscopically
<ul> <li>ascending colon, descending colon, transverse colon</li> <li>parts, description</li> <li>relation, blood supply</li> <li>nerve supply and lymphatic</li> <li>Clinical notes.</li> </ul>	1	Objective :At the end of this lecture the student must be able to :  *to describe the ascending colon , descending colon , transverse colon , anatomical relations , peritoneal relations and their neurovascular supply  *to demonstrate some clinical notes
<ul> <li>Blood supply of abdomen.</li> <li>Branches of abdominal aorta</li> <li>celiac trunk</li> <li>superior mesenteric artery</li> <li>inferior mesenteric artery</li> <li>Clinical notes</li> </ul>	1	Objective :At the end of this lecture the student must be able to :  *to describe the arterial blood supply of abdomen and their branches
<ul><li>Venous drainage of abdomen ,Porto caval anastomosis</li><li>Clinical notes</li></ul>	1	Objective :At the end of this lecture the student must be able to :  *to describe the venous drainage of abdomen  *to demonstrate the importance of Porto caval anastomosis
<ul> <li>liver , gall bladder</li> <li>Gross appearance. Relation , divisions , boundaries</li> <li>Blood supply, nerve supply and lymphatic ,Clinical notes</li> </ul>	1	Objective :At the end of this lecture the student must be able to :  *to describe liver lobes ,functions , anatomical relations , peritoneal relations and its neurovascular supply  *to identify gallbladder ,functions , anatomical relations , peritoneal relations and its neurovascular supply  *to demonstrate some clinical notes
<ul> <li>pancreas , spleen.</li> <li>Structure, relation , parts</li> <li>blood supply, nerve supply and lymphatic</li> <li>Clinical notes</li> </ul>	1	Objective :At the end of this lecture the student must be able to :  *to describe pancreas ,functions , anatomical relations , peritoneal relations and its neurovascular supply  *to identify spleen , anatomical relations , peritoneal relations and its neurovascular supply  *to demonstrate some clinical notes

kidney, suprarenal gland Objective :At the end of this lecture the student must Structure, parts be able to: Relation .blood supply, nerve \*to describe suprarenal glands ,functions , supply, Clinical notes anatomical relations and its neurovascular supply ureters \*to describe renal structures ,functions , anatomical normal constrictions , description relations and its neurovascular supply , blood supply \*to know ureter structures, constrictors, anatomical nerve supply and lymphatic relations and its neurovascular supply ,Functions ,Clinical notes. \*to demonstrate some clinical notes Pelvis 5 Lec Dr. Saleh M. **Orientation of pelvis** Objective :At the end of this lecture the student must False and true pelvis be able to: **Structures of pelvic wall. contents** \*to describe the bonny pelvis, pelvic diaphragm of pelvic diaphragm \*to know the differences of pelvis between male and Sex differences of pelvis female sacral plexuses ,autonomic nerves \*to demonstrate the neurovascular supply of pelvis arteries of pelvis Clinical notes pelvic viscera Objective :At the end of this lecture the student must sigmoid colon be able to: rectum ,ureters \*to describe functions, anatomical relations and urinary bladder their neurovascular supply Clinical notes \*to demonstrate some clinical notes Objective :At the end of this lecture the student must female genital organs ovary , uterine tube be able to: \*to describe functions of female genital organs uterus blood supply and lymphatic \*to identify neurovascular supply of female genital drainage organs nerve supply Clinical notes perineum Objective :At the end of this lecture the student must definitions, parts be able to: urogenital, superficial and deep \*to define the perineum and its parts \*to describe various structures in its wall and its perineal pouches ischiorectal fossa relations with clinical problems \*to list the contents of superficial and deep perineal anal triangle ,anal canal (location, relations, structures) pouches nerve supply blood supply \*to memorized the blood and nerve supply of

perineum

Clinical notes