

## LECTURES

- Introduction. The subject of anatomy.
- Reproduction. Stages of embryogenesis. Types of reproduction. Cycle of pregnancy-general features of the gametes.
- Meiosis. Reduction division. Equational division.
- Spermatogenesis. Spermatocytosis. Spermiogenesis. Spermia-structure, biology.
- Oogenesis. Ovogenetic cycle. Menstrual cycle. Primary, secondary, mature ovarian follicles.
- Fertilization. Implantation. Cleavage.
- Evolution in the second week
- Evolution in the third week.
- Evolution in weeks 4-8. Neurulation. Gastrulation. Derivatives of the germ layers. Development of the limbs. Development abnormalities.
- Embryonic annexes.
- Notions of biomechanics. Classification of the joints-means of hinging, means of gliding. Joints of the vertebral column with the cranium, joints of the vertebrae.
- Sternoclavicular joint, acromioclavicular joint, shoulder joint-structure, motor agents, movements. Forward or upward rotation of the scapula and the reverse movement, the rotator cuff.
- Elbow joint, radio-ulnar joints, radiocarpal joint-structure, motor agents, movements.
- Hip joint, knee joint, talocrural joint-structure, motor agents, movements.
- Cranium-neuro- and viscerocranium- functional architecture of the cranium, cranial anthropometrical points.
- Development of the neurocranium.
- Development of the viscerocranium.
- Development of the face-development abnormalities.
- Branchial region, the pharyngeal pouches-evolution, derivatives.
- The pharyngeal arches- evolution, derivatives.
- The mesobranchial field-evolution, derivatives. Derivatives of the primitive mouth.
- Temporomandibular joint- articular surfaces, means of joining, means of gliding
- Biomechanics of the temporomandibular joint. Depression, elevation, lateral movements of the mandible, functional structure of the masticatory muscles.
- Oral cavity- walls, content, blood supply, lymph vessels, nerve supply. Tongue-structure, blood supply, nerve supply. Teeth- structure, deciduous teeth, permanent teeth, group features, blood supply, nerve supply..
- Salivary glands- development, minor salivary glands, sublingual gland, submandibular gland, parotid gland.
- Pharynx
- Larynx
- Topographic regions of the face and of the neck
- Development of the respiratory system
- Development of the heart and of the great vessels
- Serous cavities of the body- Development, peritoneal cavity, omenta, mesenteries, the division of the abdominal cavity, the anatomo-clinical division of the abdominal wall,

weak points of the abdominal wall.

- Development of the digestive system. Evolution of the foregut, evolution of the primary intestinal loop, derivatives, physiological hernia. Evolution of the hindgut-derivatives. Cloaca and its division. Development of the liver and congenital abnormalities. Development of the pancreas, congenital abnormalities.
- Portal vein, visceral and parietal anatomoses between the portal and systemic circulation.
- Development of the urogenital system. Evolution of the pronephros, mesonephros and metanephros. Development of the ureter. Derivatives of the cloaca, development of the kidney. Congenital abnormalities of the urinary system.
- Development of the genital system. Indifferent stage of the gonad. Development of the testis and of the male genital ducts. Development of the male external genitalia. Congenital abnormalities.
- Development of the female genital system. Development of the ovary, of the uterus, of the uterine tube, of the vagina. Development of the female external genitalia. Congenital abnormalities.
- Retroperitoneal space. Topography of the retroperitoneal space. Renal fascia. Major retroperitoneal vessels. Thoracic duct.
- Retroperitoneal autonomic plexuses. Lumbar part of the sympathetic trunk, pelvis-subperitoneal space.
- Perineum in male-topography, structure, fasciae
- Perineum in female-topography, structure, fasciae
- Perineal spaces, ischiorectal fossa, superficial perineal space, deep perineal space.
- Receptors and their structure
- General cutaneous sensory pathways (pain, temperature, touch, pressure and vibration pathways)
- Proprioceptive pathways
- Visual and gustatory pathways.
- Auditory and vestibular pathways.
- Reticular formation.
- Structure of the cerebellum and its connections.
- Thalamus: nuclei, connections.
- Hypothalamus: nuclei, connections
- Limbic system and its connections.
- Structure of the cerebral cortex
- Pyramidal system
- Extrapyrarnidal system
- Blood vessels of the encephalon and vascular syndromes.