International School of Medicine / Medicine (English)

2023 - 2024 Academic Year

Endocrine & Urogenital Systems

Syllabus

Course Description					
Name	**Code**	**Semester**	**T+A Hour**	**Credit**	**ECTS**
Endocrine & Urogenital Systems	10. Committee	Spring Semester	107+26	0	8

Prerequisites Courses	
Recommended Elective Courses	
Language of Instruction	English
Course Level	First Cycle (Bachelor's Degree)
Course Type	Committee
Course Coordinator	Assist.Prof. Sven Pierre L. VILAIN
Name of Lecturer(s)	Assist.Prof. Sven Pierre L. VILAIN
Assistant(s)	
Aim	The aim of this committee is to acquire the knowledge of histologic, anatomic, physiologic and biochemical aspects of endocrine and urogenital system and to correlate these knowledge with the pathophysiologic process that will establish a basis for understanding clinical applications.
Course Content	This course contains; ,,,,.

Course Learning Outcomes	**Teaching Methods**	**Assessment Methods**
Identify the histological regions of the pituitary and count the cells found.		
Explain the histological structure of the pineal gland.		
Counts the names of the cells in the thyroid gland, their histological features and the hormones they secrete.		
Explain the histological structure of the parathyroid gland and the effects of the hormone it secretes.		
Counts the layers of the adrenal gland and the cells found.		
Counts the histological features of cells in the adrenal gland and the hormones they secrete, briefly explains the effects of hormones.		
Recognize and distinguish the preparations of endocrine organs and interpret images.		
Explain the embryological development of the pituitary and pineal glands.		
Explain the embryological development of the thyroid gland.		
Explain the embryological development of the parathyroid gland.		
Explain the embryological development of the cortex and medulla of the adrenal gland.		
Interprets the problems related to the development of endocrine organs.		
Explain the histological structure of the kidneys.		
Counts the cortex and medulla features.		
Explain the structure of the glomerulus.		
Counts and defines the cells in the glomerulus and explains the podocyte morphology.		
Counts the differences between proximal and distal tubules and distinguishes them in images.		
Defines the parts of the loop of Henle and counts the features.		
Explain the importance of convoluted tubules and loop of Henle in kidney physiology.		
Count the structures forming the juxtaglomerular apparatus and explain their histological features.		
Explain the structure and importance of collecting tubules and ducts.		
Explain the kidney interstitial region.		
List the histological and histophysiological features of the transitional epithelium.		
Explain the layers and histological features of ureter, bladder and urethra.		
Counts the differences between male and female urethra.		
Counts the parts of the male urethra and explains their histophysiological importance.		
Interprets the preparations and images about the organs in the urinary system.		
Explain the embryological origin of the urinary system.		
Express the embryological development of the organs that make up the urinary system.		
Explain the development and differentiation of kidneys.		
Explain the development and differentiation of kidney tubules.		
Explain the origin and differentiation of the urinary bladder.		
It describes the ovarian cortex and medulla, developing follicles, and the corpus luteum.		
Counts the tuba uterina sections and layers and explains histological features.		
Counts the uterine layers and explains their histological structures.		
It explains the functions of the endometrium along with changes in its cells, blood vessels and glands.		
Explain the uterine cycle with the effect of hormones and histological changes.		
Counts the features of the endometrium in normal, pregnancy and postmenopausal periods.		
Explain the histology of cervix and glands.		
Counts the vaginal wall, epithelial features and interprets the effects of the cycle.		
Explain the histological features of external genitalia.		
Distinguish the preparations of the organs related to the female genital system and interpret the images.		
Counts and explains the tissues that make up the male genital system.		
Counts the layers on the scrotum wall and explains its relation to the testis.		
Explain the histological structure of testicles.		
Counts the cells in the seminiferous tubules, explains their structures and functions.		
Counts the genital excretory ducts and explains their histological structures.		
Explain the histological structure of prostate, seminalis vesica and bulbourethral glands.		

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Explain the histological structure and histophysiology of the penis.		
Distinguish and interpret microscopic images of male genital system organs.		
Interprets from which germ leaf the genital system develops.		
Summarize the development of the genital system.		
Explain the development of Gonads and Genital Canals.		
Identify the differences in male and female genital system development.		
Identify the differences in the development of testes and ovaries.		
Explain the development of male genital tract and glands.		
Defines the development of female genital tract and glands.		
Explain the development of uterus and vagina.		
Identify the differences in the development of male and female external genitalia.		
Explain the development of inguinal canals.		
Counts congenital malformations of male and female genital organs.		
Counts clinical problems.		

Teaching Methods	
Assessment Methods	

Lecture Schedule

Sequence	Topics	Preliminary Preparation
1		
2		
3		
4		
5		

Evaluation Methods	Weight(%)
Midterm Exam	60
General Exam	40

Resources

Medical Physiology – Guyton Ganong's Review of Medical Physiology Molecular Biology of the cell - Alberts Principles of Neurological Sciences - Kandel Color Atlas of Physiology Color Atlas of Pathophysiology
Gartner L.P., Hiatt J.L.: Color Text Book of Histology. Second ed. SAUNDERS. Moore K.M., Persaud T.V.N. Çev. Ed: Yıldırım M., Okar İ., Dalçık H. Klinik Yönleri ile İnsan Embriyolojisi. 6. Ed. NOBEL TIP Sadler T.W: Langman's Medical Embryology, Eleventh Edition. Lippincott Williams & Wilkins, USA Schoenwolf G.C.: Larsen's Human Embryology. 4. Ed. CHURCHILL LIVINGSTONE ELSEVIER Stevens A., Human Histology, Third Ed. Junqueira L.C., Carneiro J. Çev. Ed: Aytekin Y, Solakoğlu S.: Temel Histoloji. NOBEL TIP Gartner L.P., Hiatt J.L.: Color Atlas of Histology, Fifth Edition. Lippincott Williams & Wilkins, USA Welsch U. Çev. Ed.: Tekelioğlu M.: Sobotta Histoloji Atlası. BETA Moore K.M., Persaud T.V.N. Çev. Ed: Yıldırım M., Okar İ., Dalçık H. Klinik Yönleri ile İnsan Embriyolojisi. 6. Ed. NOBEL TIP
1.Yiğitbaşı T, Emekli N. Biyokimya Laboratuarı. İstanbul Medipol Üniversitesi,Yayınları, Akademi Basın Yayın, İstanbul 2013. 2.Klinik Biyokimya, Editörler Emekli N & Yiğitbaşı T. Nobel Tıp Kitapevleri 2015. 3.Emekli N. Temel ve Uygulamalı Biyokimya, 4.Baskı.Akademi Basın Yayın, İstanbul 20064.Lieberman M, Marks AD. Marks' Basic Medical biochemistry 3. Baskı, 5.Lippincott Williams &Wilkins, 2010. 6.Henry's Clinical Diagnosisand Management by Laboratory Method,.22.Baskı,Eds.Pherson RA, Pincus MR,Elsevier-Saunders, 2011.