

MAKLUMAT KURSUS

1. **Kod Kursus** : **FFEP 1414**
2. **Nama Kursus/
Course Title** : **Anatomi dan Fisiologi Manusia II
Human Anatomy and Physiology II**
3. **Kredit** : **4**
4. **Taraf Kursus** : **Wajib Fakulti**
5. **Sinopsis/Synopsis** :

Kursus ini adalah lanjutan daripada kursus Anatomi dan Fisiologi Manusia I. Di dalam bahagian II ini, pelajar akan mempelajari anatomi dan fisiologi manusia bagi sistem saraf, 'special senses', endokrin, saluran gastro-usus, saluran kencing dan reproduktif.

This course is an extension of the course of Human Anatomy and Physiology I. In this part II, students will study the human anatomy and physiology of the nervous, special senses, endocrine, gastro-intestinal tract, urinary tract and reproductive systems.

6. **Pra-keperluan:**
Tiada
7. **Keperluan Kursus¹ untuk Menduduki Peperiksaan/ Course Requirements to sit for Examination.**

Pelajar perlu memenuhi 100%¹ keperluan komponen pentaksiran kursus tetapi tidak termasuk komponen pentaksiran peperiksaan akhir dengan menghadiri/menghantar item pentaksiran tersebut semasa minggu pengkuliahan.

8. **Rujukan:**

Peate, I. 2017. *Fundamentals of Anatomy and Physiology Workbook: a study guide for nurses and healthcare students*. Hoboken: John Wiley & Sons Ltd.

Marieb, E.N. & Hoehn, K. 2016. *Human Anatomy & Physiology. 10th Edition*. Edinburgh Gate: Pearson Education Limited.

Bartholomew, E.F. & Martini, F.H. 2016. *Essentials of Anatomy & Physiology. 7th Edition*. Harlow: Pearson Education Limited.

¹Keperluan Kursus boleh meliputi peratusan kehadiran, bilangan/peruntukan markah tugas/laporan yang telah dihantar, bilangan/peruntukan markah ujian yang telah diduduki serta komponen pentaksiran lain sepanjang minggu pengkuliahan. Pelajar yang dihalang untuk menduduki peperiksaan perlu dikenalpasti selewat-lewatnya 2 minggu sebelum peperiksaan bermula dan tertakluk kepada kelulusan Timbalan Pendaftar Akademik.

¹80% untuk FKAB dan 100% untuk FPER.

Waugh, A. & Grant, A. 2014. *Ross & Wilson Anatomy and Physiology in Health and Illness. 12th Edition*. Edinburgh: Churchill Livingstone Elsevier.

Wingerd, B.D. 2014. *The human Body: concepts of anatomy and physiology*. Philadelphia: Lippincott Williams & Wilkins.

Tortora, G.J. & Derrickson, B. 2014. *Principles of Anatomy & Physiology. 14th Edition*. New Jersey: John Wiley & Sons.

9. Senarai Hasil Pembelajaran Kursus/*Course Learning Outcomes List*

HPK 1: Menghubungkan anatomi bagi sistem saraf, 'special senses', endokrin, saluran gastro-usus, saluran kencing dan reproduktif dengan prosedur perawatan.

Relate the anatomy of the nervous, special senses, endocrine, gastro-intestinal tract, urinary tract and reproductive systems with treatment procedure.

HPK 2: Menjelaskan fisiologi sistem saraf, 'special senses', endokrin, saluran gastro-usus, saluran kencing dan reproduktif.

Describe the physiology of the nervous, special senses, endocrine, gastro-intestinal tract, urinary tract and reproductive systems.

HPK 3: Menghubungkan aspek perkembangan sistem saraf, 'special senses', endokrin, saluran gastro-usus, saluran kencing dan reproduktif dengan penyakit lazim supaya dapat memberikan penjagaan yang holistik.

Relate the developmental aspects of the nervous, special senses, endocrine, gastro-intestinal tract, urinary tract and reproductive systems with common diseases in order to provide holistic care.

10. Rancangan Mengajar:

Bil	Hasil Pembelajaran Kursus (HPK)	Kaedah Pengajaran dan Pembelajaran	Kaedah Pentaksiran	Jam Bersemuka (Jam)	Jam Pentaksiran (Jam)	Belajar Kendiri (Jam)	Jumlah Jam Pembelajaran (Jam)
1	Menghubungkan anatomi bagi sistem saraf, 'special senses', endokrin, saluran gastro-usus, saluran kencing dan reproduktif dengan prosedur perawatan.	Kuliah, Tutorial	Kuiz, Peperiksaan (Pertengahan Semester & Akhir Semester)	18	1	39	58
2	Menjelaskan fisiologi sistem saraf, 'special senses', endokrin, saluran gastro-usus, saluran kencing dan reproduktif.	Kuliah, Tutorial	Kuiz, (Peperiksaan Pertengahan Semester & Akhir Semester)	28	1.30	59.30	89
3	Menghubungkan aspek perkembangan sistem saraf, 'special senses', endokrin, saluran gastro-usus, saluran kencing dan reproduktif dengan penyakit lazim supaya dapat memberikan penjagaan yang holistik.	Kuliah	Peperiksaan Akhir Semester	5	0.10	7.50	13
Jumlah Jam National Yang Diperlukan/ Required Total Notional Hours				(jumlah jam/40)			160
Jumlah Kredit/ Total Credit							4.0

11. Pelan Pentaksiran:

FFEP 1414: Anatomi dan Fisiologi Manusia II Pada akhir kursus ini, diharapkan pelajar berkebolehan untuk:		Tahap Taksonomi	Indikator	HPP*/MQF**	Pemboleh (1) /Penentu (2)	Kaedah Penyampaian	Kaedah Pentaksiran (%)			
							Kuiz	Peperiksaan Pertengahan Semester (MCQ)	Peperiksaan Akhir Semester	
									MCQ	SAQ
1.	Menghubungkan anatomi bagi sistem saraf, 'special senses', endokrin, saluran gastro-usus, saluran kencing dan reproduktif dengan prosedur perawatan.	C2	<ul style="list-style-type: none"> Menghuraikan anatomi bagi sistem berkenaan. 	HPP2	1	Kuliah, Tutorial	10	10	10	10
2.	Menjelaskan fisiologi sistem saraf, 'special senses', endokrin, saluran gastro-usus, saluran kencing dan reproduktif.	C2	<ul style="list-style-type: none"> Menghuraikan fisiologi bagi sistem berkenaan. 	HPP1	1	Kuliah, Tutorial	10	10	20	10
3.	Menghubungkan aspek perkembangan sistem saraf, 'special senses', endokrin, saluran gastro-usus, saluran kencing dan reproduktif dengan penyakit lazim supaya dapat memberikan penjagaan yang holistik.	C2	<ul style="list-style-type: none"> Menghuraikan aspek perkembangan bagi sistem berkenaan. 	HPP3	1	Kuliah			10	
JUMLAH/TOTAL							20	20	40	20

Pentaksiran:

Bil	Jenis	Bil. Soalan	Peratusan
1	Pentaksiran berterusan		
	a) Kuiz	20	20
	b) Peperiksaan pertengahan semester (MCQ)	20	20
2	Peperiksaan Akhir Semester		
	a) MCQ	40	40
	b) SAQ	4	20

12. Kandungan Pembelajaran dan Kiraan Jam

Course Content Outline	CLO	Teaching & Learning Activities						Total SLT
		Guided Learning (F2F)				Guided Learning (NF2F) e.g: e-learning	Independent Learning (NF2F)	
		L	T	P	O			
1 Nervous system <ul style="list-style-type: none"> • central & peripheral • general structure & classification of neurons. • major regions of brain. • structure of spinal cord and nerve. Special senses <ul style="list-style-type: none"> • structures of external, internal & accessory eye. • structure of the external, middle & internal ear. 	2	14	4				32	50

Course Content Outline		CLO	Teaching & Learning Activities					Total SLT	
			Guided Learning (F2F)				Guided Learning (NF2F) e.g: e-learning		Independent Learning (NF2F)
			L	T	P	O			
	<ul style="list-style-type: none"> • structure of the olfactory & taste receptors. <p>Endocrine system</p> <ul style="list-style-type: none"> • major endocrine glands & hormones <p>Digestive System</p> <ul style="list-style-type: none"> • organs of the alimentary canal & accessory digestive organs. <p>Urinary System</p> <ul style="list-style-type: none"> • structure of kidneys, ureters, urinary bladder & urethra. • structure of nephron <p>Reproductive system</p> <ul style="list-style-type: none"> • structure of organs in the human reproductive system. • meiosis, spermatogenesis, oogenesis, endometrium & myometrium • structure of mammary glands. 								
2	<p>Nervous system</p> <ul style="list-style-type: none"> • functions of nervous system • function of neurons & neuroglia. 	1	22	6			50	78	

Course Content Outline	CLO	Teaching & Learning Activities					Total SLT	
		Guided Learning (F2F)				Guided Learning (NF2F) e.g: e-learning		Independent Learning (NF2F)
		L	T	P	O			
<ul style="list-style-type: none"> • functions of brain, spinal cord, cranial nerves and spinal nerves and nerve plexuses. • function of sympathetic, parasympathetic and autonomic nervous system. <p>Special senses</p> <ul style="list-style-type: none"> • functions of accessory eye & layers of eyeball • functions of rods & cones. • image formation on the retina. • pathway of light through the eye to the retina and eye reflexes. • functions of the external, middle & internal ear. • equilibrium organs help in maintaining balance. • function of the organ of Corti in hearing. • functions of the olfactory & taste receptors. <p>Endocrine system</p> <ul style="list-style-type: none"> • functions of hormones produced by the endocrine glands. • major pathological consequences of hypersecretion & hyposecretion of the hormones. <p>Digestive System</p>								

Course Content Outline	CLO	Teaching & Learning Activities						Total SLT
		Guided Learning (F2F)				Guided Learning (NF2F) e.g: e-learning	Independent Learning (NF2F)	
		L	T	P	O			
<ul style="list-style-type: none"> Gastrointestinal processes & controls. Activities occurring in the mouth, pharynx, esophagus, stomach, small & large intestine. <p>Urinary System</p> <ul style="list-style-type: none"> functions of the kidneys, ureters, urinary bladder & urethra. process of urine formation. composition of normal urine. <p>Reproductive system</p> <ul style="list-style-type: none"> functions of each organs of the reproductive system. phases & controls of the menstrual cycle. functions of mammary glands. pregnancies & embryonic development 								
<p>3</p> <p>Nervous system</p> <ul style="list-style-type: none"> congenital disorders nervous system deterioration. <p>Special senses</p> <ul style="list-style-type: none"> changes occur with age in the special sense organs. 	3	5					10	15

Course Content Outline	CLO	Teaching & Learning Activities						Total SLT
		Guided Learning (F2F)				Guided Learning (NF2F) e.g: e-learning	Independent Learning (NF2F)	
		L	T	P	O			
<p>Endocrine system</p> <ul style="list-style-type: none"> effect of aging on the endocrine system & body homeostasis. <p>Digestive System</p> <ul style="list-style-type: none"> congenital disorders of the digestive system & significant inborn errors of metabolism <p>Urinary System</p> <ul style="list-style-type: none"> common congenital problems. effect of aging on urinary system. <p>Reproductive system</p> <ul style="list-style-type: none"> importance of the presence/absence of testosterone during embryonic development. menarche & menopause. 								
Continuous Assessment		Percentage 40%						Total SLT
1. Kuiz	1 & 2				0.30		2	2.30
2. Peperiksaan Pertengahan Semester (MCQ)	1 & 2				1		5	6

Course Content Outline	CLO	Teaching & Learning Activities						Total SLT
		Guided Learning (F2F)				Guided Learning (NF2F) e.g: e-learning	Independent Learning (NF2F)	
		L	T	P	O			
Final Semester Assessment		Percentage 60%						Total SLT
1. MCQ	1, 2 & 3				0.30		2	2.30
3. SAQ	1 & 2				1		5	6
GRAND TOTAL SLT								160

L = Lecture, T = Tutorial, P = Practical, O = Others, F2F = Face to Face, NF2F = Non Face to Face