

MAKLUMAT KURSUS

1. **Kod Kursus** : **FFEP 1314**
2. **Nama Kursus/
Course Title** : **Anatomi dan Fisiologi Manusia I
Human Anatomy and Physiology I**
3. **Kredit** : **4**
4. **Taraf Kursus** : **Wajib Fakulti**
5. **Sinopsis/Synopsis** :

Kursus ini bertujuan mendedahkan pelajar mengenai anatomi dan fisiologi struktur tubuh badan manusia. Pengetahuan yang dipelajari dalam kursus ini dapat membantu pelajar membuat keputusan klinikal berkaitan dengan kesihatan dan penyakit yang akan dipelajari dalam kursus-kursus lain yang berkaitan. Kandungan kursus meliputi anatomi dan fisiologi bagi sistem respiratori, kardiovaskular, muskuloskeletal dan limfatik.

This course aims to expose students about the anatomy and physiology of human body structure. The knowledge learned in this course can help students make clinical decisions relating to health and illnesses that will be learned in other related courses. Course content includes anatomy and physiology for respiratory, cardiovascular, musculoskeletal and lymphatic systems.

6. **Pra-Keperluan:**

Tiada

7. **Keperluan Kursus¹ untuk Menduduki Peperiksaan/ *Course Requirements to sit for Examination*** (Rujuk Peraturan UKM Pengajian Sarjanamuda pindaan 2009).

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

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.

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 pengkuliahahan. 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.

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

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*

HPK1 : Menjelaskan konsep dan struktur asas tubuh badan manusia.
Describe the basic concept and structure of human body.

HPK2 : Menghubunkait anatomi dan fisiologi sistem kardiovaskular, limfatik, respiratori dan muskuloskeletal dengan prosedur perawatan.
Relate the anatomy and physiology of the cardiovascular, lymphatic, respiratory and musculoskeletal systems with treatment procedure.

HPK3: Menghubunkait aspek perkembangan sistem kardiovaskular, limfatik, respiratori dan muskuloskeletal dengan penyakit lazim supaya dapat memberikan penjagaan yang holistik.
Relate the developmental aspect of cardiovascular, lymphatic, respiratory and musculoskeletal 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	Menjelaskan konsep dan struktur asas tubuh badan manusia	Kuliah dan Lawatan Makmal Anatomi	Kuiz, Peperiksaan (Pertengahan & Akhir Semester)	6	0.30	11.30	18
2	Menghubungkait anatomi dan fisiologi sistem kardiovaskular, limfatik, respiratori dan muskuloskeletal dengan prosedur perawatan.	Kuliah, Tutorial & Lawatan Makmal Anatomi	Kuiz & Peperiksaan Akhir Semester	40	3	94	137
3	Menghubungkait aspek perkembangan sistem kardiovaskular, limfatik, respiratori dan muskuloskeletal dengan penyakit lazim supaya dapat memberikan penjagaan yang holistik.	Kuliah	Kuiz	2	0.10	3.50	6
Jumlah Jam Notional Yang Diperlukan/ Required Total Notional Hours (jumlah jam/40)							161
Jumlah Kredit/Total Credit							4.025

11. Pelan Pentaksiran:

FFEP1314: Anatomi dan Fisiologi Manusia I Pada akhir kursus ini, pelajar seharusnya 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	Menjelaskan konsep dan struktur asas tubuh badan manusia	C2	<ul style="list-style-type: none"> Menjelaskan konsep yang digunakan khususnya dalam bidang anatomi yang meliputi terminologi, lapisan geminal dan asas tisu. 	HPP1	1	Kuliah & Lawatan Makmal Anatomi	8	20	20	
2	Menghubungkan anatomi dan fisiologi sistem kardiovaskular, limfatik, respiratori dan muskuloskeletal dengan prosedur perawatan.	C2	<ul style="list-style-type: none"> Menghuraikan struktur anatomi bagi sistem kardiovaskular, limfatik, respiratori dan muskuloskeletal. Menghuraikan fungsi fisiologi bagi sistem respiratori, hematopoiesis, hemostasis, sirkulasi darah dan jantung. 	HPP2	1	Kuliah, Tutorial & Lawatan Makmal Anatomi	8		20	20
3	Menghubungkan aspek perkembangan sistem kardiovaskular,	C2	<ul style="list-style-type: none"> Menghuraikan aspek perkembangan bagi sistem sirkulasi, respiratori, skeletal dan muskular. 	HPP3	1	Kuliah	4			

limfatik, respiratori dan muskuloskeletal dengan penyakit lazim supaya dapat memberikan penjagaan yang holistik.									
JUMLAH/TOTAL						20	20	40	20

Pentaksiran:

Bil	Jenis	Bil. Soalan	Peratusan
1	Pentaksiran berterusan		
	a) Kuiz	30	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 1. Anatomical terms <ul style="list-style-type: none"> • Various discipline in anatomy • Terms regional & systemic anatomy • Anatomical position • Planes and section 	1	5				0.30	10	15.30

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"> Terms used in describing position, comparing position, describing general movements of the limbs & joints. <p>2. Germinal layers.</p> <ul style="list-style-type: none"> Development of amniotic cavity, yolk sac, extra-embryonic mesoderm & trophoblast Gastrulation Three germs layers of the embryo. <p>3. Four basic tissues: Cell function, epithelial tissues, connective tissues, membranes.</p> <ul style="list-style-type: none"> Organization of cells, tissues, organs and systems Epithelium, location and junctions Composition of connective tissue, cells, fibres and ground substances Types of connective tissue, location and function Classification of muscle, skeletal, smooth and cardiac muscle Location and function of neuron and neuroglia 								
<p>2</p> <p>1. Anatomical structure of respiratory system</p> <ul style="list-style-type: none"> Functional anatomy of respiratory system. <p>2. Respiratory physiology</p> <p>3. Anatomical structure of lymphatic system</p>	2	20	20		0.30	78.30	119	

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"> • Components • Lymph nodes • Tonsil • Spleen • Thymus • Functions of lymphatic system <p>4. Cardiovascular system</p> <p>a) Blood</p> <ul style="list-style-type: none"> • Components • Formed elements • Blood grouping & transfusion • Hematopoiesis • Hemostasis <p>b) Blood vessels</p> <ul style="list-style-type: none"> • Microscopic anatomy of blood vessels • Gross anatomy of blood vessels • Physiology of circulation <p>c) Heart</p> <ul style="list-style-type: none"> • Heart anatomy • Physiology of heart <p>5. Musculoskeletal system</p> <p>a) Skeletal 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"> • Overview of bones • Axial skeletal • Appendicular skeletal • Joints b) Muscular system <ul style="list-style-type: none"> • Overview of muscle tissues • Muscle movements, types & names • Gross & microscopy anatomy of skeletal muscle 								
3	a) Developmental aspect of respiratory system. b) Developmental aspect of circulatory system c) Developmental aspect of skeletal system. d) Developmental aspect of muscular system	3	2				4	6	
Continuous Assessment									
			Percentage 40%					Total SLT	
1.	Kuiz	1, 2 & 3				1	5	6	
2.	Peperiksaan Pertengahan Semester (MCQ)	1				0.30	2	2.30	
Final Semester Assessment									
			Percentage 60%					Total SLT	
1.	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			
2. SAQ	2				1		5	6
GRAND TOTAL SLT								161

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