

Course	YEAR TWO			14/1/18	
MBChB	FIRST SEMESTER				
BPharm				University of Nairobi	
BDS				College of Health Science	
				Department of Medical Physiology	
				Lectures, Tutorials & Practicals	
				2017-2018 Academic year	
LECTURES					
	WEDNESDAY	2 TO 5 PM			
	THURSDAY	11:00 to 1 PM			
	MILLENNIUM II	HALL			
PRACTICALS / TUTORIALS					
	THURSDAY	8:30 to 10:30 AM			
	FRIDAY	10.00 to 1 PM			
RESPIRATORY PHYSIOLOGY					
WK 1	WED	29-Nov 14:00	15:00	Introduction to Respiration Physiology	M.F. DIN
	WED	29-Nov 15:00	16:00	Respiratory System- Organization	M.F. DIN
	WED	29-Nov 16:00	17:00	Introduction to practicals	KINYUNGU/NZIVO
	THUR	30-Nov 08:30	10:30	PRACTICALS / TUTORIALS	ALL
	THUR	30-Nov 11:00	12:00	RS - Gas laws and physical principles	M.F. DIN
	THUR	30-Nov 12:00	13:00	RS - Ventilation and mechanisms of ventilation	M.F. DIN
	FRIDAY	1-Dec 10:00	13:00	PRACTICALS / TUTORIALS	ALL
WK 2	WED	6-Dec 14:00	15:00	INTRODUCTION TO HEARING PRACTICAL	M.F. DIN
	WED	6-Dec 15:00	16:00	RS - Volume changes and measurements	K.THAIRU
	WED	6-Dec 16:00	17:00	RS - Volume changes and measurements	K.THAIRU
	THUR	7-Dec 08:30	10:30	PRACTICALS	ALL
	THUR	7-Dec 11:00	12:00	INTRODUCTION TO RESPIRATION PRACTICAL	K. THAIRU
	THUR	7-Dec 12:00	13:00	RS - Blood/gas barrier and alveolar function	K.THAIRU
	FRIDAY	8-Dec 10:00	13:00	PRACTICALS	KINYUNGU/NZIVO
WK 3	WEDNESDAY	13-Dec 14:00	15:00	INTRODUCTION TO PNS PRACTICAL	A.W.MURITHI/PM. MBUGUA
	WEDNESDAY	13-Dec 15:00	16:00	INTRODUCTION TO PNS PRACTICAL	A.W.MURITHI/PM. MBUGUA
	WEDNESDAY	13-Dec 16:00	17:00	INTRODUCTION TO VISION PRACTICAL	T.K.MWENDWA
	THURSDAY	14-Dec 08:30	10:30	PRACTICALS	ALL
	THURSDAY	14-Dec 11:00	12:00	RS - Pulmonary circulation	M.F. DIN
	THURSDAY	14-Dec 12:00	13:00	RS - Ventilation perfusion ratio and methods of measurement	M.F. DIN
	FRIDAY	15-Dec 10:00	13:00	PRACTICALS	ALL
WK 4	WED	20-Dec 14:00	15:00	RS - Laryngeal physiology	M.F. DIN
	WED	20-Dec 15:00	16:00	RS - Gas transport (CO ₂ & O ₂) and blood/tissue gas exchange	M.F. DIN
	WED	20-Dec 16:00	17-00	RS - Control of respiration (General principles)	M.F. DIN
	THUR	21-Dec 08:30	10:30	PRACTICALS	ALL
	THUR	21-Dec 11:00	12:00	RS - Integrated responses	M.F. DIN
	THUR	21-Dec 12:00	13:00	RS - Space, High altitude and depth physiology	F.O.BUKACHI
	FRI	22-Dec 10:00	13:00	PRACTICALS	
CHRISTMAS BREAK					
WK 5	WEDNESDAY	10-Jan 14:00	15:00	RS - Gas transport (CO ₂ & O ₂) and blood/tissue gas exchange	M.F. DIN
	WEDNESDAY	10-Jan 15:00	16:00	RS - Laryngeal physiology	M.F. DIN
	WEDNESDAY	10-Jan 16:00	17:00	RS - Control of respiration (General principles)	M.F. DIN
	THURSDAY	11-Jan 08:30	10:30	PRACTICALS	ALL
	THURSDAY	11-Jan 11:00	12:00	REMEDIAL	E.S.OTIENO
	THURSDAY	11-Jan 12:00	13:00	REMEDIAL	E.S.OTIENO
	FRI	12-Jan 10:00	13:00	PRACTICALS	ALL
WK 6	WED	17-Jan 14:00	15:00	RS - non-respiratory functions of the lungs (Protective/Endocrine)	E.S.OTIENO
	WED	17-Jan 15:00	16:00	RS - Cardiopulmonary failure	E.S.OTIENO
	WED	17-Jan 16:00	17:00	Extracorporeal circulation and life support	E.S.OTIENO
	THUR	18-Jan 08:30	10:30	self study	all
	THUR	18-Jan 11:00	12:00	RS - Oxygen therapy and resuscitation	E.S.OTIENO
	THUR	18-Jan 12:00	13:00	RS - Oxygen therapy and resuscitation	E.S.OTIENO
	FRI	19-Jan 10:00	13:00	self study	ALL
Renal Physiology					
WK 7	WEDNESDAY	24-Jan 14:00	15:00	Renal function - Overview	O. OKONGO
	WEDNESDAY	24-Jan 15:00	16:00	Renal - Organization, evolutionary and development	O. OKONGO
	WEDNESDAY	24-Jan 16:00	17:00	Renal - regulatory mechanisms / renal blood flow	O. OKONGO
	THURSDAY	25-Jan 08:30	10:30	self study	ALL
	THURSDAY	25-Jan 11:00	12:00	Renal - Filtration and clearance	O. OKONGO
	THURSDAY	25-Jan 12:00	13:00	Renal - Proximal tubular function /	O. OKONGO
	FRIDAY	26-Jan 10:00	13:00	self study	ALL
WK 8	WEDNESDAY	31-Jan 14:00	15:00	loop of Henle	E.S. OTIENO
	WEDNESDAY	31-Jan 15:00	16:00	Renal - distal tubule and collecting ducts	E. S. OTIENO
	WEDNESDAY	31-Jan 16:00	17:00	Renal - concentration mechanisms, handling of hydrogen ions and water	E. S. OTIENO
	THURSDAY	1-Feb 08:30	10:30	PRACTICALS	ALL
	THURSDAY	1-Feb 11:00	12:00	Micturition and bladder function	E. S. OTIENO
	THURSDAY	1-Feb 12:00	13:00	Renal - hormonal functions of the kidney	E. S. OTIENO
	FRIDAY	2-Feb 10:00	13:00	PRACTICALS	ALL
WK 9	MONDAY	08:30	11:00	EXAM MODERATION/ (Led by exam committee)	ALLSTAFF
	WEDNESDAY	7-Feb 14:00	15:00	Fluid and electrolyte balance	E. S. OTIENO
	WEDNESDAY	7-Feb 15:00	16:00	Fluid and electrolyte balance	E. S. OTIENO
	WEDNESDAY	7-Feb 16:00	17:00	Fluid therapy	E. S. OTIENO
	THURSDAY	8-Feb 08:30	10:30	PRACTICALS	ALL
	THURSDAY	8-Feb 11:00	12:00	Renal failure, dialysis, renal transplants	E. S. OTIENO
	THURSDAY	8-Feb 12:00	13:00	Renal failure, dialysis, renal transplants	E. S. OTIENO
	FRIDAY	9-Feb 10:00	13:00	PRACTICALS	ALL
GASTROINTESTINAL TRACT					
WK 10	WEDNESDAY	14-Feb 14:00	15:00	GIT - General functional organization	A.W.MURITHI
	WEDNESDAY	14-Feb 15:00	16:00	GIT - Principles of control of gut function (neuromyogenic)	A.W.MURITHI
	WEDNESDAY	14-Feb 16:00	17:00	GIT - Principles of control of gut function (humoral)	A.W.MURITHI
	THURSDAY	15-Feb 08:30	10:30	PRACTICALS	ALL
	THURSDAY	15-Feb 11:00	12:00	GIT - Hepatic portal circulation	A.W.MURITHI
	THURSDAY	15-Feb 12:00	13:00	GIT - Upper GI motility (Mouth and Oesophagus)	A.W.MURITHI
	FRIDAY	16-Feb 10:00	13:00	MID-SEMESTER CAT (60 MQQS- 1 HOUR 30 MIN)	EXAMS OFFICER
WK11	WEDNESDAY	21-Feb 14:00	15:00	GIT - Upper GI motility (Stomach)	A.W.MURITHI
	WEDNESDAY	21-Feb 15:00	16:00	GIT - Lower GI motility (Biliary and Pancreatic)	A.W.MURITHI
	WEDNESDAY	21-Feb 16:00	17:00	GIT - Lower GI motility (Intestines and Rectum)	A.W.MURITHI
	THURSDAY	22-Feb 08:30	10:30	PRACTICALS	ALL
	THURSDAY	22-Feb 11:00	12:00	Secretions of the digestive tract 1	PM.MBUGUA
	THURSDAY	22-Feb 12:00	13:00	Secretions of the digestive tract 2	PM.MBUGUA
	FRIDAY	23-Feb 10:00	13:00	PRACTICALS	ALL
Digestion and Absorption					
WK12	WEDNESDAY	28-Feb 15:00	16:00	Digestion and Absorption - General	PM.MBUGUA
	WEDNESDAY	28-Feb 16:00	17:00	GIT - Carbohydrate digestion and absorption	PM.MBUGUA
	WEDNESDAY	28-Feb 17:00	18:00	GIT - Carbohydrate digestion and absorption	PM.MBUGUA
	THURSDAY	1-Mar 08:30	10:30	PRACTICALS	ALL
	THURSDAY	1-Mar 11:00	13:00	GIT - Protein digestion and absorption	PM.MBUGUA
	FRIDAY	2-Mar 10:00	13:00	PRACTICALS	ALL
WK 13	WEDNESDAY	7-Mar 15:00	16:00	GIT - Lipids digestion and absorption	PM.MBUGUA
	WEDNESDAY	7-Mar 16:00	17:00	GIT - Lipids digestion and absorption	PM.MBUGUA
	WEDNESDAY	7-Mar 17:00	18:00	GIT - Absorption of vitamins /Absorption of ions	PM.MBUGUA
	THURSDAY	8-Mar 08:30	10:30	PRACTICALS	ALL
	THURSDAY	8-Mar 11:00	13:00	GIT - Absorption of water /diarrhoea - physiological effects	PM.MBUGUA
	FRIDAY	9-Mar 10:00	13:00	PRACTICALS	ALL
WK 14	WEDNESDAY	14-Mar 15:00	16:00	GIT - diarrhoea, intravenous nutrition and hyperalimentionation	PM.MBUGUA
	WEDNESDAY	14-Mar 16:00	17:00	GIT - diarrhoea, intravenous nutrition and hyperalimentionation	PM.MBUGUA
	WEDNESDAY	14-Mar 17:00	18:00	Acid /base balance	M.F.DIN
	THURSDAY	15-Mar 08:30	10:30	PRACTICALS	ALL
	THURSDAY	15-Mar 11:00	13:00	Applied aspects of Acid /base balance	M.F.DIN
	FRIDAY	16-Mar 10:00	13:00	PRACTICALS	ALL
WK 15	WEDNESDAY	21-Mar 15:00	16:00	GIT - Splanchnic Flow and liver function	PM.MBUGUA

	WEDNESDAY		16:00	17:00	GIT - Hepatobiliary and enterohepatic circulation of bile	PM.MBUGUA
	WEDNESDAY		16:00	17:00	GIT - Hepatobiliary and enterohepatic circulation of bile	PM.MBUGUA
	THURSDAY	22-Mar	08:30	10:30	SELF STUDY	ALL
	THURSDAY		11:00	13:00	SELF STUDY	ALL
	FRIDAY	23-Mar	10:00	13:00	PRACTICALS	ALL
WK16	WEDNESDAY	28-Mar	15:00	16:00	NUTRITION - Hypothalamus and appetite regulation	M.W.MURIITHI
	WEDNESDAY		16:00	17:00	NUTRITION - Hypothalamus and control of thirst	M.W.MURIITHI
	WEDNESDAY		16:00	17:00	NUTRITION - Protein balance and osmotic pressure	M.W.MURIITHI
	THURSDAY	29-Mar	08:30	10:30	PRACTICALS	ALL
	THURSDAY		11:00	13:00	NUTRITION - metabolic aspects	T.K.MWENDWA
	FRIDAY	30-Mar	10:00	13:00	PRACTICALS	ALL
WK 17	TUESDAY	3-Apr	08:30	11:00	EXAM QUESTIONS MODERATION(led by exam committee)	ALL STAFF
	WEDNESDAY	4-Apr	15:00	16:00	REVISION WEEK	ALL
	WEDNESDAY		16:00	17:00	REVISION WEEK	ALL
	WEDNESDAY		16:00	17:00	REVISION WEEK	ALL
	THURSDAY	5-Apr	08:30	10:30	REVISION WEEK	ALL
	THURSDAY		11:00	13:00	REVISION WEEK	ALL
	FRIDAY	6-Apr	08:30	10:00	REVISION WEEK	ALL
	FRIDAY		10:00	13:00	REVISION WEEK	ALL
WK 18	WEDNESDAY		08:30	13:00	END OF FIRST SEMESTER EXAMINATIONS	ALL
					EXAM WEEK	

END OF FIRST SEMESTER

AFT



	hours	%
T.N. KIAMA	22	9
T.K.MWENDWA	20	8
P.G.KIOY	15	6
O. OKONG'O	17	7
N.B.PATEL	20	8
M.W.MURIITHI	23	10
M.FDIN	23	10
H.N.KARIUKI	19	8
F.O.BUKACHI	25	11
F.N.WAWERU	18	8
E.S.OTIENO	19	8
A.W.MURIITHI	16	7
	237	







Lecture Schedule

University of Nairobi
College of Health Science
Department of Medical Physiology
Lectures, Tutorials & Practicals
2009 - 2010 Academic Year

Code

HMP 100

UPC 100

VMP 100

Lecture Topics

Introduction to Physiology

Descriptive terms and units of expression
concept of normality

Cell Physiology

The Cell and functional organization
cellular organelles

The Plasma membrane and its functions

The Plasma membrane and its functions

Transport across cell membranes

cellular communications

cellular communications

applied cell physiology

applied cell physiology

Medical Statistics

Basic Statistics -Introduction

descriptive statistics

measures of location and central tendency

normal distribution

Variability & frequency distribution

Contingency tables and chi squares

Correlation of measurements

Significance test based on normal distribution

Simple experimental design and analysis of variance

Regression Analysis

definition & characteristics of life

Organisation and specialisation (Tissues, Organs and Organ systems)

Control and Body compartments

Physiological control

Physiological control

Body fluids and compartmentation

Body fluids and compartmentation

Neural Communications

Electrochemical potentials across a membrane

HR Lecturer: Lecture outlines

NBP

2 MWM

MWM

9

MWM

MWM

MWM

MWM

MWM

TKN

TKN

TKN

TKN

10

NBP

yes

NBP

yes

NBP

yes

NBP

yes

NBP

yes

TKM

TKM

TKM

TKM

TKM

2 MFD

MFD

4

MFD

MFD

MFD

MFD

7

NBP

Electrochemical potentials across a membrane	NBP	yes
resting membrane potential	NBP	yes
non -propagated potentials	NBP	yes
Action potential and propagation	NBP	yes
the neuron: types, structure and axoplasmic transport	NBP	yes
introduction to peripheral nerves	NBP	yes

Principles of intracellular communications

	5	
Membrane receptors and first messenger	TNK	
The second messengers- nucleotides cAMP and cGMP	TNK	
The second messengers-IP3, DAG, Ca ²⁺	TNK	
The second messengers- nitric oxide and carbon monoxide	TNK	
Steroids and gene function	TNK	

The synapse

	4	
Principles of synaptic transmission	HNK	
chemical transmission	HNK	
Chemical transmission	HNK	
Chemical transmission	HNK	

Autonomic nervous system

	4	
The autonomic nervous system - Organization	TNK	
sympathetic nervous system	TNK	
Parasympathetic nervous system	TNK	
intergration -ANS	TNK	

Muscle

	5	
Muscle - Physiological organization	FOB	
Muscle - Skeletal muscle Contraction	FOB	
Skeletal muscles - Excitation/Contraction coupling	FOB	
Cardiac muscle	FOB	
smooth muscle	FOB	

Peripheral sensory physiology

	5	
Stages of sensory information handling	PGK	
Principles of sensory physiology	PGK	
Principles of sensory physiology	PGK	
processing at sensory receptor	PGK	
conduction and sensory encoding	PGK	

Reflex Physiology

	3	
The spinal reflex - stretch reflex	ESO	
Inverse stretch reflex	ESO	
Polysynaptic reflexes: withdrawal reflex	ESO	

Blood

	6	
Blood - Introduction- composition and transport functions	FNW	
Blood - Physiology of plasma proteins	FNW	
Haemopoiesis and its regulation	FNW	
Leucopoiesis and thrombopoiesis	FNW	
Erythropoiesis and RBC life span	FNW	
Body Iron metabolism, Haem metabolism and catabolism	FNW	

Formed elements

5

Physiology of formed elements - leucocytes	FNW
Physiology of formed elements - platelets	FNW
Blood clotting and coagulation	FNW
Physiological adjustments to anaemia	FNW
Physiological adjustments to anaemia	FNW
Blood groups, blood transfusion and other practical relevances	FNW

Immune mechanisms 4

Innate immunity	TKM
Adaptive immunity	TKM
Secretory immunity and autoimmunity	TKM
Immune mechanisms and AIDs	TKM

Cardiovascular system 16

CVS - general organization and haemodynamics(flow and pressure)	FOB
CVS - General organization- of the heart and systemic circulation	FOB
CVS - Electrical activity and the EKG	FOB
The heart - mechanical activity	FOB
Flow and pressure dynamics in various vessels	FOB
Lymphatic circulation	FOB
Capillary circulation and oedema formation	FOB
Cardiac output and Control of cardiac output	MFD
Cardiovascular control - general principles	MFD
Cardiovascular control - immediate and long term mechanisms	MFD
Cardiovascular control - local and systemic mechanisms	MFD
Integrated responses	MFD
Circulation in special areas (Brain and Liver)	ESO
Cardiovascular homeostasis in exercise	FOB
Cardiovascular shock	ESO
Cardiovascular failure and hypertension	ESO

Respiratory Physiology 17

RS - Organization	FOB
RS - Gas laws and physical principles	FOB
RS - Ventilation and mechanisms of ventilation	FOB
RS - Volume changes and measurements	FOB
RS - Blood/gas barrier and alveolar function	FOB
RS - Pulmonary circulation	FOB
RS - Ventilation perfusion ratio and methods of measurement	FOB
RS - Gas transport (CO ₂ & O ₂) and blood/tissue gas exchange	FOB
RS - Control of respiration (General principles)	MFD
RS - Integrated responses	MFD
RS - Laryngeal physiology	MFD
RS - Space, High altitude and depth physiology	FOB
RS - Space, High altitude and depth physiology	FOB
RS - non-respiratory functions of the lungs (Protective/Endocrine)	ESO
RS - Cardiopulmonary failure	ESO
RS - Extracorporeal circulation	ESO
RS - Life Support - Oxygen therapy and resuscitation	ESO

Renal Physiology 13

Renal - Organization, evolutionary and development	OO
Renal - regulatory mechanisms	OO
Renal - regulation of renal blood flow	OO

Renal - Filtration and clearance	OO
Renal - Proximal tubular function	OO
Renal - the loop of Henle	OO
Renal - distal tubule and collecting ducts	OO
Renal - concentration mechanisms, handling of hydrogen ions and water	ESO
Renal - hormonal functions of the kidney	ESO
Renal - assessment of renal function and renal failure	ESO
Fluid and electrolyte balance	ESO
Fluid therapy	ESO
Renal - pathophysiology: hypertension, dialysis, renal transplants	ESO
INTRODUCTION TO PRACTICALS-EKG	1 FOB
INTRODUCTION TO PRACTICALS-EXERCISE PHYSIOLOGY	1 MWM
INTRODUCTION TO PRACTICALS-RESPIRATION.	1 PGK
INTRODUCTION TO PRACTICALS- ANS FUNCTION	2 TNK
INTRODUCTION TO PRACTICALS- HEARING	2 MFD
INTRODUCTION TO PRACTICALS- VISION	2 HNK
GIT	16
GIT - general overview	AWM
GIT - General functional organization	AWM
GIT - Principles of control of gut function (neuromyogenic)	AWM
GIT - Principles of control of gut function (humoral)	AWM
Motility	
GIT - Upper GI motility (Mouth and Oesophagus)	AWM
GIT - Upper GI motility (Stomach)	AWM
GIT - Lower GI motility (Biliary and Pancreatic)	AWM
GIT - Lower GI motility (Intestines and Rectum)	AWM
GIT - Secretions of the digestive tract 1	AWM
GIT - Secretions of the digestive tract 2	AWM
Digestion and Absorption	
GIT - Carbohydrate digestion and absorption	AWM
GIT - Protein digestion and absorption	AWM
GIT - Lipids digestion and absorption/ absorption of vitamins	AWM
GIT - Absorption of ions	AWM
GIT - Absorption of water	AWM
GIT - Applied aspects: diarrhoea, hyperalimentation intravenous nutrition	AWM
GIT - Applied aspects: diarrhoea, hyperalimentation intravenous nutrition	AWM
Acid /base balance	3
Acid /base balance	MFD
Acid /base balance	MFD
Applied aspects of Acid /base balance	MFD
Endocrine system	16
Overview of endocrine system	MWM
Endocrine - the hypothalamus	MWM
Endocrine - the anterior pituitary	MWM
Endocrine - the intermediate lobe and posterior pituitary	MWM
Endocrine - the intermediate lobe and posterior pituitary	MWM
Endocrine - the thyroid and iodine metabolism	MWM
Endocrine - the thyroid and iodine metabolism	MWM
Endocrine - the parathyroids and Calcium metabolism	OO
Endocrine - vitamin D, calcitonin, Calcium and bone physiology	OO

Endocrine - an overview of steroid hormones	00
Endocrine - the adrenal cortex: mineralocorticoids	00
Endocrine - adrenal cortex - glucocorticoids	00
Endocrine - endocrine pancreas, glucose homeostasis and diabetes mellitus	00
Endocrine - endocrine pancreas, glucose homeostasis and diabetes mellitus	00

Metabolism & Skin 4

Metabolism	00
Basic nutrition and obesity	00
Body temperature regulation	TKN
Skin function	TKN
Control of visceral function, appetites and satiety	00

Reproduction 18

Reproduction - review of genetics	MWM
Reproduction - reproductive system in utero	MWM
Reproduction - puberty	MWM
Reproduction - the climacteric	MWM
Reproduction - developmental physiology and aging	MWM
Reproduction - male and female gonads	MWM
Reproduction - male reproductive system and gametogenesis	MWM
Reproduction - ovarian function	TKN
Reproduction - female reproductive cycles	TKN
Reproduction - ovulation, fertilization and infertility	TKN
Reproduction - pregnancy :physiological changes diagnosis	TKN
Reproduction - fetal placenta unit	TKN
Reproduction - fetal physiology and parturition	TKM
Reproduction - Fetal adaptations and changes at birth	TKM
Reproduction - Lactation and breast feeding	TKM
Reproduction - hormonal control of lactation	TKM
Reproduction - fertility regulation and contraception 1	TKM
Reproduction - fertility regulation and contraception 2	TKM
SEXUALITY and AIDs	TKM

Sensory Physiology 10

Sensory Physiology - Spinal mechanisms	PGK
Sensory Physiology - Spinal mechanisms	PGK
Sensory Physiology - Specific spinal modalities	PGK
Sensory Physiology - Cortical mechanisms 1	PGK
Sensory Physiology - Cortical mechanisms 2	PGK
Sensory Physiology - Specific cortical modalities	PGK
Sensory Physiology - Pain introduction	HNK
Sensory Physiology - Pain peripheral mechanisms	HNK
Sensory Physiology - Pain central mechanisms	HNK
Sensory Physiology - principles of analgesia and pain relief	HNK

Special senses

Special senses - Vision 1	1 HNK
Special senses - vision 2	1 HNK
Special senses - hearing 1	1 MFD
Special senses - hearing 2	1 MFD
Special senses - olfaction	1 AWM
Special senses - taste	1 AWM

Physiology of motor systems	9
Physiology of motor systems - general organization	NBP
Physiology of motor systems - organization of the spinal motor neuron	NBP
Physiology of motor systems - the spinal reflexes and motor mechanisms	NBP
Physiology of motor systems: brainstem motor mechanisms	NBP
Physiology of motor systems: cortical motor mechanisms	NBP
Physiology of motor systems: basal ganglia and extrapyramidal mechanisms	NBP
Physiology of motor systems: cerebellar mechanisms	NBP
Vestibular function	NBP
Balance	NBP
Higher neural function	6
Higher neural function - EEG, cerebral frontal lobe function	PGK
Higher neural function - language function, learning and memory	PGK
Higher neural function - motivation and behaviour	PGK
CSF circulation and the Blood Brain Barrier	PGK
Sleep	ESO
Consciousness/GA	ESO
Integrative Physiology	
Fluid and pH Control	1 MFD
Physiological response to injury and inflammation	1 ESO
Physiological changes in aging	1 FOB
Glucose regulation	1 NBP
Fever	1 TKM



date submitted	Lecturers	hr	
	HNK	11	-8
	FNW	12	-7
	PGK	16	-3
	OO	17	-2
	TKM	17	-2
	AWM	19	0
	ESO	20	1
	MFD	21	2
	TKN	21	2
	MWM	22	3
	NBP	23	4
	FOB	24	5
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Approved:
Date:

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Date:

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Date:

Approved:
Date:

Approved:
Date:

MChB HMP 100
BPharm UPC 103
BDS VMP 100

University of Nairobi
College of Health Sciences
Department of Medical Physiology

Lectures: Millennium Hall II
CATs and Exams: Exam Center



Compatibility Report for Copy of MBChB, BPharm Year TWO Schedule
2017-2018 Fxls

Run on 9/18/2017 4:23

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Minor loss of fidelity

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UNIVERSITY OF NAIROBI
 COLLEGE OF HEALTH SCIENCES
 DEPARTMENT OF MEDICAL PHYSIOLOGY

Course YEAR TWO 14/1/18
 MBChB FIRST SEMESTER
 BPharm
 BDS

University of Nairobi
 College of Health Science
 Department of Medical Physiology
 Lectures, Tutorials & Practicals
 2017-2018 Academic year

LECTURES

WED. 2 TO 5 PM PRACTICALS / TUTORIALS
 THURSDAY 11:00 to 1 PM THURSDAY 8:30 to 10:30 AM
 MILLER HALL FRIDAY 10.00 to 1PM

RESPIRATORY PHYSIOLOGY

WK 1	WED	29-Nov	14:00	15:00	Introduction to Respiration Physiology	M.F. DIN
	WED	29-Nov	15:00	16:00	Respiratory System- Organization	M.F. DIN
	WED	29-Nov	16:00	17:00	Introduction to practicals	KINYUNGU/NZIVO
	THUR	30-Nov	08:30	10:30	PRACTICALS / TUTORIALS	ALL
	THUR	30-Nov	11:00	12:00	RS - Gas laws and physical principles	M.F. DIN
	THUR	30-Nov	12:00	13:00	RS - Ventilation and mechanisms of ventilation	M.F. DIN
	FRI	1-Dec	10:00	13:00	PRACTICALS / TUTORIALS	ALL
WK 2	WED	6-Dec	14:00	15:00	INTRODUCTION TO HEARING PRACTICAL	M.F. DIN
	WED	6-Dec	15:00	16:00	RS - Volume changes and measurements	K.THAIRU
	WED	6-Dec	16:00	17:00	RS - Volume changes and measurements	K.THAIRU
	THUR	7-Dec	08:30	10:30	PRACTICALS	ALL
	THUR	7-Dec	11:00	12:00	INTRODUCTION TO RESPIRATION PRACTICAL	K. THAIRU
	THUR	7-Dec	12:00	13:00	RS - Blood/gas barrier and alveolar function	K.THAIRU
	FRI	8-Dec	10:00	13:00	PRACTICALS	KINYUNGU/NZIVO
WK 3	WED	13-Dec	14:00	15:00	INTRODUCTION TO PNS PRACTICAL	A.W.MURIITHI/P.M. M
	WED	13-Dec	15:00	16:00	INTRODUCTION TO PNS PRACTICAL	A.W.MURIITHI/P.M. M
	WED	13-Dec	16:00	17:00	INTRODUCTION TO VISION PRACTICAL	T.K.MWENDWA
	THUR	14-Dec	08:30	10:30	PRACTICALS	ALL
	THUR	14-Dec	11:00	12:00	RS - Pulmonary circulation	M.F. DIN
	THUR	14-Dec	12:00	13:00	RS - Ventilation perfusion ratio and methods of	mM.F. DIN
	FRI	15-Dec	10:00	13:00	PRACTICALS	ALL
WK 4	WED	20-Dec	14:00	15:00	RS - Laryngeal physiology	M.F. DIN
	WED	20-Dec	15:00	16:00	RS - Gas transport (CO ₂ & O ₂) and blood/tissue gas	M.F. DIN
	WED	20-Dec	16:00	17:00	RS - Control of respiration (General principles)	M.F. DIN

THUR	21-Dec	08:30	10:30	PRACTICALS	ALL
THUR	21-Dec	11:00	12:00	RS - Integrated responses	M.F. DIN
THUR	21-Dec	12:00	13:00	RS - Space, High altitude and depth physiology	F.O.BUKACHI
FRI	22-Dec	10:00	13:00	PRACTICALS	

CHRISTMAS BREAK

WK 5	WED	10-Jan	14:00	15:00	RS - Gas transport (CO ₂ & O ₂) and blood/tissue g	M.F. DIN
	WED		15:00	16:00	RS - Laryngeal physiology	M.F. DIN
	WED		16:00	17:00	RS - Control of respiration (General principles)	M.F. DIN
	THUR	11-Jan	08:30	10:30	PRACTICALS	ALL
	THUR		11:00	12:00	REMEDIAL	E.S.OTIENO
	THUR		12:00	13:00	REMEDIAL	E.S.OTIENO
	FRI	12-Jan	10:00	13:00	PRACTICALS	ALL

WK 6	WED	17-Jan	14:00	15:00	RS - non-respiratory functions of the lungs (Prote	E.S.OTIENO
	WED		15:00	16:00	RS - Cardiopulmonary failure	E.S.OTIENO
	WED		16:00	17:00	Extracorporeal circulation and life support	E.S.OTIENO
	THUR	18-Jan	08:30	10:30	self study	all
	THUR		11:00	12:00	RS - Oxygen therapy and resuscitation	E.S.OTIENO
	THUR		12:00	13:00	RS - Oxygen therapy and resuscitation	E.S.OTIENO
	FRI	19-Jan	10:00	13:00	self study	ALL

Renal Physiology

WK 7	WED	24-Jan	14:00	15:00	Renal function - Overview	O. OKONGO
	WED		15:00	16:00	Renal - Organization, evolutionary and developmer	O. OKONGO
	WED		16:00	17:00	Renal - regulatory mechanisms / renal blood flow	O. OKONGO
	THUR	25-Jan	08:30	10:30	self study	ALL
	THUR		11:00	12:00	Renal - Filtration and clearance	O. OKONGO
	THUR		12:00	13:00	Renal - Proximal tubular function /	O. OKONGO
	FRI	26-Jan	10:00	13:00	self study	ALL

WK 8	WED	31-Jan	14:00	15:00	loop of Henle	E.S. OTIENO
	WED		15:00	16:00	Renal - distal tubule and collecting ducts	E. S. OTIENO
	WED		16:00	17:00	Renal - concentration mechanisms, handling of h	E. S. OTIENO
	THUR	1-Feb	08:30	10:30	PRACTICALS	ALL
	THUR		11:00	12:00	Micturition and bladder function	E. S. OTIENO
	THUR		12:00	13:00	Renal - hormonal functions of the kidney	E. S. OTIENO
	FRI	2-Feb	10:00	13:00	PRACTICALS	ALL

WK 9	MON		08:30	11:00	EXAM MODERATION/ (Led by exam committee)	ALLSTAFF
	WED	7-Feb	14:00	15:00	Fluid and electrolyte balance	E. S. OTIENO
	WED		15:00	16:00	Fluid and electrolyte balance	E. S. OTIENO
	WED		16:00	17:00	Fluid therapy	E. S. OTIENO
	THUR	8-Feb	08:30	10:30	PRACTICALS	ALL
	THUR		11:00	12:00	Renal failure, dialysis, renal transplants	E. S. OTIENO

THUR		12:00	13:00	Renal failure, dialysis, renal transplants	E. S. OTIENO
FRI	9-Feb	10:00	13:00	PRACTICALS	ALL

GASTROINTESTINAL TRACT

WK 10

WED	14-Feb	14:00	15:00	GIT - General functional organization	A.W.MURIITHI
WED		15:00	16:00	GIT - Principles of control of gut function (neuron)	A.W.MURIITHI
WED		16:00	17:00	GIT - Principles of control of gut function (humor)	A.W.MURIITHI
THUR	15-Feb	08:30	10:30	PRACTICALS	ALL
THUR		11:00	12:00	GIT - Hepatic portal circulation	A.W.MURIITHI
THUR		12:00	13:00	GIT - Upper GI motility (Mouth and Oesophagus)	A.W.MURIITHI
FRI	16-Feb	10:00	13:00	MID-SEMESTER CAT (60 MCQS- 1 HOUR 30 MIN)	EXAMS OFFICER

WK11	WED	21-Feb	14:00	15:00	GIT - Upper GI motility (Stomach)	A.W.MURIITHI
	WED		15:00	16:00	GIT - Lower GI motility (Biliary and Pancreatic)	A.W.MURIITHI
	WED		16:00	17:00	GIT - Lower GI motility (Intestines and Rectum)	A.W.MURIITHI
	THUR	22-Feb	08:30	10:30	PRACTICALS	ALL
	THUR		11:00	12:00	Secretions of the digestive tract 1	P.M.MBUGUA
	THUR		12:00	13:00	Secretions of the digestive tract 2	P.M.MBUGUA
	FRI	23-Feb	10:00	13:00	PRACTICALS	ALL

Digestion and Absorption

WK12	WED	28-Feb	15:00	16:00	Digestion and Absorption - General	P.M.MBUGUA
	WED		16:00	17:00	GIT - Carbohydrate digestion and absorption	P.M.MBUGUA
	WED		16:00	17:00	GIT - Carbohydrate digestion and absorption	P.M.MBUGUA
	THUR	1-Mar	08:30	10:30	PRACTICALS	ALL
	THUR		11:00	13:00	GIT - Protein digestion and absorption	P.M.MBUGUA
	FRI	2-Mar	10:00	13:00	PRACTICALS	ALL

WK 13	WED	7-Mar	15:00	16:00	GIT - Lipids digestion and absorption	P.M.MBUGUA
	WED		16:00	17:00	GIT - Lipids digestion and absorption	P.M.MBUGUA
	WED		16:00	17:00	GIT - Absorption of vitamins /Absorption of ions	P.M.MBUGUA
	THUR	8-Mar	08:30	10:30	PRACTICALS	ALL
	THUR		11:00	13:00	GIT - Absorption of water /diarrhoea - physiologic	P.M.MBUGUA
	FRI	9-Mar	10:00	13:00	PRACTICALS	ALL

WK 14	WED	14-Mar	15:00	16:00	GIT - diarrhoea, intravenous nutrition and hypera	P.M.MBUGUA
	WED		16:00	17:00	GIT - diarrhoea, intravenous nutrition and hypera	P.M.MBUGUA
	WED		16:00	17:00	Acid /base balance	M.FDIN
	THUR	15-Mar	08:30	10:30	PRACTICALS	ALL
	THUR		11:00	13:00	Applied aspects of Acid /base balance	M.FDIN
	FRI	16-Mar	10:00	13:00	PRACTICALS	ALL

WK 15	WED	21-Mar	15:00	16:00	GIT - Splanchnic Flow and liver function	P.M.MBUGUA
	WED		16:00	17:00	GIT - Hepatobiliary and enterohepatic circulation	P.M.MBUGUA
	WED		16:00	17:00	GIT - Hepatobiliary and enterohepatic circulation	P.M.MBUGUA
	THUR	22-Mar	08:30	10:30	SELF STUDY	ALL

	THUR		11:00	13:00	SELF STUDY	
	FRI	23-Mar	10:00	13:00	PRACTICALS	ALL
WK16	WED	28-Mar	15:00	16:00	NUTRITION - Hypothalamus and appetite regulati	M.W.MURIITHI
	WED		16:00	17:00	NUTRITION - Hypothalamus and control of thirst	M.W.MURIITHI
	WED		16:00	17:00	NUTRITION - Protein balance and osmotic pressu	M.W.MURIITHI
	THUR	29-Mar	08:30	10:30	PRACTICALS	ALL
	THUR		11:00	13:00	NUTRITION - metabolic aspects	T.K.MWENDWA
	FRI	30-Mar	10:00	13:00	PRACTICALS	ALL
WK 17	TUES	3-Apr	08:30	11:00	EXAM QUESTIONS MODERATION(led by exam com	ALL STAFF
	WED	4-Apr	15:00	16:00	REVISION WEEK	ALL
	WED		16:00	17:00	REVISION WEEK	ALL
	WED		16:00	17:00	REVISION WEEK	ALL
	THUR	5-Apr	08:30	10:30	REVISION WEEK	ALL
	THUR		11:00	13:00	REVISION WEEK	ALL
	FRI	6-Apr	08:30	10:00	REVISION WEEK	ALL
	FRI		10:00	13:00	REVISION WEEK	ALL
WK 18	WED		08:30	13:00	END OF FIRST SEMESTER EXAMINATIONS	ALL
					EXAM WEEK	
					END OF FIRST SEMESTER	

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Approved
Chairman - Department of Medical Physiology
Date

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