

Republic of Yemen

Ministry of Higher Education & Scientific Research

Council of Academic Accreditation & Quality Assurance of Higher Education (CAQA)

21 September University of Medical and applied Sciences



Course Specification of physiology

Course Code. (01 01 819)

2024



T4: This Template is Developed and Approved by CAQA-Yemen, 2023

I. Course Identification and General Information:			
Physiology		Course Title:	1
(01 01 819)		Course Code & Number:	2
TOTAL	C.H	Credit hours: 2	3

Prepared by:

Reviewed by:

Head of the Department:

Quality Unit:

Dean

Dr aref saleh

Dr. Ahmed al khader

Dr. Fares Mahdi

Dr.Horia alsabri

drAbdulsalam Dallak

	Tr.	Pr	Seminar	Th.		
2		-	-	2		
First year/2 semester					Study level/ semester at which this course is offered:	4
					Pre –requisite:	5
-					Co –requisite :	6
Anesthesia Technician					Program (s) in which the course is offered:	7
English					Language of teaching the course:	8
Faculty of Medical Applied Science					Location of teaching the course:	9
Dr:Aref saleh					Prepared By:	10
2024					Date of Approval	11

I. Course Description:

This course is designed to provide student with the basic knowledge and principles of physiology with references to man including body fluids function and composition and functioning of the body systems.

III. Intended learning outcomes of the course (ILCOs) and their alignment to Program Intended learning outcomes (PILOs)

PILOs	ILCOs
a1 Demonstrate the concepts and principles of anesthesia and different basic and humanities courses and its applications in anesthesia practice	a1. Identify the basic physiological functions of the human body.
A2 Describe normal and abnormal human behaviors, structure and function of human body and identify the basics of intensive care, medical emergencies that the anesthetist and high dependency care units and how to	a2. Classifies signs and symptoms of deviation of the function of an organ from normal.

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manage patients at risk.		
B1. . integrate assessment data to formulate anesthesia diagnosis.	b1. Interpret how normal body function is regulated.	
B3 : Interpret the basic normal anatomical structures on radiographs, C.T. scans and magnetic resonance images and readings of the standard monitors attached to the patient as well as additional monitors as central venous pressure monitoring	b2 .Distinguish normal function of different body system and organs.	
(A) Alignment Course Intended Learning Outcomes of Knowledge and Understanding to Teaching Strategies and Assessment Strategies:		
Assessment Strategies	Teaching strategies	Course Intended Learning Outcomes
Short answer questions Objective type	Lecture discussion Explain using models, charts, slides	a1. Identify the basic physiological functions of the human body.
Short answer questions Objective type	Lecture discussion Explain using models, charts, slides	a2. Classifies signs and symptoms of deviation of the function of an organ from normal.
(B) Alignment Course Intended Learning Outcomes of Intellectual Skillsto Teaching Strategies and Assessment Strategies:		
Assessment Strategies	Teaching strategies	Course Intended Learning Outcomes
Short answer questions Objective type	Lecture discussion Explain using models, charts, slides	b1. Interpret how normal body function is regulated.
Short answer questions Objective type	Lecture discussion Explain using models, charts, slides	b2. Distinguish normal function of different body system and organs.
(C) Alignment Course Intended Learning Outcomes of Professional and Practical Skillsto Teaching Strategies and Assessment Strategies:		

Assessment Strategies	Teaching strategies	Course Intended Learning Outcomes
-	-	Not applicable
(D) Alignment Course Intended Learning Outcomes of General and Transferable Skillsto Teaching Strategies and Assessment Strategies:		
Assessment Strategies	Teaching strategies	Course Intended Learning Outcomes
-	-	Not applicable

I. Course Content:					
A – Theoretical Aspect:					
Learning Outcomes	lecturer hours	No. of Weeks	Sub Topics List	Units/Topics List	Order
a1,a2, b1,b2	2	1	- Tissue-formation, repair - Membranes & glands - functions	Cell Physiology	1
a1,a2, b1,b2	4	2	- Bone formation & growth - Bones - Functions and movements of bones of axial and appendicular skeleton, bone healing - Joints and joint movement	Skeletal System	2
a1,a2, b1,b2	4	2	Muscle movements, Muscle tone, Physiology of muscle contraction, levels and maintenance of posture	Muscular System	3
a1,a2, b1,b2	4	2	- Functions of Neurologia& neurons - Stimulus & nerve-impulse- definitions and mechanism - Functions of brain, spinal cord, cranial and spinal nerves - Cerebrospinal fluid-Composition, circulation and function	Nervous System	4

			- Reflex arc, Reflex action and reflexes - Autonomic functions— - Pain: somatic, visceral, and referred - Autonomic learning and biofeedback		
a1,a2, b1,b2	2	1	Midterm exam		5
a1,a2, b1,b2	6	3	- Blood formation, composition, blood groups, blood coagulation - Hemoglobin: Structure, Synthesis and breakdown, Variation of molecules, estimation - Functions of Heart, Conduction, Cardiac cycle, circulation-Principles, Control, factors influencing BP and Pulse	Circulatory System	6
a1,a2, b1,b2	8	4	- Functions of respiratory organs - Physiology of respiration - Pulmonary ventilation, Volume - Mechanics of respiration - Gaseous exchange in lungs - Carriage of oxygen & carbon-dioxide Exchange of gases in tissues - Regulation of respiration.	The Respiratory System	7
a1,a2, b1,b2	2	1	Final exam		8
	32	16	Number of Weeks /and Units Per Semester		

B - Practical Aspect:

Learning Outcomes	contact hours	Number of Weeks	Tasks/ Experiments	Order
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-	-	-	Not applicable	
			Number of Weeks /and Units Per Semester	

II. Teaching strategies of the course:

1. Lecture Discussion
2. Case discussions
3. Seminar

V. Assignments:

Mark	Week Due	Aligned CILOs(symbols)	Assignments	No
5	5-10	a1,a2,b1,b2	▪ Regulation of respiration.	1

I. Schedule of Assessment Tasks for Students During the Semester

Theoretical part

Aligned Course Learning Outcomes	Proportion of Final Assessment	Mark	Week Due	Assessment Method	No.
a1,a2,b1,b2	5%	5	15th week	Attendance and activities	1
a1,a2,b1,b2	5%	5	5th and 12th week	Student assignments	2
a1,a2,b1,b2	20%	20	7th or 8th week	Mid-term exam	3
a1,a2,b1,b2	70 %	70	16th-17th week	Final-exam	4
	100%	100	Total Theory Weight		

Practical part

Aligned Course	Proportion of Final	Mark	Week	Type of	No
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Reviewed by:

Head of the Department:

Quality Unit:

Dean

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Dr. Fares Mahdi

Dr.Horia alsabri

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Learning Outcomes	Assessment		Due	Assessment Tasks	
-	-	-	-	Not applicable	

Learning Resources:	
1- Required Textbook(s)	
1. Grayton and Mall (2001). Textbook of medical physiology. 10th, Saunders London, Toronto, company, Philadelphia, London, Toronto.	
2. Cohen (2009). Memmler's Structure & Function of Human Body, LWW.	
2- Essential References.	
1. Venkatesh (2009). Basic Medical Physiology, LWW	
2. Guyton (2007). Medical Physiology, 2007, Elsevier.	
3. Venkatesh (2009). Basic Medical Physiology for Nursing ,2009 ,LWW	
3- Electronic Materials and Web Sites etc.	
1. Http: // www.google. Com	
2. Http:// www.yahoo.com	

I. Course Policies:	
Class Attendance: At least 75 % of the course hours should be attended by the student. Otherwise, he/she will not be allowed to attend the final exam	1.
Tardy: any student who is late for more than 15 minutes from starting the lecture will not be allowed to attend the lecture and will be considered absent.	2.
Exam Attendance/Punctuality: Any student who is late for more than 30 minutes from starting the exam will not be allowed to attend the exam and will be considered absent.	3.
Assignments & Projects: Assignments and projects will be assessed individually unless the teacher request for group work	4.
Cheating: Cheating by any means will cause the student failure and he/she must re-study the course	5.
Plagiarism: Plagiarism by any means will cause the student failure in the course. Other disciplinary procedures will be according to the college rules.	6.

1. Course Plan (Syllabus)

I. Information about Faculty Member Responsible for the Course:

Name of Faculty Member	Dr. aref saleh	Office Hours					
Location&Telephone No.		SAT	SUN	MON	TUE	WED	THU
E-mail		X					

II. Course Identification and General Information:

Physiology					Course Title:	1.
()					Course Number & Code:	2.
Total	C.H				Credit hours: 2	3.
	F. Tr.	Pr.	Seminar	Th.		
2	-	-	-	2		
First year/2 semester					Study level/year at which this course is offered:	4.
-					Pre –requisite:	5.
-					Co –requisite :	6.
Anesthesia Technician					Program (s) in which the course is offered	7.
English					Language of teaching the course:	8.
Semester system					System of Study:	9.
Full time					Mode of delivery:	10.
Faculty of Medical Applied Science					Location of teaching the course:	11.

III. Course Description:

This course is designed to provide student with the basic knowledge and principles of physiology with references to man including body fluids function and composition and functioning of the body systems.

IV. Intended learning outcomes (ILOs) of the course:

- a1. Identify the basic physiological functions of the human body.
a2. Classifies signs and symptoms of deviation of the function of an organ from normal.
b1 Interpret how normal body function is regulated.
b2 Distinguish normal function of different body system and organs.

I. Course Content:

A – Theoretical Aspect:

Learning Outcomes	lecturer hours	No. of Weeks	Sub Topics List	Units/Topics List	Order
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a1,a2, b1,b2	2	1	Midterm exam	5
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a1,a2, b1,b2	2	1	Final exam	8
	32	16	Number of Weeks /and Units Per Semester	

B– Practical Aspect:

ContactHours	Week Due	Topics List	Order
-	-	Not applicable	

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		Number of Weeks /and Units Per Semester
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V. Teaching strategies of the course:

1. Lecture
2. Discussion
3. Case discussions
4. Seminar

VI. Assignments:

Mark	Week Due	Aligned CILOs(symbols)	Assignments	No
5	5-10	a1,a2,b1,b2	Regulation of respiration.	1

VIII. Schedule of Assessment Tasks for Students During the Semester Theoretical part

Aligned Course Learning Outcomes	Proportion of Final Assessment	Mark	Week Due	Assessment Method	No.
a1,a2,b1,b2	5%	5	15th week	Attendance and activities	1
a1,a2,b1,b2	5%	5	5th and 12th week	Student assignments	2
a1,a2,b1,b2	20%	20	7th or 8th week	Mid-term exam	3
a1,a2,b1,b2	70 %	70	16th-17th week	Final-exam	4
	100%	100	Total Theory Weight		

Practical part					
Aligned Course Learning Outcomes	Proportion of Final Assessment	Mark	Week Due	Type of Assessment Tasks	No
-	-	-	-	Not applicable	
Learning Resources:					
1- Required Textbook(s)					
1. Grayton and Mall (2001). Textbook of medical physiology. 10th, Saunders London, Toronto, company, Philadelphia, London, Toronto.					
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3- Electronic Materials and Web Sites etc.					
1. Http: // www.google. Com					
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