MODULE DESCRIPTION FORM

Module Information					
Module Title	**Physiology**			**Module Delivery**	
Module Type	**Core**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**MPH2025**				
ECTS Credits	**6 ECTS**				
SWL (hr/sem)	**150**				
Module Level		UG II	**Semester of Delivery**		1
Administering Department		MPH	**College**	Type College Code	
Module Leader	Dargham Adel Obaid Hassoun		**e-mail**	E-mail	
Module Leader's Acad. Title		Assit. Lecturer	**Module Leader's Qualification**		Ph.D.
Module Tutor	karar H. Obaid Mohammed Abdul Ali Hamza		**e-mail**	Karar.h.obaid@uowa.edu.iq	
Peer Reviewer Name		Ali Hamid oraiby	**e-mail**	Ali.h@uowa.edu.iq	
Scientific Committee Approval Date		2024-9-17	**Version Number**		1.0

Relation with other Modules			
Prerequisite module	MPH103	**Semester**	UG I
Co-requisites module	None	**Semester**	None

Department Head Approval **Dean of the College Approval**

Module Aims, Learning Outcomes and Indicative Contents	
Module Objectives	1. To provide students with an understanding of the structure and function of a number of key physiological systems and their role in body homeostasis. 2. To study the physiology of humans as a model for physiological processes in other organisms. 3. To describe a range of tissues and physiological processes in humans at an introductory level. 4. To relate physiological processes to their bases at cellular levels. 5. To be able to understand and analyses experimental work in physiology. 6. To be able to apply problem-solving skills to practical problems in physiology, including the use of mathematics and data analysis. 7. To develop further practical biological skills introduced in this Physiology course
Module Learning Outcomes	1. Introductory knowledge of the cellular and biochemical processes which underlying physiological processes in humans. 2. 2. Demonstrate an understanding of special mechanisms used to transport selected molecules unable to cross the plasma membrane on their own: carrier mediated; endocytosis; exocytosis. 3. Describe the anatomy, physiology and control of a number of key physiological systems critical for the functioning of the human body. 4. Basic knowledge of communications between cells is largely by extra cellular chemical messengers: paracrine, neurotransmitters and neurohormones. 5. Explain principles and solve problems in human physiology. 6. Introductory-level knowledge of physiology of major processes, such as cardiovascular system, nervous system, digestive system, respiratory system, endocrinology and reproductive system in human . 7. Demonstrate an understanding of levels of organization of key physiological systems from cells to function. 8. Basic knowledge to perform, analyses and report on experiments and observations in physiology 9. Relate knowledge of physiological systems above to selected homeostatic mechanisms and their control. 10. Recognize the principal tissue structures to understanding of key physiological systems
Indicative Contents	Theory Lectures Learning concepts of each theoretical lecture or groups of lectures. [SSWL = 28 hrs] Lab. Lectures Learning concepts of each laboratory lecture or groups of lectures. [SSWL = 30 hrs]

Learning and Teaching Strategies	
Strategies	Lectures: In traditional lecture-based courses, instructors deliver content to students through spoken presentations. This format is often supplemented with slides, multimedia, or handouts to aid understanding. •Workshops: Workshops enhance the knowledge and understanding of the subject gained from lectures and develop fundamental and subject-specific skills. •Self-guided learning contributes to subject-specific knowledge and self-motivation. •The examinations demonstrate achievement of the appropriate level of subject-specific knowledge of physiology, with an emphasis on understanding and communication (essay and problem-based questions) or recall of factual knowledge (multiple choice or short answer question tests) •Tutorials: Tutorials are small-group sessions led by a tutor, where students can ask questions, receive individualized support, and clarify concepts covered in lectures or readings. • Practical analysis based on subject-specific knowledge and demonstrate subject-specific skills in understanding experimental work and data analysis. • Practical exercises allow students to utilize subject-specific knowledge gained from lectures, and support the development of key and subject-specific skills. • Flipped classroom: In a flipped classroom model, students are introduced to course material through self-paced learning activities outside of class (e.g., watching pre-recorded lectures or reading texts), freeing up class time for interactive discussions, problem-solving, and hands-on activities

Student Workload (SWL)			
Structured SWL (h/sem)	75	**Structured SWL (h/w)**	5.2
Unstructured SWL (h/sem)	72	**Unstructured SWL (h/w)**	4.8
Total SWL (h/sem)	147**+3 final = 150**		

Module Evaluation

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	4	5% (8)	2,8,13	3,5,6,7,8,11
	Home Work	4	5% (8)	1,6,9,10	4,7,8,11
	Report	10	10% (10)	4,5,6,7,8,9, 10,12,13	1-12
	Lab	4	10%(8)	4,6,7,12	3,5,8,11
	Circal Learn	2	10% (6)	All Weeks	1-12
Summative assessment	**Midterm Exam**	1hr	10% (10)	7	1 - 7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	Introduction to cell physiology
Week 2	The general and cellular basis of medical physiology
Week 3	Circulatory body fluid
Week 4	Cardiovascular system: Function, organs and diseases
Week 5	Generation and conduction of the cardiac impulse
Week 6	Physiology of the nervous system I
Week 7	Physiology of the nervous system II
Week 8	Mid. Exam
Week 9	Renal physiology
Week 10	Digestive system I: Structures and tissues
Week 11	Digestive system II : Digestion and absorption
Week 12	The Anatomy and Physiology of the respiratory system
Week 13	Endocrinology I: Introduction and energy balance

Week 14	Endocrinology I I: Pituitary gland and thyroid gland
Week 15	Reproductive system
Week 16	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus)	
	Material Covered
Week 1	General laboratory rules and safety procedures
Week 2	Introduction to blood physiology.
Week 3	Blood typing and blood transfusion.
Week 4	Packed cell volume.
Week 5	Determination of hemoglobin concentration.
Week 6	Determination of bleeding time and clotting time.
Week 7	Blood pressure.
Week 8	Effect of exercise on blood pressure.
Week 9	Erythrocyte sedimentation rate (ESR)
Week 10	Differential W.B.C count
Week 11	Total W.B.C. count
Week 12	Experiments on respiratory system (respiratory rate and volumes)
Week 13	Red blood cell counting
Week 14	Insulin regulation of blood glucose
Week 15	Electrocardiogram (ECG).

Learning and Teaching Resources		
	Text	**Available in the Library?**
Required Texts	Medical Physiology:Principles for Clinical Medicine ,Fourth Edition,Rodney A.Rhoades and David R.Bell, Lippincott Williams & Wilkins;2012	Yes
Recommended Texts	Human Physiology ,Tweifth Edition ,Widmaier ,Raff and Strang ,2011	No
Websites	Website Address.	

Grading Scheme				
Group	**Grade**	التقدير	**Marks %**	**Definition**
Success Group (50 - 100)	**A -** Excellent	Excellent	90 - 100	Outstanding Performance
	B - Very Good	Very Good	80 - 89	Above average with some errors
	C - Good	Good	70 - 79	Sound work with notable errors
	D - Satisfactory	Satisfactory	60 - 69	Fair but with major shortcomings
	E - Sufficient	Sufficient	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	**FX –** Fail	Fail	(45-49)	More work required but credit awarded
	F – Fail	Fail	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.