



Ministry of Higher Education and
Scientific Research - Iraq
University of Warith Al-Anbiyaa
College of Sciences
Department of Medical Physics



MODULE DESCRIPTION FORM

Module Information				
معلومات المادة الدراسية				
Module Title	Physiology	Module Delivery		
Module Type	Core	Method	h/week	Frequency
Module Code	MPH2025	Theory	2	14
ECTS Credits	6 ECTS	Lecture	-	-
SWL (hr/sem)	150	Lab	2	15
		Tutorial	1	14
		Practical	-	-
		Seminar	-	-
Module Level	UG II	Semester of Delivery	3ed Semester	
Administering Department	MPH	College	CoS	
Module Leader	Dargham Adel Obaid Hassoun	e-mail	dirgham.ad@uowa.edu.iq	
Module Leader's Acad. Title	Assit. Lecturer	Module Leader's Qualification	MS.c.	
Module Tutor	karar H. Obaid Mohammed Abdul Ali Hamza	e-mail	krar.h.obaid@uowa.edu.iq	
Peer Reviewer Name		e-mail		
Scientific Committee Approval Date		Version Number	1.0	

Relation with other Modules

العلاقة مع المواد الدراسية الأخرى

Prerequisite module	MPH103	Semester	UG I, 1st Semester
Co-requisites module	None	Semester	None



Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

<p>Module Objectives أهداف المادة الدراسية</p>	<ol style="list-style-type: none">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.
<p>Module Learning Outcomes مخرجات التعلم للمادة الدراسية</p>	<ol style="list-style-type: none">1. Introductory knowledge of the cellular and biochemical processes which underlying physiological processes in humans.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 physiology9. 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.
<p>Indicative Contents المحتويات الإرشادية</p>	<p><u>Theory Lectures</u> Learning concepts of each theoretical lecture or groups of lectures. [SSWL= 28 hrs]</p> <p><u>Lab. Lectures</u> Learning concepts of each laboratory lecture or groups of lectures. [SSWL= 30 hrs]</p> <p>Total hrs = 28 + 30+1+3=62 hrs</p>

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

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)

الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	62	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	4.13
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	88	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	5.87
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	150		

Module Evaluation

تقييم المادة الدراسية

	Time Number	Weight (Marks)	Week Due													Relevant Learning Outcome												
			W1	W2	W3	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	LO1	LO2	LO3	LO4	LO5	LO6	LO7	LO8	LO9	LO10	
Formative	Quizzes	2	10%		*							*						*				*						
	Report	1	5%													*									*	*		
	Lab Report	1	5%											*								*	*					
	Project	-	-																									
	Online Assig.	2	10%					*		*										*	*	*						
	Onsite Assig.	1	10%			*														*								
	Seminar	-	-																									
Summative	Mid. Exam	1hr	10% (10)							*								*	*	*	*	*						
	Final Exam	3hr	50% (50)	Week 16													*	*	*	*	*	*	*	*	*	*	*	*
Total assessment			100%																									

Delivery Plan (Weekly Syllabus)

المنهاج الاسبوعي النظري

	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

Delivery Plan (Weekly Lab. Syllabus)

المناهج الاسبوعي للمختبر

	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

مصادر التعلم والتدريس

	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	Yes
Websites	Website Address.	

Grading Scheme

مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(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.