



CIHAN UNIVERSITY-SULAIMANIYA

Course Outline

2023-2024

Address:
Chwarchra-Opposite to Family Mall
Sulaymaniyah City
Kurdistan Region-Iraq
Tel: 07714695656,
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MODULE DESCRIPTION FORM

Module Information			
Module Title	Systemic Physiology		
Module Type	Basic	<input type="checkbox"/> Theory <input type="checkbox"/> Lecture <input type="checkbox"/> Lab <input type="checkbox"/> Tutorial <input type="checkbox"/> Practical <input type="checkbox"/> Seminar <input type="checkbox"/> Report <input type="checkbox"/> Extra activity	
Module Code			
Language	English		
ECTS Credits	6		
Module Level	1		
Administering Department	Anesthesia	College	Health Sciences
Lecturer	Dr Sadat Abdulla Aziz		
Academic Title	Asst. Prof.	Qualification	PhD
Module Tutor	Dr Sadat Abdulla Aziz	e-mail	Sadat.aziz@sulicihan.edu.krd
Peer Reviewer Name		e-mail	
Scientific Committee Approval Date	????	Version Number	
Cycle of Study	Bachelor	Form of Education	Full time

Relation with other Modules			
Prerequisite module	General Physiology	Semester	1 st
Co-requisites module	None	Semester	

Cihan University-Sulaimaniya?

College of Health Sciences

Department: **Anesthesia**

Discipline: **Systemic Physiology**

Stage: **2nd**



Total Contact Hours:	57
Total Self Study Hours:	105
Total No. Hours:	162
ECTS:	6

No. of Weeks	Contact Hours					Self-Study					
	Theoretical	Practical	Lab	Project	Visit	Quiz	Reading	Assignment	Report	Midterm Exam.	Final Exam.
1 st Week (Registration)		1	1								
2 nd Week	2	1	1				4			10	16
3 rd Week	2	1	1				4				
4 th Week	2	1	1			2	4	2	3		
5 th Week	2	1	1	1			4				
6 th Week	2	1	1	1			4		3		
7 th Week		1	1				4				
8 th Week	2	1	1								
9 th Week	2	1	1				4				
10 th Week	2	1	1				4	2			
11 th Week	2	1	1	1			4		3		
12 th Week	2	1	1	1		2	4	2	3		
13 th Week	2	1	1	1			4		3		
14 th Week	2	1	1				4				
15 th Week (Pr. Final Ex)										6	
16 th Week (Final Exam.)											
TOTAL	24	14	14	5		4	48	6	15	16	16

Delivery Plan (Weekly Syllabus)

	Material Covered
Week 1	Renal Physiology; the urinary system, Main functions of the kidneys, Renal vasculature, The nephrons, Nephrons functions, Membrane surfaces of the renal tubules, The basic mechanisms of transport across the renal tubules, The counter-current mechanism in the kidney, Glomerular Filtration Rate, acid-base balance.
Week 2	Renal Physiology; Urine Volume, Regulation of the renal blood flow and pressure, Regulatory effect of Renin–Angiotensin System on the kidney, hormones that influence reabsorption of water, Aldosterone, Atrial natriuretic peptide, Antidiuretic hormone
Week 3	Digestive system; Structure of the gastrointestinal (GI) tract, Innervation of the GI tract, Types of digestion, Oral cavity, Saliva, Esophagus, Stomach, Regulation of Gastric juice secretion, Small intestine, Completion of digestion.
Week 4	Digestive System; Completion of digestion (intestine, liver, pancreas), Hormonal regulation of the intestinal secretions, Digestion and absorption. Common types of digestion and absorption disorders
Week 5	Cardiovascular system; General features and functional structures of the heart, Circulation of blood through the heart, The Cardiovascular Pathways, heart sounds, Heart rate, Stroke volume Regulation
Week 6	Cardiovascular system (continued): cardiac cycle, Phases of the cardiac cycle, cardiac output, The Frank-Starling Mechanism, Electrical conductive system of the heart, .Electrocardiograph (ECG).
Week 7	Mid-Term Exam
Week 8	Cardiovascular system; Regulation of heart rate, blood flow, Factors regulating blood flow, blood pressure, Regulation of Arterial Blood Pressure
Week 9	Respiratory system; Functions of respiratory system, organization of the respiratory system, Mechanism of breathing, Exchange of gases, Transport of Oxygen and Carbon Dioxide in Blood and Tissue Fluids, Hb-O ₂ dissociation curve,
Week 10	Respiratory system; Physical properties that affect lung function, airway surface liquid (ASL), Lung Volumes and Capacities, Respiratory acid-base disorders, Bicarbonate Buffer System, Regulation of respiration.
Week 11	Male reproductive system, Structures (testes, epididymis, vas deference, urethra), Accessory sex glands (Seminal vesicles, Prostate gland, Bulb urethral gland), Spermatogenesis, Hormone Regulation.
Week 12	Female reproductive system; Ovaries, Oogenesis, Fallopian tube, Uterus, Vagina, Sexual cycles, Fertilization, Implantation.
Week 13	Special Senses
Week 14	Special Senses
Week 15	Preparatory Week
Week 16	Final Exam

Delivery Plan (Weekly Lab. Syllabus)

	Material Covered
Week 1	CBC
Week 2	RBC Indices
Week 3	ESR
Week 4	Color blindness

Week 5	Blood Pressure
Week 6	ECG
Week 7	
Week8	Effect of exercise on body physiology
Week9	BMI
Week 10	Lung capacity
Week 11	Semen analysis
Week 12	Reflex
Week 13	
Week 14	
Week 15	
Week 16	

Module Aims, Learning Outcomes and Indicative Contents

Module Objectives	<p>Course objective</p> <p>Upon completion of this Course, the students should be able to:</p> <ul style="list-style-type: none"> ■ The broad goal of teaching physiology is to provide the students with a comprehensive knowledge of the normal functions of the body various molecules, cells, organ systems and interrelationships among them. How body responses to different stimuli, mechanism of homeostasis. With examples of pathophysiology, always to illustrate the basic physiology that underlies the disease. ■ Understand physiological terms properly. ■ Understand and predict the responses of the body to stimuli. ■ Understand how the body maintains conditions within a narrow range of values in a constantly changing environment. ■ Understand how the body cells, organs and systems are integrated with each other to maintaining of the body homeostasis. ■ Observe and analyze physiological variations and similarities among animal species.
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	<ul style="list-style-type: none"> ■ Link between physiologic changes and manifestations of the disease. ■ Evaluation and diagnosis the abnormal conditions based on the normal conditions
Module Learning Outcomes	

Learning and Teaching Strategies	
Strategies	

Module Evaluation					
Assessment Types		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes		5%		
	Assignments		3%		
	Projects / Lab.		5%		
	Report		7%		
	Presentation		5%		
Summative assessment	Midterm Exam	2hr	20%	7 th	
	Prefinal Pr. Exam	2hr	25%	15 th	
	Final Exam	3hr	30%	16 th	
Total assessment			100% (100 Marks)		

Learning and Teaching Resources		
	Text	Available in the Library?
Required Texts		
Recommended Texts		
Websites		

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.

- Cycle of studies - choose one of the three options: Bachelor «1», Master «2», PhD. «3»
- (**Exam:** Oral Examination, Written Exam), and (**Continuous Evaluation**(CE), Portfolio).
- Discipline status (Content) - for the Bachelor level, choose one of the options: FD (Fundamental (**General**) Discipline), PF (Preparatory Disciplines in the Field), SD (Specialty Disciplines), CD (Complementary Disciplines), DU (Disciplines based on the University's options).
- Discipline status (compulsoriness) - choose one of the options
 - a. MD (Mandatory discipline)
 - b. OD (Optional Discipline)
 - c. ED (Elective (**Facultative**) Discipline).

Approved by Head of the Branch / Department

Signature

Date

Name

Approved by Curriculum Development Committee and Bologna Process Committee

Signature	
Date	
Name	