Warith Al-Anbiya University / College of Engineering / Department of Biomedical Engineering Course Description

Course Description Form

1. Course Name:						
Physiology II						
2. Course Code:						
5. Semester / Tear:						
4. Description Preparation Date:						
2025-02-1						
5. Available Attendance Forms:						
presence in the classroom, lab						
6. Number of Credit Hours (Total) / Number of Units (Total)						
60 hours\ 3 units						
7. Course administrator's name (mention all, if more than one name)						
Name: Ahmed oudah kadhim						
Email: ahmed.oudah@uowa.edu.iq						
8. Course Objectives						
8. Course Objectives The study objectives can be summarized as follows: • The circulatory system: Understand how the heart and blood vessels work, how blood is pumped and distributed in the body, an the mechanisms of regulating blood pressure. • The nervous system: Know the types of nervous tissue, how nervous signals are transmitted, and the role of the autonomic nervous system in regulating the various functions of the body. • The senses: Understand the mechanisms of the different senses such as hearing, sight, and touch, and how sensory signals are converted into nerve signals. • Muscle physiology: Study the different types of muscles, how they contract and relax, and the mechanisms of muscle fatigue. • Renal and respiratory physiology: Understand the functions of the kidneys and respiratory system, and how fluid, acid, and bas balance are regulated in the body.						
9. Teaching and Learning Strategies						
Strategy Assessment is based on hand-in assignments, written exam, Case study, Quizzes, seminars, Practical testing and Online testing.						

10. Course Structure								
Week	Hours	Required Learning	Unit or subject name	Learning	Evaluation			
		Outcomes		method	method			
1	4	Learn about the cardiovascular system, action partial	Cardiovascular system, actior partial,	Lectures presented PDF format + Lab	Daily exam + homeworl assignments + monthly exams			
2	4	Learn about the functional design of cardiovascular system, electrophysiology of the heart ECG	functional design of cardiovascular system, electrophysiology of the heart ECG	Lectures presented in PDF format + Lab	Daily exams homework assignments monthly exam			
3	4	Learn about the cardiac cycle, Cardiac output	cardiac cycle, Cardiac output	Lectures presented in PDF format + Lab	Daily exams homework assignments monthly exam			
4	4	Learn about the blood pressure, muscle and nerve	blood pressure, muscle and nerve	Lectures presented in PDF format + Lab	Daily exams homework assignments monthly exam			
5	4	Learn about the excitable tissue, nervous tissue	excitable tissue, nervous tissue	Lectures presented in PDF format + Lab	Daily exam homework assignments monthly			
6	4	Learn about the types of nerves, excitation of the muscle	types of nerves, excitation of the muscle	Lectures presented in PDF format + Lab	Daily exams homework assignments monthly			

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7	4	Learn about the theories of contraction, muscle contraction change	theories of contraction, muscle contraction change	Lectures presented in PDF format + Lab	Daily exam homework assignments monthly
8	4	Learn about the fatigue, smooth muscle	fatigue, smooth muscle	Lectures presented in PDF format + Lab	Daily exam homework assignments monthly
9	4	Learn about the cardiac muscle, neuromuscular transmission	cardiac muscle, neuromuscular transmission	Lectures presented in PDF format + Lab	Daily exam homework assignments monthly
10	4	Learn about the autonomic nervous system, anatomical consideration and autonomic reflex arch	autonomic nervous system, anatomical consideration and autonomic reflex arch	Lectures presented in PDF format + Lab	Daily exam homework assignments monthly exa
11	4	Learn about the sympathetic and parasympathetic nervous system, higher anatomical centers and neurotransmitters in autonomic nervous system	sympathetic and parasympathetic nervous system, higher anatomical centers and neurotransmitters in autonomic nervous system	Lectures presented in PDF format + Lab	Daily exam homework assignments monthly exa
12	4	Learn about the micturition, introduction to special senses	micturition, introduction to special senses	Lectures presented in PDF format + Lab	Daily exam homework assignments monthly exa

13	4	Learn about the hearing vestibular apparatus, vision and the eye muscle contractility,	hearing vestibular apparatus, vision and the eye muscle contractility,		Lectures presented in PDF format + Lab	Daily exams homework assignments monthly exam	
14	4	Learn about the electroencephalography, biophysics of circulation	electroencephalography, biophysics of circulation,		Lectures presented in PDF format + Lab	Daily exam homework assignments monthly exa	
15	4	Learn about the Renal physiology, respiratory physiology	Renal physiology, respiratory physiology		Lectures presented in PDF format + Lab	Daily exam homework assignments monthly exa	
11. Course Evaluation							
 Daily exams with practical and scientific questions. Participation scores for difficult competition questions among students Establishing grades for environmental duties and the reports assigned to them Semester exams for the curriculum, in addition to the mid-year exam and final exam 							
12. L	_earning	g and Teaching Reso	urces				
Required textbooks (curricular books, if any) Principiles of anatomy and physiology, by Gerard J. Tortora& Brian H. Derrickson 12PthP ed. Volume 1 2009					ogy, by Gerard J. Jume 1 2009		
Main references (sources)				Text book of medical physiology, by Guton & Hall . eleven ed. 2020.			
Recommended books and references (scientific Check out websites in this field							
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