

## Course description form

<b>1. Course Name</b>	
Applied Physiology	
<b>2. Semester /year</b>	
<b>3. Data this description prepared</b>	
2024/9/1	
<b>4–Available attendance forms</b>	
Lectures	
<b>5. Number of study hours (total) / Number of units (total)</b>	
2 hours	
<b>6–Name of course leader (if more than one name is provided)</b>	
<p>Theoretical parts Asst. prof. Dr. Hassan Abdullah Athbi</p> <p>Practical parts Dr. Noor Dehyaa Hassan</p>	
<b>Course objectives</b>	
<ul style="list-style-type: none"> <li>-Identifying the functions of different body systems.</li> <li>- Describe the mechanism of operation of the various body systems and the sequence of physiological events accompanying them.</li> <li>- To distinguish between normal and abnormal functions of different body systems</li> <li>- Expanding knowledge through periodicals, medical books and the Internet</li> </ul>	<div style="background-color: #e1f5fe; padding: 5px; display: inline-block;"><b>Course objectives</b></div>

Teaching and learning strategies					
Teaching and learning methods explain the aims and objective of lecture give some clinical problems and encourage for seminar presentation by students					Strategy
5. Course structure					
The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	2	Electrical components and activity of the heart	Electrical components and activity of the heart	Theoretical lectures	Daily exam
2 <sup>nd</sup>	2	The cardiac action potential in ventricular muscle and pace maker tissues	The cardiac action potential in ventricular muscle and pace maker tissues	Theoretical lecture	Daily exam
3 <sup>rd</sup>	2	Contractile cardiomyocytes and excitation – contraction coupling	Contractile cardiomyocytes and excitation – contraction coupling	Theoretical lectures	Daily exam
4 <sup>th</sup>	2	ECG and arrhythmia	ECG and arrhythmia	Theoretical lectures	Daily exam
5 <sup>th</sup>	2	Cardiac cycle	Cardiac cycle	theoretical lecture	Daily exam
6 <sup>th</sup>	2	Heart sound and waveform generated	Heart sound and waveform generated	theoretical lecture	Daily exam

		during cardiac cycle	during cardiac cycle		
8 <sup>th</sup>	2	The left ventricle pressure volume loop	The left ventricle pressure volume loop	Theoretical lecture	Daily exam
9 <sup>th</sup>	2	Cardiac innervations and control of heart rate	Cardiac innervations and control of heart rate	Theoretical Lecture	Daily exam
10 <sup>th</sup>	2	Cardiac reflexes	Cardiac reflexes	Theoretical Lecture	Daily exam
11 <sup>th</sup>	2	Systemic circulation	Systemic circulation	Theoretical Lecture	Daily exam
12 <sup>th</sup>	2	Blood pressure regulation	Blood pressure regulation	Theoretical Lecture	Daily exam
13 <sup>th</sup>	2	Physiology of microcirculation ( starling law of capillary )	Physiology of microcirculation ( starling law of capillary )	Theoretical Lecture	Daily exam
14 <sup>th</sup>	2	Venous circulation and venous return	Venous circulation and venous return	Theoretical Lecture	Daily exam
15 <sup>th</sup>	2	Coronary circulation	Coronary circulation	Theoretical Lecture	Daily exam

Course Evaluation	
<p>Changing some of the vocabulary of the subject according to the global updates used in developing general physiology. Using deductive questions and questions whose answers require deep or outside-the-box thinking to motivate students to know the extent of their capabilities and mental abilities in deducing and arriving at conclusions. Also, using the research lecture method instead of the theoretical lecture, and identifying the extent to which female students can access the largest number of information about the subject, become familiar with it, and discuss research within the class, in order to create a generation aware of scientific research and its development</p>	
Learning and teaching resources	
A-Required prescribed books	Medical physiology and general physiology book
1-Main references (sources)	<ul style="list-style-type: none"> <li>▪ Sembulingam, K., and Sembulingam, P. (2019). Essential of medical physiology. Eighth Edition. Jaypee Brothers Medical Publishers (P) Ltd. India.</li> <li>▪ Miller, R. D., &amp; Eriksson, L. I. (2020). Miller's Anesthesia (9<sup>th</sup> ed.). Elsevier. A comprehensive guide covering anesthesia techniques, including apneic oxygenation.</li> </ul>
2-Recommended books and references (scientific journals, reports,...)	Barash, P. G., Cullen, B. F., & Stoelting, R. K. (2021). Clinical Anesthesia (9 <sup>th</sup> ed.). Wolters Kluwer. Discusses airway management, oxygenation strategies, and complications like diffusion hypoxia.
B - Electronic references, Internet sites...	Free full, science direct, pub med

1. Course Name
<b>Medicine</b>
2. Semester /year

3. Data this description prepared					
2024/9/1					
4-Available attendance forms					
Lectures					
5. Number of study hours (total) / Number of units (total)					
2 hours					
6-Name of course leader (if more than one name is provided)					
Ghada Ali Hussein					
Course objectives					
1- Respiratory system . 2- GIT system . 3- GU system . 4- Liver disease . Endocrine disorder					Course objectives
Teaching and learning strategies					
Evaluation methods by different examination in same lecture and in monthly time					Strategy
5. Course structure					
The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	2	Causes ,clinical feature	Students be able to understand	Theoretical lectures	Daily exam

			<b>infectious diseases</b>		
2 <sup>nd</sup>	2	<b>Diagnosis and treatment</b>	<b>Students be able to understand infectious diseases</b>	Theoretical lecture	Daily exam
3 <sup>rd</sup>	2	<b>Causes ,clinical feature Diagnosis and treatment</b>	<b>Students be able to understand respiratory diseases</b>	Theoretical lectures	Daily exam
4 <sup>th</sup>	2	<b>Causes ,clinical feature Diagnosis and treatment</b>	<b>Students be able to understand respiratory diseases</b>	Theoretical lectures	Daily exam
5 <sup>th</sup>	2	<b>Causes ,clinical feature Diagnosis and treatment</b>	<b>Students be able to understand respiratory diseases</b>	theoretical lecture	Daily exam
6 <sup>th</sup>	2	<b>Causes ,clinical feature Diagnosis</b>	<b>Students be able to</b>	theoretical lecture	Daily exam

		<b>and treatment</b>	<b>understand cardiovascular system</b>		
8 <sup>th</sup>	2	<b>Causes ,clinical feature Diagnosis and treatment</b>	<b>Students be able to understand cardiovascular system</b>	Theoretical lecture	Daily exam
9 <sup>th</sup>	2	<b>Causes ,clinical feature</b>	<b>Students be able to understand ECG</b>	Theoretical Lecture	Daily exam
10 <sup>th</sup>	2	<b>Diagnosis and treatment</b>	<b>Students be able to understand AIDS</b>	Theoretical Lecture	Daily exam
11 <sup>th</sup>	2	<b>Causes ,clinical feature</b>	<b>Students be able to understand gastrointestinal system</b>	Theoretical Lecture	Daily exam
12 <sup>th</sup>	2	<b>Diagnosis and treatment</b>	<b>Students be able to understand</b>	Theoretical Lecture	Daily exam

			<b>gastrointestinal system</b>		
13 <sup>th</sup>	2	<b>Causes ,clinical feature</b>	<b>Students be able to understand liver diseases</b>	Theoretical Lecture	Daily exam
14 <sup>th</sup>	2	<b>Complication Diagnosis and treatment</b>	<b>Students be able to understand liver diseases</b>	Theoretical Lecture	Daily exam
15 <sup>th</sup>	2	<b>Causes ,clinical feature Diagnosis and treatment</b>	<b>Students be able to understand kidney diseases</b>	Theoretical Lecture	Daily exam

#### Course Evaluation

To enrolled the students in hospital practice more cases more practice

#### Learning and teaching resources

<b>Oxford hand book of clinical medicine ,</b>	
<b>Harrisons principle of internal medicine</b>	
<b>IVSL</b>	
<b>B – Electronic references, Internet sites...</b>	<b>e medicine Health</b>



## Course description form

<b>1. Course Name</b>	
Basic Anaesthetic Equipment 1	
<b>2. Semester /year</b>	
<b>3. Data this description prepared</b>	
2024/9/1	
<b>4–Available attendance forms</b>	
Lectures	
<b>5. Number of study hours (total) / Number of units (total)</b>	
2 hours	
<b>6–Name of course leader (if more than one name is provided)</b>	
Dr. Muataz Fouad Alagha	
<b>Course objectives</b>	
<b>Teaching the course aims to introduce the student to the basics of using and maintaining anesthetic devices.</b>	<b>Course objectives</b>
<b>Teaching and learning strategies</b>	
Conducting periodic exams of students for every one or two new lectures  Surprising questions while explaining the lecture and	<b>Strategy</b>

recording this in the students' evaluation record	
Conducting weekly, monthly and final exams	

#### 5. Course structure

The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	6	Learn about the details and design of operating theaters and their specifications	Operating room design and functioning	<ul style="list-style-type: none"> <li>-Use the smart screen</li> <li>-Devices and equipment available in the classroom and laboratory</li> </ul>	<ul style="list-style-type: none"> <li>-Oral exam</li> <li>-Daily exams</li> <li>-Semester exams and the end of the course</li> </ul>
2 <sup>nd</sup> 3 <sup>rd</sup>	12	Identifying the types of canola and feeding devices and how to best use them, as well as their types	Cannula and giving set and device for intravenous infusion	<ul style="list-style-type: none"> <li>-Use the smart screen</li> <li>-Devices and equipment available in the classroom and laboratory</li> </ul>	<ul style="list-style-type: none"> <li>-Oral exam</li> <li>-Daily exams</li> <li>-Semester exams and the end of the course</li> </ul>
4 <sup>rd</sup>	6	Get to know these fluid payment or calculation devices, as well as syringe devices and their electrical and mechanical features	Infusion equipment: patient control analgesia, filtration, aut transfusion	<ul style="list-style-type: none"> <li>-Use the smart screen</li> <li>-Devices and equipment available in the classroom and laboratory</li> </ul>	<ul style="list-style-type: none"> <li>-Oral exam</li> <li>-Daily exams</li> <li>-Semester exams and the end of the course</li> </ul>
5 <sup>th</sup> 6 <sup>th</sup> 7 <sup>th</sup>		Learn about the behavior of fluids under different conditions of motion and temperature. Learn about	Physical principles: behavior of molecules of solid and liquid, heat and	<ul style="list-style-type: none"> <li>-Use the smart screen</li> <li>-Devices and</li> </ul>	<ul style="list-style-type: none"> <li>-Oral exam</li> <li>-Daily exams</li> </ul>

	18	the motion and mixing of fluids, as well as the mechanics of static and moving fluids, learn about the types of gas laws and give examples of each law	temperature  Physical principles: properties of gases, temperature, and flow of fluid through tubes and orifice	equipment available in the classroom and laboratory	-Semester exams and the end of the course
8 <sup>th</sup> 9 <sup>th</sup> 10 <sup>th</sup> 11 <sup>th</sup> 12 <sup>th</sup>	30	Types of endotracheal tubes, the method of intubation, their parts, the benefits, reasons for using and disadvantages of each type, and identifying the special types.	Endotracheal tube (ordinary tube) laryngoscope, airway (oropharyngeal and nasopharyngeal), tracheostomy, facemask	-Use the smart screen  -Devices and equipment available in the classroom and laboratory	-Oral exam  -Daily exams  -Semester exams and the end of the course
13 <sup>th</sup> 14 <sup>th</sup> 15 <sup>th</sup>	18	Components of the respiratory system, its mechanism of action and its parts, the breathing system without CO <sub>2</sub> absorption, an explanation and classification of Mapelson types,.	Breathing system and their component, definition, classification, working principle	-Use the smart screen  -Devices and equipment available in the classroom and laboratory	-Oral exam  -Daily exams  -Semester exams and the end of the course

### Course Evaluation

Increasing the number of study hours for the anesthesia devices course to train students on more device techniques

### Learning and teaching resources

A-Required prescribed books	
1-Main references (sources)	1- Anesthesia equipment, principle and application, Jan Ehrenwerth, MD, 3rd edition  The MGH Textbook of Anesthetic Equipment, Warren S. Sandberg, MD, PhD 2nd edition

2-Recommended books and references (scientific journals, reports,...)	Relevant scientific journals
B - Electronic references, Internet sites...	All educational sites

### Course description form

<b>1. Course Name</b>
Basic Anaesthetic Equipment 2
<b>2. Semester /year</b>
<b>3. Data this description prepared</b>
2024/9/1
<b>4-Available attendance forms</b>
<b>Lectures</b>
<b>5. Number of study hours (total) / Number of units (total)</b>
6 hours per week
<b>6-Name of course leader (if more than one name is provided)</b>
Dr. Muataz Fouad Alagha
Course objectives

Teaching the course aims to introduce the student to the basics of using and maintaining anesthetic devices.					Course objectives
Teaching and learning strategies					
1-Creating a generation experienced in using advanced and modern devices and familiar with all their details  2-Preparing students through conducting seminars and their own researches					Strategy
5. Course structure					
The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup> 2 <sup>nd</sup> 3 <sup>rd</sup> 4 <sup>rd</sup> 5 <sup>th</sup>	30	Gases and their types, supplying medical gases, details of cylinders and their types, methods of storing them, and how to deal with them.	The supply of anesthetic gases, cylinders, oxygen concentrator Medical gas services, bulk storage, and supply of gases, piped medical vacuum, electrical supply distribution of pipework, terminal outlet flexible pipeline, test and check for medical gas pipeline	-Use the smart screen  -Devices and equipment available in the classroom and laboratory	-Oral exam  -Daily exams  -Semester exams and the end of the course
6 <sup>th</sup>		Measurement of Pressure of Gases, Manipulation of High-Pressure Gases, Gas Volume Measurement, Gas Flow Measurement	Gas Measurement, Gas Volume Measurement, Gas Flow Measurement	-Use the smart screen  -Devices and equipment	-Oral exam  -Daily exams  -Semester exams and

7 <sup>th</sup> 8 <sup>th</sup>	18			available in the classroom and laboratory	the end of the course
9 <sup>th</sup> 10 <sup>th</sup> 11 <sup>th</sup>	18	How to make a vaporizer and its old and modern types, identifying its internal parts, ways to fill the vaporizer, how to deal with it, and identifying the risks.	Vaporizer: law of vaporization, vaporizing system, type of vaporizer Factor affecting vaporizer performance, calibration of vaporizer, fillin of vaporizer	-Use the smart screen  -Devices and equipment available in the classroom and laboratory	-Oral exam  -Daily exams  -Semester exams and the end of the course

### Course Evaluation

### Learning and teaching resources


### 1. Course Name


2. Semester /year					
3. Data this description prepared					
2024/9/1					
4–Available attendance forms					
Lectures					
5. Number of study hours (total) / Number of units (total)					
2 hours					
6-Name of course leader (if more than one name is provided)					
Course objectives					
					Course objectives
Teaching and learning strategies					
					Strategy
5. Course structure					
The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell	Definition of physiology, cell physiology ,cell	Theoretical lectures	Daily exam

		components and functions	components and functions		
2 <sup>nd</sup>	2	Transport across cell membrane, extracellular and intracellular fluid	Transport across cell membrane, extracellular and intracellular fluid	Theoretical lecture	Daily exam
3 <sup>rd</sup>	2	Muscular system :types and characteristics	Muscular system :types and characteristics	Theoretical lectures	Daily exam
4 <sup>th</sup>	2	Mechanism of muscle contraction, fatigue and muscle pain	Mechanism of muscle contraction, fatigue and muscle pain	Theoretical lectures	Daily exam
5 <sup>th</sup>	2	Nerve cells, shape , type , structure , impulse , signal	Nerve cells, shape , type , structure , impulse , signal	theoretical lecture	Daily exam
6 <sup>th</sup>	2	Blood, function of blood, serum, plasm	Blood, function of blood, serum, plasm	theoretical lecture	Daily exam
8 <sup>th</sup>	2	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte	Theoretical lecture	Daily exam



			production		
9 <sup>th</sup>	2	platelet and WBC	platelet and WBC	Theoretical Lecture	Daily exam
10 <sup>th</sup>	2	Blood clotting mechanism	clotting Blood	Theoretical Lecture	Daily exam
11 <sup>th</sup>	2	Cardiovascular system , heart valve cycle , HR conductive	Cardiovascular system , heart valve cycle , HR conductive	Theoretical Lecture	Daily exam
12 <sup>th</sup>	2	Heart sound and murmurs, ECG	Heart sound and murmurs, ECG	Theoretical Lecture	Daily exam
13 <sup>th</sup>	2	Blood Pressure	Blood Pressure	Theoretical Lecture	Daily exam
14 <sup>th</sup>	2	Respiratory system	Respiratory system	Theoretical Lecture	Daily exam
15 <sup>th</sup>	2	Oxygen transport exchange and	Oxygen transport and exchange	Theoretical Lecture	Daily exam
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam

Course Evaluation	
Increasing the number of study hours for the anesthesia devices course to train students on more device techniques	
Learning and teaching resources	
A-Required prescribed books	
1-Main references (sources)	<p>2- Anesthesia equipment, principle and application, Jan Ehrenwerth, MD, 3rd edition</p> <p>The MGH Textbook of Anesthetic Equipment, Warren S. Sandberg, MD, PhD 2nd edition</p>
2-Recommended books and references (scientific journals, reports,...)	Relevant scientific journals
B - Electronic references, Internet sites...	All educational sites

## Course description form

<b>1. Course Name</b>	
Anesthesia	
<b>2. Semester /year</b>	
<b>3. Data this description prepared</b>	
2024/9/1	
<b>4-Available attendance forms</b>	
Lectures	
<b>5. Number of study hours (total) / Number of units (total)</b>	
2 hours	
<b>6-Name of course leader (if more than one name is provided)</b>	
Huda fadhel hassan	
<b>Course objectives</b>	
<p>a) Know basic information about anesthesiology</p> <p>b) The ability to assess the patient's condition before the operation and the radiological and laboratory tests necessary for the pathological condition</p> <p>c) Knowledge of narcotic drugs and drugs used in the different stages of anesthesia</p> <p>d) Know the stages of anesthesia and the procedures</p>	Course objectives

necessary for each stage	
e) The ability to deal with expected and sudden complications that may occur during or after the operation	
f) Study the necessary medical devices in the different stages of anesthesia	

#### Teaching and learning strategies

Emotional and value goals The ability to deal with the psychological state of the patient before the operation and reassure him	Strategy
The ability to communicate positively with the patient and his family	

#### 5. Course structure

The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	8	Know the history of anesthesia and the scope of use of anesthesia	History of anesthesia and introduction + scope of anesthesiology.	Theoretical + interactive lectures	Written + oral evaluation
2 <sup>nd</sup>	8	Know how to choose an anesthesia technique	Choice of anesthetic technique	Theoretical + interactive lectures	Written + oral evaluation
3 <sup>rd</sup>	8	Things to focus on during the	Preanaesthetic visit and	Theoretical +	Written + oral

		patient's visit before the operation	assessment	interactive lectures	evaluation
4 <sup>th</sup>	8	Know the medications that must be given before starting anesthesia	Premedication aims and therapeutic management	Theoretical + interactive lectures	Written + oral evaluation
5 <sup>th</sup>	8	Knowledge of general pharmacology with precise details of the handling of drugs with the body	General pharmacology	Theoretical + interactive lectures	Written + oral evaluation
6 <sup>th</sup>	8	To have a detailed knowledge about inhalational anesthesia and how to deliver to patient	Inhalational anaesthetic agents	Theoretical + interactive lectures	Written + oral evaluation
7 <sup>th</sup>	8		Inhalational anesthetic agents	Theoretical +	

				interactive lectures	
8 <sup>th</sup>	8		Inhalational anesthetic agents		
9 <sup>th</sup>	8	Know detailed information on how to use anesthesia with intravenous drugs and their complications	Intravenous anesthetic	Theoretical + interactive lectures	Written + oral evaluation
10 <sup>th</sup>	8		Intravenous anesthetic		Written + oral evaluation
11 <sup>th</sup>	8	Know the subtleties of muscle relaxants, how to give them and their complications	Muscle relaxant	Theoretical + interactive lectures	Written + oral evaluation
12 <sup>th</sup>	8		Muscle relaxant	Theoretical + interactive lectures	Written + oral evaluation

Course Evaluation	
Introducing new methods in education, such as problem-based education, education in the form of panel discussions, and how to form scientific research.	
Learning and teaching resources	
A-Required prescribed books	fundamental of anesthesia textbook
1-Main references (sources)	Clinical anesthesia morgan
2-Recommended books and references (scientific journals, reports,...)	Clinical anesthesia barash
B - Electronic references, Internet sites...	Pubmed.com

### Course description form

<b>1. Course Name</b>
<b>Basics of surgery</b>
<b>2. Semester /year</b>
<b>3. Data this description prepared</b>
<b>2024/9/1</b>
<b>4-Available attendance forms</b>
<b>Lectures</b>
<b>5. Number of study hours (total) / Number of units (total)</b>
<b>2 hours</b>

6-Name of course leader (if more than one name is provided)					
Yasir Adnan Mohammed Abd					
Course objectives					
Learning of students about the basic concepts of surgery including physiopathology and surgical complications				Course objectives	
Teaching and learning strategies					
Transferable general and qualifying skills (other skills related to employability and personal development)  1- discussion of surgical cases and how to find suitable treatment to it  2- brainstorming questions				Strategy	
5. Course structure					
The Week	Hours	Name of the unit/topic	Teaching method	Evaluation method	
1 <sup>st</sup>	4	Metabolic response to trauma	Theory + practical	Questioning +discussion +quiz	
2 <sup>nd</sup>	4	Inflammation acute and chronic	Theory + practical	Questioning +discussion +quiz	
3 <sup>rd</sup>	4	Shock types and	Theory +	Questioning	



		<b>pathophysiology</b>	<b>practical</b>	+discussion +quiz	
<b>4<sup>th</sup></b>	<b>4</b>	<b>Wound tissue repair and scars</b>	<b>Theory + practical</b>	Questioning +discussion +quiz	
<b>5<sup>th</sup></b>	<b>4</b>	<b>Surgical infections</b>	<b>Theory + practical</b>	Questioning +discussion +quiz	
<b>6<sup>th</sup></b>	<b>4</b>	<b>Patient safety</b>	<b>Theory + practical</b>	Questioning +discussion +quiz	
<b>7<sup>th</sup></b>	<b>4</b>	<b>Preoperative care and care in operations</b>	<b>Theory + practical</b>	Questioning +discussion +quiz	
<b>8<sup>th</sup></b>	<b>4</b>	<b>Head injury, management of unconscious patient</b>	<b>Theory + practical</b>	Questioning +discussion +quiz	
<b>9<sup>th</sup></b>	<b>4</b>	<b>Abscess , cellulitis , carbuncles</b>	<b>Theory + practical</b>	Questioning +discussion +quiz	
<b>10<sup>th</sup></b>	<b>4</b>	<b>Gangrene types and causes</b>	<b>Theory + practical</b>	Questioning +discussion +quiz	

<b>11<sup>th</sup></b>	<b>4</b>	<b>Fluid therapy</b>	<b>Theory + practical</b>	Questioning +discussion +quiz	
<b>12<sup>th</sup></b>	<b>4</b>	<b>Nutritional support in surgery</b>	<b>Theory + practical</b>	Questioning +discussion +quiz	
<b>13<sup>th</sup></b>	<b>4</b>	<b>Acid – base balance</b>	<b>Theory + practical</b>	Questioning +discussion +quiz	
<b>14<sup>th</sup></b>	<b>4</b>	<b>Spinal and peripheral nerves injuries</b>	<b>Theory + practical</b>	Questioning +discussion +quiz	
<b>15<sup>th</sup></b>	<b>4</b>	<b>Principles of laparoscopic surgeries</b>	<b>Theory + practical</b>	Questioning +discussion +quiz	

#### Course Evaluation

Updating and changing in the study plan to be suitable for anesthesia technical students

#### Learning and teaching resources

<b>1-Main references (sources)</b>	<b>Fiona basic surgical technique , COURTNEY text book of surgery</b>
<b>2-Recommended books and references (scientific journals, reports,...)</b>	<b>Any resource dealing with surgery and its basics</b>
<b>B - Electronic references, Internet</b>	<b>Uptodate , medicine net , pubmed , global</b>

sites...	surgery research
1-Main references (sources)	Fiona basic surgical technique , COURTNEY text book of surgery

### Course description form

<b>1. Course Name</b>	
Pharmacology	
<b>2. Semester /year</b>	
<b>3. Data this description prepared</b>	
2024/9/1	
<b>4-Available attendance forms</b>	
<b>Lectures</b>	
<b>5. Number of study hours (total) / Number of units (total)</b>	
<b>2 hours</b>	
6-Name of course leader (if more than one name is provided)	
Assistant Lecturer: Maha Mohammed Kadhim Majeed Al- Toma.	
Course objectives	
Introducing the student to medications and focusing on the medications that used in anesthesia.	Course objectives
2-Distinguishing the medications that are used in spinal and general anesthesia.	
3-How to use medications according to the affected part, age, gender and weight.	

Teaching and learning strategies					
Emotional and value goals:  1- Communicating chemical and biological ideas in a way that is understandable to the student.  2- Preparing students capable of working within various health and medical institutions				Strategy	
5. Course structure					
The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	4	Principles of Drug Therapy	Principles of Drug Therapy	Theoretical+ Practical	General questions, discussion, and daily exam
2 <sup>nd</sup>	4	Cholinergic agonists and antagonists	Cholinergic agonists and antagonists	Theoretical+ Practical	General questions, discussion, and daily exam
3 <sup>rd</sup>	4	Adrenergic agonists and adrenergic antagonists	Adrenergic agonists and adrenergic antagonists	Theoretical+ Practical	General questions, discussion, and daily exam
4 <sup>th</sup>	4	Drugs affecting cardiovascular system:  -Antihypertensive drugs	Drugs affecting cardiovascular system:  - Antihypertensive	Theoretical+ Practical	General questions, discussion, and daily exam

		<b>-Anti-heart failure drugs</b>	<b>drugs</b> <b>-Anti-heart failure drugs</b>		
<b>5<sup>th</sup></b>	<b>4</b>	<b>Drugs affecting cardiovascular system</b> <b>-Antiarrhythmics.</b> <b>-Antianginal drugs</b>	<b>Drugs affecting cardiovascular system</b> <b>-</b> <b>Antiarrhythmics.</b> <b>-Antianginal drugs-</b>	<b>Theoretical+ Practical</b>	<b>General questions, discussion, and daily exam</b>
<b>6<sup>th</sup></b>	<b>4</b>	<b>Diuretics</b>	<b>Diuretics</b>	<b>Theoretical+ Practical</b>	<b>General questions, discussion, and daily exam</b>
<b>7<sup>th</sup></b>	<b>4</b>	<b>Antihistamines</b>	<b>Antihistamines</b>	<b>Theoretical+ Practical</b>	<b>General questions, discussion, and daily exam</b>
<b>8<sup>th</sup></b>	<b>4</b>	<b>Drugs for Disorders of the Respiratory System</b>	<b>Drugs for Disorders of the Respiratory System</b>	<b>Theoretical+ Practical</b>	<b>General questions, discussion, and daily exam</b>
<b>9<sup>th</sup></b>	<b>4</b>	<b>Drugs for anemia</b>	<b>Drugs for anemia</b>	<b>Theoretical+ Practical</b>	<b>General questions, discussion, and daily</b>

					<b>exam</b>
<b>10<sup>th</sup></b>	<b>4</b>	<b>Drugs for anemia</b>	<b>Drugs for anemia</b>	<b>Theoretical+ Practical</b>	<b>General questions, discussion, and daily exam</b>
<b>11<sup>th</sup></b>	<b>4</b>	<b>Anticoagulants and Antiplatelet Agents</b>	<b>Anticoagulants and Antiplatelet Agents</b>	<b>Theoretical+ Practical</b>	<b>General questions, discussion, and daily exam</b>
<b>12<sup>th</sup></b>	<b>4</b>	<b>Skeletal muscle relaxants</b>	<b>Skeletal muscle relaxants</b>	<b>Theoretical+ Practical</b>	<b>General questions, discussion, and daily exam</b>
<b>13<sup>th</sup></b>	<b>4</b>	<b>Local anesthetics</b>	<b>Local anesthetics</b>	<b>Theoretical+ Practical</b>	<b>General questions, discussion, and daily exam</b>
<b>14<sup>th</sup></b>	<b>4</b>	<b>General anesthetics</b>	<b>General anesthetics</b>	<b>Theoretical+ Practical</b>	<b>General questions, discussion, and daily exam</b>
<b>15<sup>th</sup></b>	<b>4</b>	<b>General anesthetics</b>	<b>General anesthetics</b>	<b>Theoretical+ Practical</b>	<b>General questions, discussion, and daily</b>

					<b>exam</b>
Course Evaluation					
Making an adjustment to the study plan so that the curriculum is intended for female students in the Anesthesiology Department and linking general concepts in medications to the department's specialization.					
Learning and teaching resources					
A-Required prescribed books		Pharmacology; Lippincott Latest edition			
1-Main references (sources)		Pharmacology; Katzung Latest Edition			
2-Recommended books and references (scientific journals, reports, etc.)		Sources related to new medicines from the Internet or other modern books			
B - Electronic references, Internet sites...		<u>Google Scholar, PubMed</u>			

### Course description form

<b>1. Course Name</b>
Medical Terminology
<b>2. Semester /year</b>
<b>3. Data this description prepared</b>
2024/9/1
<b>4-Available attendance forms</b>

Lectures					
5. Number of study hours (total) / Number of units (total)					
2 hours					
6-Name of course leader (if more than one name is provided)					
Dr. Nadia Nayyef Hussein					
Course objectives					
The student should be able to distinguish the prefixes, suffixes, roots, and word endings of terms				Course objectives	
Medical: The student will be familiar with medical terminology for each system of the human body					
Teaching and learning strategies					
Transferable general and qualifying skills (other skills related to employability and personal development)				Strategy	
-Presenting lectures with drawings and pictures related to the subject .1					
Using external sources					
5. Course structure					
The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	8	Introduction–structural analysis- Basic rules of medical word  Building  Major suffixes- suffixes	Fundamental – Fundamental Analysis – Instructions for the medical	Using the screen  Scientific references	Daily and monthly exams



		denoting a state or condition	word building  Main suffixes- Suffixes that indicate a state or condition		
2 <sup>nd</sup>	8	Major suffixes-suffixes denoting medical actions  Prefixes- prefixes of No.& measures	Main suffixes - suffixes that indicate medical procedures  Prefixes - Prefixes of numbers and scales	Using the screen  Scientific references	Daily and monthly exams
3 <sup>rd</sup>	8	Prefixes- prefixes of color  Prefixes- prefixes of direction & position	Demonstrates clues related to color, direction, and position.	Using the screen  Scientific references	Daily and monthly exams
4 <sup>th</sup>	8	Prefixes- prefixes of size, time & place  Prefixes- prefixes of negation	Explains the prefixes related to size, place, and negation	Using the screen  Scientific references	Daily and monthly exams

5 <sup>th</sup>	8	Prefixes- prefixes of type Roots	Explains gender-related prefixes and an explanation of the roots of medical words	Using the screen Scientific references	Daily and monthly exams
6 <sup>th</sup>	8	Word terminals Conditions	Word endings and different medical conditions	Using the screen Scientific references	Daily and monthly exams
7 <sup>th</sup>	8	The body as a whole Skin & its appendages	An explanation of the body's systems as a whole, along with the skin system and its accessories	Using the screen Scientific references	Daily and monthly exams
8 <sup>th</sup>	8	Gastrointestinal Tract Respiratory system	An explanation of the digestive system, its appendages, the respiratory system, and the most important medical terms related to it	Using the screen Scientific references	Daily and monthly exams

9 <sup>th</sup>	8	Cardiovascular System Blood & lymphatic system	Illustration of the cardiovascular system and the lymphatic system	Using the screen Scientific references	Daily and monthly exams
10 <sup>th</sup>	8	Musculoskeletal system Urogenital system	The most important medical terms related to the musculoskeletal system  And the genitourinary system	Using the screen Scientific references	Daily and monthly exams
11 <sup>th</sup>	8	system Endocrine	The endocrine system and its most important medical terms	Using the screen Scientific references	Daily and monthly exams
12 <sup>th</sup>	8	system Nervous.	The nervous system and its most important medical terms	Using the screen Scientific references	Daily and monthly exams
th	8	senses Special	Sense organs	Using the	Daily and

13			and its most important medical terms	screen Scientific references	monthly exams
<sup>th</sup> 14	8	Oncology	Oncology and its common medical terminology	Using the screen Scientific references	Daily and monthly exams
<sup>th</sup> 15	8	Speciality related termes	The most important terms related to the specialty	Using the screen Scientific references	Daily and monthly exams

#### Course Evaluation

Use different sources such as Medical Terminology Book

SEVENTH EDITION

AN ILLUSTRATED GUIDE It will widely benefit female students of Portuguese

#### Learning and teaching resources

A-Required prescribed books	Short Course of Medical terminology
1-Main references (sources)	
2-Recommended books and references (scientific journals, reports,...)	

B - Electronic references, Internet sites...	
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1. Course Name	
2. Semester /year	
3. Data this description prepared	
2024/9/1	
4-Available attendance forms	
Lectures	
5. Number of study hours (total) / Number of units (total)	
2 hours	
6-Name of course leader (if more than one name is provided)	
Course objectives	
	Course objectives
Teaching and learning strategies	

					Strategy
5. Course structure					
The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam
2 <sup>nd</sup>	2	Transport across cell membrane, extracellular and intracellular fluid	Transport across cell membrane, extracellular and intracellular fluid	Theoretical lecture	Daily exam
3 <sup>rd</sup>	2	Muscular system :types and characteristics	Muscular system :types and characteristics	Theoretical lectures	Daily exam
4 <sup>th</sup>	2	Mechanism of muscle contraction, fatigue and muscle pain	Mechanism of muscle contraction, fatigue and muscle pain	Theoretical lectures	Daily exam
5 <sup>th</sup>	2	Nerve cells, shape , type , structure , impulse , signal	Nerve cells, shape , type , structure ,	theoretical lecture	Daily exam

			impulse , signal		
6 <sup>th</sup>	2	Blood, function of blood, serum, plasm	Blood, function of blood, serum, plasm	theoretical lecture	Daily exam
8 <sup>th</sup>	2	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Theoretical lecture	Daily exam
9 <sup>th</sup>	2	platelet and WBC	platelet and WBC	Theoretical Lecture	Daily exam
10 <sup>th</sup>	2	Blood clotting mechanism	clotting Blood	Theoretical Lecture	Daily exam
11 <sup>th</sup>	2	Cardiovascular system , heart valve cycle , HR conductive	Cardiovascular system , heart valve cycle , HR conductive	Theoretical Lecture	Daily exam
12 <sup>th</sup>	2	Heart sound and murmurs, ECG	Heart sound and murmurs, ECG	Theoretical Lecture	Daily exam
13 <sup>th</sup>	2	Blood Pressure	Blood Pressure	Theoretical Lecture	Daily exam
14 <sup>th</sup>	2	Respiratory system	Respiratory system	Theoretical	Daily exam





2024/9/1					
4-Available attendance forms					
Lectures					
5. Number of study hours (total) / Number of units (total)					
2 hours					
6-Name of course leader (if more than one name is provided)					
Course objectives					
					Course objectives
Teaching and learning strategies					
					Strategy
5. Course structure					
The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam
2 <sup>nd</sup>	2	Transport across cell membrane,	Transport across cell	Theoretical	Daily exam

		extracellular and intracellular fluid	membrane, extracellular and intracellular fluid	lecture	
3 <sup>rd</sup>	2	Muscular system :types and characteristics	Muscular system :types and characteristics	Theoretical lectures	Daily exam
4 <sup>th</sup>	2	Mechanism of muscle contraction, fatigue and muscle pain	Mechanism of muscle contraction, fatigue and muscle pain	Theoretical lectures	Daily exam
5 <sup>th</sup>	2	Nerve cells, shape , type , structure , impulse , signal	Nerve cells, shape , type , structure , impulse , signal	theoretical lecture	Daily exam
6 <sup>th</sup>	2	Blood, function of blood, serum, plasm	Blood, function of blood, serum, plasm	theoretical lecture	Daily exam
8 <sup>th</sup>	2	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Theoretical lecture	Daily exam
9 <sup>th</sup>	2	platelet and WBC	platelet and WBC	Theoretical Lecture	Daily exam

10 <sup>th</sup>	2	Blood clotting mechanism	clotting Blood	Theoretical Lecture	Daily exam
11 <sup>th</sup>	2	Cardiovascular system , heart valve cycle , HR conductive	Cardiovascular system , heart valve cycle , HR conductive	Theoretical Lecture	Daily exam
12 <sup>th</sup>	2	Heart sound and murmurs, ECG	Heart sound and murmurs, ECG	Theoretical Lecture	Daily exam
13 <sup>th</sup>	2	Blood Pressure	Blood Pressure	Theoretical Lecture	Daily exam
14 <sup>th</sup>	2	Respiratory system	Respiratory system	Theoretical Lecture	Daily exam
15 <sup>th</sup>	2	Oxygen transport exchange and	Oxygen transport and exchange	Theoretical Lecture	Daily exam
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam

#### Course Evaluation

#### Learning and teaching resources

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1. Course Name	
2. Semester /year	
3. Data this description prepared	
2024/9/1	
4–Available attendance forms	
Lectures	
5. Number of study hours (total) / Number of units (total)	
2 hours	
6-Name of course leader (if more than one name is provided)	
Course objectives	
	Course objectives

Teaching and learning strategies	
	Strategy

#### 5. Course structure

The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam
2 <sup>nd</sup>	2	Transport across cell membrane, extracellular and intracellular fluid	Transport across cell membrane, extracellular and intracellular fluid	Theoretical lecture	Daily exam
3 <sup>rd</sup>	2	Muscular system :types and characteristics	Muscular system :types and characteristics	Theoretical lectures	Daily exam
4 <sup>th</sup>	2	Mechanism of muscle contraction, fatigue and muscle pain	Mechanism of muscle contraction, fatigue and muscle pain	Theoretical lectures	Daily exam
5 <sup>th</sup>	2	Nerve cells, shape , type , structure ,	Nerve cells, shape , type ,	theoretical lecture	Daily exam

		impulse , signal	structure , impulse , signal		
6 <sup>th</sup>	2	Blood, function of blood, serum, plasm	Blood, function of blood, serum, plasm	theoretical lecture	Daily exam
8 <sup>th</sup>	2	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Theoretical lecture	Daily exam
9 <sup>th</sup>	2	platelet and WBC	platelet and WBC	Theoretical Lecture	Daily exam
10 <sup>th</sup>	2	Blood clotting mechanism	clotting Blood	Theoretical Lecture	Daily exam
11 <sup>th</sup>	2	Cardiovascular system , heart valve cycle , HR conductive	Cardiovascular system , heart valve cycle , HR conductive	Theoretical Lecture	Daily exam
12 <sup>th</sup>	2	Heart sound and murmurs, ECG	Heart sound and murmurs, ECG	Theoretical Lecture	Daily exam
13 <sup>th</sup>	2	Blood Pressure	Blood Pressure	Theoretical Lecture	Daily exam

14th	2	Respiratory system	Respiratory system	Theoretical Lecture	Daily exam
15 <sup>th</sup>	2	Oxygen transport exchange and	Oxygen transport and exchange	Theoretical Lecture	Daily exam
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam

#### Course Evaluation

#### Learning and teaching resources


#### 1. Course Name


#### 2. Semester /year

3. Data this description prepared					
2024/9/1					
4-Available attendance forms					
Lectures					
5. Number of study hours (total) / Number of units (total)					
2 hours					
6-Name of course leader (if more than one name is provided)					
Course objectives					
					Course objectives
Teaching and learning strategies					
					Strategy
5. Course structure					
The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and	Definition of physiology, cell physiology ,cell components	Theoretical lectures	Daily exam



		functions	and functions		
2 <sup>nd</sup>	2	Transport across cell membrane, extracellular and intracellular fluid	Transport across cell membrane, extracellular and intracellular fluid	Theoretical lecture	Daily exam
3 <sup>rd</sup>	2	Muscular system :types and characteristics	Muscular system :types and characteristics	Theoretical lectures	Daily exam
4 <sup>th</sup>	2	Mechanism of muscle contraction, fatigue and muscle pain	Mechanism of muscle contraction, fatigue and muscle pain	Theoretical lectures	Daily exam
5 <sup>th</sup>	2	Nerve cells, shape , type , structure , impulse , signal	Nerve cells, shape , type , structure , impulse , signal	theoretical lecture	Daily exam
6 <sup>th</sup>	2	Blood, function of blood, serum, plasm	Blood, function of blood, serum, plasm	theoretical lecture	Daily exam
8 <sup>th</sup>	2	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Theoretical lecture	Daily exam

9 <sup>th</sup>	2	platelet and WBC	platelet and WBC	Theoretical Lecture	Daily exam
10 <sup>th</sup>	2	Blood clotting mechanism	clotting Blood	Theoretical Lecture	Daily exam
11 <sup>th</sup>	2	Cardiovascular system , heart valve cycle , HR conductive	Cardiovascular system , heart valve cycle , HR conductive	Theoretical Lecture	Daily exam
12 <sup>th</sup>	2	Heart sound and murmurs, ECG	Heart sound and murmurs, ECG	Theoretical Lecture	Daily exam
13 <sup>th</sup>	2	Blood Pressure	Blood Pressure	Theoretical Lecture	Daily exam
14 <sup>th</sup>	2	Respiratory system	Respiratory system	Theoretical Lecture	Daily exam
15 <sup>th</sup>	2	Oxygen transport exchange and	Oxygen transport and exchange	Theoretical Lecture	Daily exam
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam
Course Evaluation					

Learning and teaching resources	

<b>1. Course Name</b>
<b>2. Semester /year</b>
<b>3. Data this description prepared</b>
<b>2024/9/1</b>
<b>4-Available attendance forms</b>
<b>Lectures</b>
<b>5. Number of study hours (total) / Number of units (total)</b>
<b>2 hours</b>
6-Name of course leader (if more than one name is provided)
Course objectives

	Course objectives
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### Teaching and learning strategies

	Strategy
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### 5. Course structure

The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam
2 <sup>nd</sup>	2	Transport across cell membrane, extracellular and intracellular fluid	Transport across cell membrane, extracellular and intracellular fluid	Theoretical lecture	Daily exam
3 <sup>rd</sup>	2	Muscular system :types and characteristics	Muscular system :types and characteristics	Theoretical lectures	Daily exam
4 <sup>th</sup>	2	Mechanism of muscle contraction,	Mechanism of muscle	Theoretical lectures	Daily exam

		fatigue and muscle pain	contraction, fatigue and muscle pain		
5 <sup>th</sup>	2	Nerve cells, shape , type , structure , impulse , signal	Nerve cells, shape , type , structure , impulse , signal	theoretical lecture	Daily exam
6 <sup>th</sup>	2	Blood, function of blood, serum, plasm	Blood, function of blood, serum, plasm	theoretical lecture	Daily exam
8 <sup>th</sup>	2	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Theoretical lecture	Daily exam
9 <sup>th</sup>	2	platelet and WBC	platelet and WBC	Theoretical Lecture	Daily exam
10 <sup>th</sup>	2	Blood clotting mechanism	clotting Blood	Theoretical Lecture	Daily exam
11 <sup>th</sup>	2	Cardiovascular system , heart valve cycle , HR conductive	Cardiovascular system , heart valve cycle , HR conductive	Theoretical Lecture	Daily exam
12 <sup>th</sup>	2	Heart sound and murmurs, ECG	Heart sound and murmurs, ECG	Theoretical Lecture	Daily exam

13 <sup>th</sup>	2	Blood Pressure	Blood Pressure	Theoretical Lecture	Daily exam
14 <sup>th</sup>	2	Respiratory system	Respiratory system	Theoretical Lecture	Daily exam
15 <sup>th</sup>	2	Oxygen transport exchange and	Oxygen transport and exchange	Theoretical Lecture	Daily exam
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam

#### Course Evaluation

#### Learning and teaching resources


#### 1. Course Name


2. Semester /year					
3. Data this description prepared					
2024/9/1					
4-Available attendance forms					
Lectures					
5. Number of study hours (total) / Number of units (total)					
2 hours					
6-Name of course leader (if more than one name is provided)					
Course objectives					
					Course objectives
Teaching and learning strategies					
					Strategy
5. Course structure					
The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	2	Definition of physiology, cell	Definition of physiology, cell	Theoretical lectures	Daily exam

		physiology ,cell components and functions	physiology ,cell components and functions		
2 <sup>nd</sup>	2	Transport across cell membrane, extracellular and intracellular fluid	Transport across cell membrane, extracellular and intracellular fluid	Theoretical lecture	Daily exam
3 <sup>rd</sup>	2	Muscular system :types and characteristics	Muscular system :types and characteristics	Theoretical lectures	Daily exam
4 <sup>th</sup>	2	Mechanism of muscle contraction, fatigue and muscle pain	Mechanism of muscle contraction, fatigue and muscle pain	Theoretical lectures	Daily exam
5 <sup>th</sup>	2	Nerve cells, shape , type , structure , impulse , signal	Nerve cells, shape , type , structure , impulse , signal	theoretical lecture	Daily exam
6 <sup>th</sup>	2	Blood, function of blood, serum, plasm	Blood, function of blood, serum, plasm	theoretical lecture	Daily exam
8 <sup>th</sup>	2	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte	Theoretical lecture	Daily exam



		production	production		
9 <sup>th</sup>	2	platelet and WBC	platelet and WBC	Theoretical Lecture	Daily exam
10 <sup>th</sup>	2	Blood clotting mechanism	clotting Blood	Theoretical Lecture	Daily exam
11 <sup>th</sup>	2	Cardiovascular system , heart valve cycle , HR conductive	Cardiovascular system , heart valve cycle , HR conductive	Theoretical Lecture	Daily exam
12 <sup>th</sup>	2	Heart sound and murmurs, ECG	Heart sound and murmurs, ECG	Theoretical Lecture	Daily exam
13 <sup>th</sup>	2	Blood Pressure	Blood Pressure	Theoretical Lecture	Daily exam
14 <sup>th</sup>	2	Respiratory system	Respiratory system	Theoretical Lecture	Daily exam
15 <sup>th</sup>	2	Oxygen transport exchange and	Oxygen transport and exchange	Theoretical Lecture	Daily exam
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam

Course Evaluation	
Learning and teaching resources	

<b>1. Course Name</b>
<b>2. Semester /year</b>
<b>3. Data this description prepared</b>
2024/9/1
<b>4-Available attendance forms</b>
<b>Lectures</b>
<b>5. Number of study hours (total) / Number of units (total)</b>
2 hours
6-Name of course leader (if more than one name is provided)

Course objectives					
					Course objectives
Teaching and learning strategies					
					Strategy
5. Course structure					
The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam
2 <sup>nd</sup>	2	Transport across cell membrane, extracellular and intracellular fluid	Transport across cell membrane, extracellular and intracellular fluid	Theoretical lecture	Daily exam
3 <sup>rd</sup>	2	Muscular system :types and characteristics	Muscular system :types and characteristics	Theoretical lectures	Daily exam

4 <sup>th</sup>	2	Mechanism of muscle contraction, fatigue and muscle pain	Mechanism of muscle contraction, fatigue and muscle pain	Theoretical lectures	Daily exam
5 <sup>th</sup>	2	Nerve cells, shape , type , structure , impulse , signal	Nerve cells, shape , type , structure , impulse , signal	theoretical lecture	Daily exam
6 <sup>th</sup>	2	Blood, function of blood, serum, plasm	Blood, function of blood, serum, plasm	theoretical lecture	Daily exam
8 <sup>th</sup>	2	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Theoretical lecture	Daily exam
9 <sup>th</sup>	2	platelet and WBC	platelet and WBC	Theoretical Lecture	Daily exam
10 <sup>th</sup>	2	Blood clotting mechanism	clotting Blood	Theoretical Lecture	Daily exam
11 <sup>th</sup>	2	Cardiovascular system , heart valve cycle , HR conductive	Cardiovascular system , heart valve cycle , HR conductive	Theoretical Lecture	Daily exam
12 <sup>th</sup>	2	Heart sound and	Heart sound and murmurs,	Theoretical	Daily exam

		murmurs, ECG	ECG	Lecture	
13 <sup>th</sup>	2	Blood Pressure	Blood Pressure	Theoretical Lecture	Daily exam
14 <sup>th</sup>	2	Respiratory system	Respiratory system	Theoretical Lecture	Daily exam
15 <sup>th</sup>	2	Oxygen transport exchange and	Oxygen transport and exchange	Theoretical Lecture	Daily exam
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam

### Course Evaluation

### Learning and teaching resources


### 1. Course Name

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2. Semester /year					
3. Data this description prepared					
2024/9/1					
4-Available attendance forms					
Lectures					
5. Number of study hours (total) / Number of units (total)					
2 hours					
6-Name of course leader (if more than one name is provided)					
Course objectives					
					Course objectives
Teaching and learning strategies					
					Strategy
5. Course structure					
The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method

1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam
2 <sup>nd</sup>	2	Transport across cell membrane, extracellular and intracellular fluid	Transport across cell membrane, extracellular and intracellular fluid	Theoretical lecture	Daily exam
3 <sup>rd</sup>	2	Muscular system :types and characteristics	Muscular system :types and characteristics	Theoretical lectures	Daily exam
4 <sup>th</sup>	2	Mechanism of muscle contraction, fatigue and muscle pain	Mechanism of muscle contraction, fatigue and muscle pain	Theoretical lectures	Daily exam
5 <sup>th</sup>	2	Nerve cells, shape , type , structure , impulse , signal	Nerve cells, shape , type , structure , impulse , signal	theoretical lecture	Daily exam
6 <sup>th</sup>	2	Blood, function of blood, serum, plasm	Blood, function of blood, serum, plasm	theoretical lecture	Daily exam
8 <sup>th</sup>	2	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in	Erythrocyte , Hemoglobin and , Anemia. Role of	Theoretical lecture	Daily exam

		erythrocyte production	erythropoietin in erythrocyte production		
9 <sup>th</sup>	2	platelet and WBC	platelet and WBC	Theoretical Lecture	Daily exam
10 <sup>th</sup>	2	Blood clotting mechanism	clotting Blood	Theoretical Lecture	Daily exam
11 <sup>th</sup>	2	Cardiovascular system , heart valve cycle , HR conductive	Cardiovascular system , heart valve cycle , HR conductive	Theoretical Lecture	Daily exam
12 <sup>th</sup>	2	Heart sound and murmurs, ECG	Heart sound and murmurs, ECG	Theoretical Lecture	Daily exam
13 <sup>th</sup>	2	Blood Pressure	Blood Pressure	Theoretical Lecture	Daily exam
14 <sup>th</sup>	2	Respiratory system	Respiratory system	Theoretical Lecture	Daily exam
15 <sup>th</sup>	2	Oxygen transport exchange and	Oxygen transport and exchange	Theoretical Lecture	Daily exam
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and	Definition of physiology, cell physiology ,cell components	Theoretical lectures	Daily exam



		functions	and functions		
Course Evaluation					
Learning and teaching resources					

<b>1. Course Name</b>
<b>2. Semester /year</b>
<b>3. Data this description prepared</b>
2024/9/1
<b>4-Available attendance forms</b>
<b>Lectures</b>
<b>5. Number of study hours (total) / Number of units (total)</b>
2 hours
6-Name of course leader (if more than one name is provided)

Course objectives					
					Course objectives
Teaching and learning strategies					
					Strategy
5. Course structure					
The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam
2 <sup>nd</sup>	2	Transport across cell membrane, extracellular and intracellular fluid	Transport across cell membrane, extracellular and intracellular fluid	Theoretical lecture	Daily exam
3 <sup>rd</sup>	2	Muscular system :types and characteristics	Muscular system :types and characteristics	Theoretical lectures	Daily exam

4 <sup>th</sup>	2	Mechanism of muscle contraction, fatigue and muscle pain	Mechanism of muscle contraction, fatigue and muscle pain	Theoretical lectures	Daily exam
5 <sup>th</sup>	2	Nerve cells, shape , type , structure , impulse , signal	Nerve cells, shape , type , structure , impulse , signal	theoretical lecture	Daily exam
6 <sup>th</sup>	2	Blood, function of blood, serum, plasm	Blood, function of blood, serum, plasm	theoretical lecture	Daily exam
8 <sup>th</sup>	2	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in erythrocyte production	Theoretical lecture	Daily exam
9 <sup>th</sup>	2	platelet and WBC	platelet and WBC	Theoretical Lecture	Daily exam
10 <sup>th</sup>	2	Blood clotting mechanism	clotting Blood	Theoretical Lecture	Daily exam
11 <sup>th</sup>	2	Cardiovascular system , heart valve cycle , HR conductive	Cardiovascular system , heart valve cycle , HR conductive	Theoretical Lecture	Daily exam
12 <sup>th</sup>	2	Heart sound and	Heart sound and murmurs,	Theoretical	Daily exam

		murmurs, ECG	ECG	Lecture	
13 <sup>th</sup>	2	Blood Pressure	Blood Pressure	Theoretical Lecture	Daily exam
14 <sup>th</sup>	2	Respiratory system	Respiratory system	Theoretical Lecture	Daily exam
15 <sup>th</sup>	2	Oxygen transport exchange and	Oxygen transport and exchange	Theoretical Lecture	Daily exam
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam

#### Course Evaluation

#### Learning and teaching resources


#### 1. Course Name

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2. Semester /year					
3. Data this description prepared					
2024/9/1					
4-Available attendance forms					
Lectures					
5. Number of study hours (total) / Number of units (total)					
2 hours					
6-Name of course leader (if more than one name is provided)					
Course objectives					
					Course objectives
Teaching and learning strategies					
					Strategy
5. Course structure					
The Week	Hours	Required learning outcomes	Name of the unit/topic	Teaching method	Evaluation method

1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and functions	Definition of physiology, cell physiology ,cell components and functions	Theoretical lectures	Daily exam
2 <sup>nd</sup>	2	Transport across cell membrane, extracellular and intracellular fluid	Transport across cell membrane, extracellular and intracellular fluid	Theoretical lecture	Daily exam
3 <sup>rd</sup>	2	Muscular system :types and characteristics	Muscular system :types and characteristics	Theoretical lectures	Daily exam
4 <sup>th</sup>	2	Mechanism of muscle contraction, fatigue and muscle pain	Mechanism of muscle contraction, fatigue and muscle pain	Theoretical lectures	Daily exam
5 <sup>th</sup>	2	Nerve cells, shape , type , structure , impulse , signal	Nerve cells, shape , type , structure , impulse , signal	theoretical lecture	Daily exam
6 <sup>th</sup>	2	Blood, function of blood, serum, plasm	Blood, function of blood, serum, plasm	theoretical lecture	Daily exam
8 <sup>th</sup>	2	Erythrocyte , Hemoglobin and , Anemia. Role of erythropoietin in	Erythrocyte , Hemoglobin and , Anemia. Role of	Theoretical lecture	Daily exam

		erythrocyte production	erythropoietin in erythrocyte production		
9 <sup>th</sup>	2	platelet and WBC	platelet and WBC	Theoretical Lecture	Daily exam
10 <sup>th</sup>	2	Blood clotting mechanism	clotting Blood	Theoretical Lecture	Daily exam
11 <sup>th</sup>	2	Cardiovascular system , heart valve cycle , HR conductive	Cardiovascular system , heart valve cycle , HR conductive	Theoretical Lecture	Daily exam
12 <sup>th</sup>	2	Heart sound and murmurs, ECG	Heart sound and murmurs, ECG	Theoretical Lecture	Daily exam
13 <sup>th</sup>	2	Blood Pressure	Blood Pressure	Theoretical Lecture	Daily exam
14 <sup>th</sup>	2	Respiratory system	Respiratory system	Theoretical Lecture	Daily exam
15 <sup>th</sup>	2	Oxygen transport exchange and	Oxygen transport and exchange	Theoretical Lecture	Daily exam
1 <sup>st</sup>	2	Definition of physiology, cell physiology ,cell components and	Definition of physiology, cell physiology ,cell components	Theoretical lectures	Daily exam

		functions	and functions		
Course Evaluation					
Learning and teaching resources					