

**Ministry of Higher Education and Scientific Research  
Scientific Supervision and Scientific Evaluation Apparatus  
Directorate of Quality Assurance and Academic Accreditation  
Accreditation Department**



# **Academic Program and Course Description Guide**

2025

## **Introduction:**

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

## **Concepts and terminology:**

**Academic Program Description:** The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

**Course Description:** Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

**Program Vision:** An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

**Program Mission:** Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

**Program Objectives:** They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

**Curriculum Structure:** All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

**Learning Outcomes:** A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

**Teaching and learning strategies:** They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

**Scientific department; anesthesia technique**

Academic or professional program name: bachelor's degree in anesthesia

Final certificate name: bachelor's degree in anesthesia technology

Academic system: courses

Description preparation date: 13-2-2025

File completion date: 13-2-2025

Signature: 

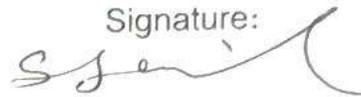
Head of department name:

Prof. Noaman chelebi

Date: 20/4/2025



Signature:



scientific associate name:

Dr. Sahil K. AL-jamil

date: 20.4.2025

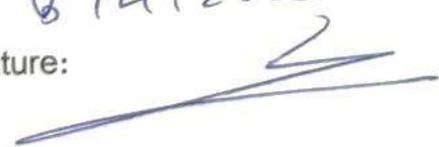
The file is checked by:

Dr. Rashe Amer 

Department of quality assurance and university performance:

Director of quality assurance and university performance:

Date: 5/4/2025

Signature: 

Approval of the dean

### **١. Program Vision**

Preparing distinguished medical technical cadres in various fields of health and medical technology, to have a position locally, regionally and internationally in order to provide advanced, high-quality health services to the community.

Training students of the Anesthesia Department on preparing, operating and following up on the organization of anesthesia devices, monitoring and treatment devices in the operating and recovery theater and various intensive care units.

The medical team participates in clinical interventions for emergency and life-threatening cases in its various workplaces (operating theater, recovery, and intensive care units).

### **٢. Program Mission**

Providing an educational and technical research environment that stimulates education and creativity that contributes to preparing highly qualified graduates, achieving effective local and international scientific twinning, and strengthening partnerships with sectors of society and international institutions in relevant fields.

### **٣. Program Objectives**

Preparing qualified and productive cadres who possess thinking, creativity and learning skills that meet the needs of society and the requirements of the labor market, and contribute to the development and growth of various fields.

Paying attention to scientific research and creating a supportive environment for high-quality applied research at the local, regional and international levels that contribute to addressing the problems faced by labor market sectors.

Developing curricula and study plans to keep pace with rapid developments in the fields of technology and science to meet current and future labor market requirements

Achieving quality standards in educational, research and organizational activities and developing the university's teaching, technical and administrative staff to ensure excellence in performance.

Establishing a culture of continuing education for various sectors of society to meet its requirements, as well as providing services and technical consultations to solve its problems and develop its programs.

Communicating with scientific institutions inside and outside Iraq and exchanging experiences and information according to common goals

#### ξ. Program Accreditation

A program based on the Iraqi Ministry of Higher Education and Scientific Research

#### ο. Other external influences

There is no

#### Ϛ. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements				
College Requirements				
Department Requirements				
Summer Training				
Other				

\* This can include notes whether the course is basic or optional.

**Department of Anesthesia Techniques**

**Vocabulary – first course – first stage**

Number of Units	Number of Hours			Lecture name
	total	practical	theoretical	
4	6	4	2	Medical Physics1
4	6	4	2	Anatomy1
4	6	4	2	General Physiology1
4	6	4	2	Clinical Chemistry1
4	6	4	2	Biology
2	3	2	1	Computer principles 1
2	2	-	2	English Language
1	1	-	1	Human Rights and Democracy1
٢٥	36	22	١٤	Total

**Department of Anesthesia Techniques**

**Vocabulary for the Second Semester First Stage**

Number of Units	Number of Hours			Lecture name
	total	Practical	Theoretical	
4	6	4	2	Medical Physics 2
4	6	4	2	Anatomy2
4	6	4	2	General Physiology2

4	6	4	2	Biochemistry2
4	6	4	2	Microbiology 2
2	3	2	1	Computer Principles (2)
1	1	-	1	Arabic Language 2
١	١	-	١	Crimes of the defunct Baath Party
24	36	21	15	Total

**Department of Anesthesia Techniques  
Vocabulary for the first course second stage**

Number of Units	Number of Hours			Lecture name	t
	total	practical	theoretical		
٤	٦	٤	٢	Anesthesia techniques (1)	١
٤	٦	٤	٢	Anesthesia device techniques (1)	٢
٤	٦	٤	٢	Applied Physiology (1)	٣
٣	٥	٤	١	Foundations of Surgery (1)	٤
٤	٦	٤	٢	Foundations of Internal Medicine (1)	٥
٣	٤	٢	٢	Pharmaceuticals (1)	٦
٢	٢	-	٢	Medical Terminology (1)	٧
٢٤	٣٥	٢٢	١٣	<b>Total</b>	

**Department of Anesthesia Techniques  
Vocabulary second course second stage**

Number of Units	Number of Hours			Lecture name	t
	total	practical	theoretical		
٤	٦	٤	٢	Anesthesia techniques (2)	١
٤	٦	٤	٢	Anesthesia device techniques (2)	٢
٤	٦	٤	٢	Applied Physiology (2)	٣

٣	٥	٤	١	Foundations of Surgery (2)	٤
٤	٦	٤	٢	Internal Medicine (2)	٥
٣	٤	٢	٢	Pharmaceuticals (2)	٦
٢	٣	٢	١	Statistics (2)	٧
٢٤	٣٦	٢٤	١٢	<b>Total</b>	

### Department of Anesthesia Techniques /vocabulary first course third Stage

Number of Units	Number of Hours			Lecture name	t
	total	practical	theoretical		
4	٧	٥	٢	Anesthesia techniques (1)	١
4	٦	٤	٢	Intensive Care Techniques (1)	٢
4	٦	٤	2	Anesthesia device techniques (1)	٣
4	٦	٤	٢	Internal Medicine (1)	٤
2	4	3	1	Surgery (1)	٥
2	٣	٢	١	Computer Software (1)	٦
20	32	٢٢	10	Total	

### Department of Anesthesia Techniques /vocabulary second course third Stage

Number of Units	Number of Hours			Lecture name	t
	total	practical	theoretical		
4	٧	٥	٣	Anesthesia techniques (2)	١
4	٦	٤	٢	Intensive Care Techniques (1)	٢
4	٦	4	2	Anesthesia device techniques (2)	٣
4	٦	٤	٢	Internal Medicine (2)	٤
2	4	3	1	Surgery (2)	٥
2	٣	٢	١	Computer Software (2)	٦
20	32	22	10	Total	

**Department of Anesthesia Techniques / vocabulary first course \Fourth Stage**

Number of Units	Number of Hours			Lecture name	t
	total	Practical	theoretical		
4	7	0	2	Advance Anesthesia (1)	1
4	6	4	2	Advance anesthesia device techniques (1)	2
4	6	4	2	Intensive Care Technologies (1)	3
3	0	3	2	advance Medicine (1)	4
2	2	-	2	Professional ethics	0
3	0	3	2	Pain medicine	6
20	31	19	12	Total	

**Department of Anesthesia Techniques / vocabulary second course \Fourth Stage**

Number of Units	Number of Hours			Lecture name	t
	total	Practical	theoretical		
4	7	0	2	Advance Anesthesia (2)	1
4	6	4	2	Advance anesthesia device techniques (2)	2
4	6	4	2	Intensive Care Technologies (2)	3
3	0	3	2	advance Medicine (2)	4
3	0	3	2	Emergency medicine	0
4	6	6	-	Graduation Project	6
22	30	20	10	Total	

## V. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical

### General Requirements First Stage

LANGUAGE	NUMBER OF HOURS		NUMBER OF UNITS	CODE/ NO	COURSE NAME	
	practical	theoretical				
English	2	١	٢	KU MT an111	Computer Principles	١
Arabic	-	١	١	KU MT an112	Human Rights and Democracy	٢
Arabic	-	١	١	KU MT an113	Arabic language	٣
English	-	٢	٢	KU MT an114	English language	٤
	2	٥	٦	Total		

### Auxiliary requirements for the first stage

LANGUAGE	NUMBER OF HOURS		NUMBER OF UNITS	CODE/ NO	COURSE NAME	
	practical	theoretical				
English	٤	2	٤	KU MT an115	Clinical Chemistry	١
English	٤	٢	٤	KU MT an116	General Biology	٢
English	٤	٢	٤	KU MT an116	General physiology	٣
English	٤	٢	٤	KU MT an116	Anatomy	٤
English	٤	٢	٤	KU MT an116	Medical Physics	٥
	٢٠	١٠	٢٠	Total		

### Specialization Requirements Second Stage

LANGUAGE	NUMBER OF HOURS		NUMBER OF UNITS	CODE/ NO	COURSE NAME	
	practical	theoretical				
English	ε	2	ε	<b>KU MT an211</b>	Foundations of anesthesia	1
English	ε	2	ε	<b>KU MT an212</b>	Anesthesia Devices Techniques	2
	λ	ε	λ	Total		

### Auxiliary requirements for the second stage

LANGUAGE	NUMBER OF HOURS		NUMBER OF UNITS	CODE/ NO	COURSE NAME	
	practical	theoretical				
English	ε	2	ε	<b>KU MT an213</b>	Applied physiology	1
English	ε	1	3	<b>KU MT an214</b>	Basics of surgery	2
English	ε	2	ε	<b>KU MT an215</b>	Foundations of Internal Medicine	3
English	2	2	3	<b>KU MT an216</b>	Pharmacology	ε
English	—	2	2	<b>KU MT an211</b>	Medical terminology	ο
English	2	1	2	<b>KU MT an211</b>	Statistics	6
	16	10	18	Total		

### Specialization requirements for the third stage

LANGUAGE	NUMBER OF HOURS		NUMBER OF UNITS	CODE/ NO	COURSE NAME	
	practical	theoretical				
English	5	3	11	<b>KU MT an221</b>	Foundations of anesthesia	1
English	5	2	9	<b>KU MT an222</b>	Anesthesia Devices Techniques	2
English	5	2	9	<b>KU MT an223</b>	Intensive Care Techniques	3
	15	7	29	Total		

**Auxiliary requirements for the third stage**

LANGUAGE	NUMBER OF HOURS		NUMBER OF UNITS	CODE/ NO	COURSE NAME	
	practical	theoretical				
English	3	۲	7	<b>KU MT an224</b>	Internal Medicine	۱
English	3	۱	5	<b>KU MT an225</b>	Surgery	۲
	6	3	12	Total		

**General requirements for the third stage**

LANGUAGE	NUMBER OF HOURS		NUMBER OF UNITS	CODE/ NO	COURSE NAME	
	practical	theoretical				
English	2	1	4	<b>KU MT an226</b>	Computer Applications	۱
				Total		

**Specialization requirements for the fourth stage**

LANGUAGE	NUMBER OF HOURS		NUMBER OF UNITS	CODE/ NO	COURSE NAME	
	practical	theoretical				
English	۴	2	8	<b>KU MT an 401</b>	Foundations of anesthesia	۱
English	2	4	8	<b>KU MT an 402</b>	Anesthesia Devices Techniques	۲
English	۴	۲	8	<b>KU MT an 403</b>	Intensive Care Techniques	۳
	10	8	24	Total		

### Auxiliary requirements for the fourth stage

LANGUAGE	NUMBER OF HOURS		NUMBER OF UNITS	CODE/ NO	COURSE NAME	
	practical	theoretical				
English	4	1	6	<b>KU MT an 404</b>	Surgical Internal Medicine	١
English	4	١	6	<b>KU MT an 405</b>	Nursing	٢
English			4	<b>KU MT an 406</b>	Graduation Project	٣
	8	2	20	Total		

#### ٨. Expected learning outcomes of the program

Knowledge	
<p>١- The mission of the Department of Anesthesia Technologies at Al-Kitab University College is to direct and develop all resources to achieve excellence in education, research and patient care, contributing to improving human health by preventing diseases throughout Iraq and providing services and medical care in the field of anesthesia in accordance with traditions, ethical and professional values.</p>	<p>Learning Outcomes Statement 1</p>

<p>The high</p> <p>٢- The mission of the Anesthesia Techniques Department includes the basic elements in improving patient care in Iraq to include education, scientific research, and continuing education to serve patients in the field of anesthesia by creating a stimulating environment for the acquisition and dissemination of knowledge in the field of anesthesia techniques, and the optimal use of technology.</p> <p>٣- 3- The student must be able to speak and write in an effective, scientific manner in both Arabic and English.</p>	
<b>Skills</b>	
<p>– Graduating specialized cadres to work in anesthesia and intensive care technology magazines in operating</p>	<p>Learning Outcomes Statement 2</p>

<p>theaters as well as in intensive care units and pulmonary resuscitation units by setting up and preparing anesthesia machines and following up on their operating system and care for them, in addition to following up on the patient's condition during anesthesia and under the supervision of the doctor.</p> <p>2 – Preparing cadres with modern education and training in the field of anesthesia to form an important tributary to the profession of anesthesia and intensive care in hospitals.</p> <p>3 – The anesthesia profession is considered one of the important and sensitive medical specialties, and it is important to provide a broad base of practitioners of this profession in the medical field in general, so that they can be of assistance in working in hospitals and under the supervision of doctors who specialize in anesthesia.</p>	
Learning Outcomes 3	Learning Outcomes Statement 3
<b>Ethics</b>	
The graduate must have scientific and practical responsibility	Learning Outcomes Statement 4
Able to acquire individual skills	Learning Outcomes Statement 5

## 9. Teaching and Learning Strategies

There are many teaching and learning methods used in the Department of Anesthesia Techniques Engineering, where learning is carried out through theoretical lectures, which are represented by a presentation using (Power Point), group discussions, seminars, and searching for topics and issues via the Internet.

## 10. Evaluation methods

The department has relied on clear, high-quality assessment methods and tools in order to maintain the good quality of graduates and a high academic reputation. The reputation of graduates is very important because the graduate represents the final product of the teaching process. The most important methods used for evaluation in the department are:

A – Objective tests: The aim of the test is to measure the student's ability to recognize and comprehend scientific facts. This is done using the following:–

- True and false questions.
- Multiple choice questions.
- Interview questions (blank questions).
- Completion questions.

B – Other tests: They are as follows:

- Seminars.
- Scientific lectures, oral dialogue, theoretical semester and final exams, in addition to the practical exam.
- writing reports.
- Field visits .

## 11. Faculty

<b>Faculty Members</b>						
Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer

<b>Professional Development</b>
<b>Mentoring new faculty members</b>
The teaching staff is directed according to the aforementioned regulations and cadres with high potential are prepared
<b>Professional development of faculty members</b>
This is done by giving weekly seminars and courses to explain modern teaching methods and the procession of global higher education

<b>١٢. Acceptance Criterion</b>
The Anesthesia Techniques Department is subject to the work mechanism of the Central Admissions Department at the Ministry of Higher Education and Scientific Research, where graduates of preparatory school – scientific branch are nominated for admission to the department.

<b>١٣. The most important sources of information about the program</b>
The most important sources of information about the Anesthesia Techniques Department program are the following: – The curriculum approved by the Ministry of Higher Education and Scientific Research

<b>١٤. Program Development Plan</b>
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The focus in the Anesthesia Techniques Department is on continuous improvement and overcoming all difficulties and obstacles that hinder the educational program by developing human resources and developing the personality of employees. The following procedures explain the steps implemented or in the process of implementation in this area:

1. Continuous improvement and development of faculty members through seminars and workshops
2. Increasing national extracurricular activities, such as holding conferences, scientific seminars, and sports activities.
3. Encouraging faculty members to obtain the highest academic and administrative ranks.



	√	√	√	√	√	√	√	√	assistant	<b>Anatomy2</b>			
	√	√	√	√	√	√	√	√	assistant	<b>General Physiology2</b>			
	√	√	√	√	√	√	√	√	assistant	<b>Biochemistry2</b>			
	√	√	√	√	√	√	√	√	assistant	<b>Microbiology 2</b>			
	√	√	√	√	√	√	√	√	public	<b>Computer Applications 2</b>			
									public	<b>Arabic Language 2</b>			
									public	<b>Crimes of the defunct Baath Party</b>			
<b>Evaluation methods</b>									<b>fundament al optional</b>	<b>Course Name</b>	<b>Course Code</b>	<b>Year/Level</b>	
<b>Other test</b>				<b>Objective tests</b>									
	B4	B3	B2	B1	A4	A3	A2	A1					
√	√	√	√	√	√	√	√	√	<b>Basic</b>	<b>Anesthesiology (1)</b>		رسم الأول	<b>Second stage</b>
√	√	√	√	√	√	√	√	√	<b>Basic</b>	<b>Anesthesia devices techniques</b>			
√	√	√	√	√	√	√	√	√	assistant	<b>Applied Physiology (1)</b>			
√	√	√	√	√	√	√	√	√	assistant	<b>Surgery (1)</b>			
√	√	√	√	√	√	√	√	√	assistant	<b>Internal Medicine (1)</b>			

√	√	√	√	√	√	√	√	√	assistant	Pharmaceuticals (1)			
	√	√	√	√	√	√	√	√	assistant	Medical Terminology (1)			
√	√	√	√	√	√	√	√	√	Basic	Anesthesiology (2)		Second course	Second stage
√	√	√	√	√	√	√	√	√	Basic	Anesthesia Techniques (2)			
√	√	√	√	√	√	√	√	√	assistant	Applied Physiology (2)			
√	√	√	√	√	√	√	√	√	assistant	Surgery (†)			
√	√	√	√	√	√	√	√	√	assistant	Internal Medicine (2)			
√	√	√	√	√	√	√	√	√	assistant	Pharmaceuticals (2)			
		√	√	√	√	√	√	√	assistant	Statistics (2)			

Evaluation methods									fundamental	Course Name	Course Code	Year/Level	
Other test				Objective tests									
	B4	B3	B2	B1	A4	A3	A2	A1					
	√	√	√	√	√	√	√	√	Basic	Anesthesiology (2)		Annual System	Third stage
	√	√	√	√	√	√	√	√	Basic	Intensive Care Techniques (1)			
	√	√	√	√	√	√	√	√	Basic	Anesthesia Techniques (2)			

	√	√	√	√	√	√	√	√	assistant	<b>Internal Medicine (2)</b>		<b>Annual System</b>	
	√	√	√	√	√	√	√	√	assistant	<b>Surgery (2)</b>			
	√	√	√	√	√	√	√	√	<b>public</b>	<b>Computer Applications (2)</b>			
	√	√	√	√	√	√	√	√	Basic	<b>Anesthesiology (3)</b>			
	√	√	√	√	√	√	√	√	Basic	<b>Anesthesia Devices Techniques (3)</b>			
	√	√	√	√	√	√	√	√	Basic	<b>Intensive Care Technologies (2)</b>			
	√	√	√	√	√	√	√	√	assistant	<b>Surgical Internal Medicine</b>			
	√	√	√	√	√	√	√	√	assistant	<b>Nursing</b>			
	√	√	√	√	√	√	√	√	assistant	<b>Graduation Project</b>			

## Course Description Form

1. Course Name: physics medical 1	
2. Course Code:	
3. Semester / Year: 2024-2023	
4. Description Preparation Date:	
5. Available Attendance Forms: physical attendance	
6. Number of Credit Hours (Total) / Number of Units (Total)	
7. Course administrator's name (mention all, if more than one name)	
Name:	
Email:	
8. Course Objectives	
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>• .....</li> <li>At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that the subject addresses and link them to what the student needs of the medical phenomena that he observes during his practical lab. Such as blood flow, a device that reads heart or brain rate, the temperature of human body, and pressures.....</li> <li>• .....</li> </ul>
9. Teaching and Learning Strategies	
<b>Strategy</b>	Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve problems • Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate

in the lesson. • Participatory assessment: This approach involves involving the student in assessment processes and mutual exchanging observations and comments, which enhances the understanding of the material and helps them improve their performance.

1.1. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The student Should be able To have enough Background About the subject	medical physics	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
2	2	The student Should be able To have enough Background About the subject	energy, work and power of the body	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
3	2	The student Should be able To have enough Background About the subject	Heat and cold medicine.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
4	2	The student Should be able To have enough Background About the subject	specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of through the human body.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
5	2	The student Should be able	Boyle's law, diffusion and mixing of gases.	Show the Theoretical	By attendance And

		To have enough Background About the subject		Lecture	Discussion The outcome Of lecture
6	2	The student Should be able To have enough Background About the subject	Physics of lung and breathi	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture
7	2	The student Should be able To have enough Background About the subject	poration of liquids, vap pressure and boiling po humidity, laminar trubulant flow in liquid	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture

#### ۱۱. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

#### ۱۲. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

### Course Description Form

۱۳.	Course Name: physics medical 1
۱۴.	Course Code:
۱۵.	Semester / Year: 2024-2023
۱۶.	Description Preparation Date:
۱۷.	Available Attendance Forms: physical attendance

١٨. Number of Credit Hours (Total) / Number of Units (Total)					
١٩. Course administrator's name (mention all, if more than one name)					
Name:					
Email:					
٢٠. Course Objectives					
Course Objectives		<ul style="list-style-type: none"> <li>.....</li> <li>At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that the subject addresses and link them to what the student needs of the medical phenomena that he observes during his practical lab. Such as blood flow, a device that reads heart or brain rate, the temperature of human body, and pressures.....</li> <li>.....</li> </ul>			
٢١. Teaching and Learning Strategies					
Strategy		<p>Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve problems</p> <ul style="list-style-type: none"> <li>Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate in the lesson.</li> <li>Participatory assessment: This approach involves involving the student in assessment processes and mutual exchanging observations and comments, which enhances their understanding of the material and helps them improve their performance.</li> </ul>			
٢٢. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The student Should be able	medical physics	Show the Theoretical	By attendance And

		To have enough Background About the subject		Lecture	Discussion The outcome Of lecture
2	2	The student Should be able To have enough Background About the subject	energy, work a power of the body	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture
3	2	The student Should be able To have enough Background About the subject	Heat and cold medicine.	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture
4	2	The student Should be able To have enough Background About the subject	specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of through the human body.	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture
5	2	The student Should be able To have enough Background About the subject	Boyle's law, diffusion and mixing of gases.	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture
6	2	The student Should be able To have enough Background About the subject	Physics of lung and breathing	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture
7	2	The student Should be able To have enough Background	Evaporation of liquids, vapour pressure and boiling point, humidity, laminar and turbulent flow in liquid	Show the Theoretical Lecture	By attendanc And Discussion The outcome

	About the subject		Of lecture
<b>٢٣. Course Evaluation</b>			
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc			
<b>٢٤. Learning and Teaching Resources</b>			
Required textbooks (curricular books, if any)			
Main references (sources)			
Recommended books and references (scientific journals, reports...)			
Electronic References, Websites			

### Course Description Form

<b>٢٥. Course Name:</b>	physics medical 1
<b>٢٦. Course Code:</b>	
<b>٢٧. Semester / Year:</b>	2024-2023
<b>٢٨. Description Preparation Date:</b>	
<b>٢٩. Available Attendance Forms:</b>	physical attendance
<b>٣٠. Number of Credit Hours (Total) / Number of Units (Total)</b>	
<b>٣١. Course administrator's name (mention all, if more than one name)</b>	
Name:	
Email:	
<b>٣٢. Course Objectives</b>	
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>.....</li> <li><b>At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that</b></li> </ul>

subject addresses and link them to what student needs of the medical phenomena that he observes during his practical work. Such as blood flow, a device that reads heart or brain rate, the temperature of human body, and pressures.....

- .....

٣٣. Teaching and Learning Strategies

<b>Strategy</b>	<p>Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve problems</p> <ul style="list-style-type: none"> <li>• Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate in the lesson.</li> <li>• Participatory assessment: This approach involves involving the student in assessment processes and mutual exchanging observations and comments, which enhances their understanding of the material and helps them improve their performance.</li> </ul>
-----------------	---

٣٤. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The student Should be able To have enough Background About the subject	medical physics	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
2	2	The student Should be able To have enough Background About the subject	energy, work and power of the body	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture

3	2	The student Should be able To have enough Background About the subject	Heat and cold medicine.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
4	2	The student Should be able To have enough Background About the subject	Specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of through the human body.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
5	2	The student Should be able To have enough Background About the subject	Boyle's law, diffusion and osmosis of gases.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
6	2	The student Should be able To have enough Background About the subject	Physics of lung and breathing	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
7	2	The student Should be able To have enough Background About the subject	Evaporation of liquids, vapour pressure and boiling point, humidity, laminar and turbulent flow in liquid	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture

### 35. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

### 36. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

## Course Description Form

٣٧.	Course Name: physics medical 1
٣٨.	Course Code:
٣٩.	Semester / Year: 2024-2023
٤٠.	Description Preparation Date:
٤١.	Available Attendance Forms: physical attendance
٤٢.	Number of Credit Hours (Total) / Number of Units (Total)
٤٣.	Course administrator's name (mention all, if more than one name)
Name:	
Email:	
٤٤.	Course Objectives
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>• .....</li> <li><b>At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that the subject addresses and link them to what the student needs of the medical phenomena that he observes during his practical work. Such as blood flow, a device that reads heart or brain rate, the temperature of the human body, and pressures.....</b></li> <li>• .....</li> </ul>
٤٥.	Teaching and Learning Strategies
<b>Strategy</b>	Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve

problems

- Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate in the lesson.
- Participatory assessment: This approach involves involving the student in assessment processes and mutual exchanging observations and comments, which enhances their understanding of the material and helps them improve their performance.

#### ٤٦. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The student Should be able To have enough Background About the subject	medical physics	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
2	2	The student Should be able To have enough Background About the subject	energy, work and power of the body	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
3	2	The student Should be able To have enough Background About the subject	Heat and cold medicine.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
4	2	The student Should be able To have enough Background About the subject	specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of through the human body.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture

5	2	The student Should be able To have enough Background About the subject	le's law, diffusion and mi of gases.	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture
6	2	The student Should be able To have enough Background About the subject	Physics of lung and breathi	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture
7	2	The student Should be able To have enough Background About the subject	poration of liquids, vap pressure and boiling po humidity, laminar trubulant flow in liquid	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture

#### εγ. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

#### εδ. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

## Course Description Form

εθ. Course Name: physics medical 1

٥٠.	Course Code:
٥١.	Semester / Year: 2024-2023
٥٢.	Description Preparation Date:
٥٣.	Available Attendance Forms: physical attendance
٥٤.	Number of Credit Hours (Total) / Number of Units (Total)
٥٥.	Course administrator's name (mention all, if more than one name)
Name:	
Email:	
٥٦.	Course Objectives
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>.....</li> <li>At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that the subject addresses and link them to what the student needs of the medical phenomena that he observes during his practical lab. Such as blood flow, a device that reads heart or brain rate, the temperature of human body, and pressures.....</li> <li>.....</li> </ul>
٥٧.	Teaching and Learning Strategies
<b>Strategy</b>	<p>Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve problems</p> <ul style="list-style-type: none"> <li>Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate in the lesson.</li> <li>Participatory assessment: This approach involves involving the student in assessment processes and mutual exchanging observations and comments, which enhances the</li> </ul>

understanding of the material and helps them improve their performance.

٥٨. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The student Should be able To have enough Background About the subject	medical physics	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
2	2	The student Should be able To have enough Background About the subject	energy, work and power of the body	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
3	2	The student Should be able To have enough Background About the subject	Heat and cold medicine.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
4	2	The student Should be able To have enough Background About the subject	specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of through the human body.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
5	2	The student Should be able To have enough Background About the subject	Boyle's law, diffusion and mixtures of gases.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture

	6	2	The student Should be able To have enough Background About the subject	Physics of lung and breathi	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture
	7	2	The student Should be able To have enough Background About the subject	poration of liquids, vap pressure and boiling po humidity, laminar trubulant flow in liquid	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture

#### 59. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

#### 60. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

### Course Description Form

61.	Course Name: physics medical 1
62.	Course Code:
63.	Semester / Year: 2024-2023
64.	Description Preparation Date:
65.	Available Attendance Forms: physical attendance
66.	Number of Credit Hours (Total) / Number of Units (Total)

٦٧. Course administrator's name (mention all, if more than one name)

Name:  
Email:

٦٨. Course Objectives

**Course Objectives**

- .....
- At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that the subject addresses and link them to what the student needs of the medical phenomena that he observes during his practical work. Such as blood flow, a device that reads heart or brain rate, the temperature of the human body, and pressures.....
- .....

٦٩. Teaching and Learning Strategies

**Strategy**

Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve problems

- Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate in the lesson.
- Participatory assessment: This approach involves involving the student in assessment processes and mutual exchanging observations and comments, which enhances their understanding of the material and helps them improve their performance.

٧٠. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
	2	The student Should be able To have enough Background	medical physics	Show the Theoretical Lecture	By attendance And Discussion The outcome

		About the subject			Of lecture
2	2	The student Should be able To have enough Background About the subject	energy, work and power of the body	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
3	2	The student Should be able To have enough Background About the subject	Heat and cold medicine.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
4	2	The student Should be able To have enough Background About the subject	Specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of through the human body.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
5	2	The student Should be able To have enough Background About the subject	Boyle's law, diffusion and mixture of gases.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
6	2	The student Should be able To have enough Background About the subject	Physics of lung and breathing	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
7	2	The student Should be able To have enough Background About the subject	Evaporation of liquids, vapour pressure and boiling point, humidity, laminar and turbulent flow in liquid	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture

٧١. Course Evaluation	
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc	
٧٢. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

### Course Description Form

٧٣.	Course Name: physics medical 1
٧٤.	Course Code:
٧٥.	Semester / Year: 2024-2023
٧٦.	Description Preparation Date:
٧٧.	Available Attendance Forms: physical attendance
٧٨.	Number of Credit Hours (Total) / Number of Units (Total)
٧٩.	Course administrator's name (mention all, if more than one name)
	Name:
	Email:
٨٠.	Course Objectives
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>.....</li> </ul> <p><b>At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that</b></p>

subject addresses and link them to what student needs of the medical phenomena that he observes during his practical work. Such as blood flow, a device that reads heart or brain rate, the temperature of human body, and pressures.....

- .....

٨١. Teaching and Learning Strategies

<b>Strategy</b>	<p>Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve problems</p> <ul style="list-style-type: none"> <li>• Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate in the lesson.</li> <li>• Participatory assessment: This approach involves involving the student in assessment processes and mutual exchanging observations and comments, which enhances their understanding of the material and helps them improve their performance.</li> </ul>
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٨٢. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The student Should be able To have enough Background About the subject	medical physics	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
2	2	The student Should be able To have enough Background About the subject	energy, work and power of the body	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture

3	2	The student Should be able To have enough Background About the subject	Heat and cold medicine.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
4	2	The student Should be able To have enough Background About the subject	Specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of through the human body.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
5	2	The student Should be able To have enough Background About the subject	Boyle's law, diffusion and osmosis of gases.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
6	2	The student Should be able To have enough Background About the subject	Physics of lung and breathing	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
7	2	The student Should be able To have enough Background About the subject	Evaporation of liquids, vapour pressure and boiling point, humidity, laminar and turbulent flow in liquid	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture

### ٨٣. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

### ٨٤. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

## Course Description Form

٨٥.	Course Name: physics medical 1
٨٦.	Course Code:
٨٧.	Semester / Year: 2024-2023
٨٨.	Description Preparation Date:
٨٩.	Available Attendance Forms: physical attendance
٩٠.	Number of Credit Hours (Total) / Number of Units (Total)
٩١.	Course administrator's name (mention all, if more than one name)
Name:	
Email:	
٩٢.	Course Objectives
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>• .....</li> <li><b>At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that subject addresses and link them to what student needs of the medical phenomena that he observes during his practical lab. Such as blood flow, a device that reads heart or brain rate, the temperature of human body, and pressures.....</b></li> <li>• .....</li> </ul>
٩٣.	Teaching and Learning Strategies
<b>Strategy</b>	Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve

problems

- Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate in the lesson.
- Participatory assessment: This approach involves involving the student in assessment processes and mutual exchanging observations and comments, which enhances their understanding of the material and helps them improve their performance.

#### 94. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The student Should be able To have enough Background About the subject	medical physics	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
2	2	The student Should be able To have enough Background About the subject	energy, work and power of the body	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
3	2	The student Should be able To have enough Background About the subject	Heat and cold medicine.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
4	2	The student Should be able To have enough Background About the subject	specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of through the human body.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture

5	2	The student Should be able To have enough Background About the subject	le's law, diffusion and mi of gases.	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture
6	2	The student Should be able To have enough Background About the subject	Physics of lung and breathi	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture
7	2	The student Should be able To have enough Background About the subject	poration of liquids, vap pressure and boiling po humidity, laminar trubulant flow in liquid	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture

#### 90. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

#### 96. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

### Course Description Form

97.	Course Name: physics medical 1
98.	Course Code:

99. Semester / Year: 2024-2023	
100. Description Preparation Date:	
101. Available Attendance Forms: physical attendance	
102. Number of Credit Hours (Total) / Number of Units (Total)	
103. Course administrator's name (mention all, if more than one name)	
Name:	
Email:	
104. Course Objectives	
Course Objectives	<ul style="list-style-type: none"> <li>.....</li> <li>At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that the subject addresses and link them to what the student needs of the medical phenomena that he observes during his practical lab. Such as blood flow, a device that reads heart or brain rate, the temperature of human body, and pressures.....</li> <li>.....</li> </ul>
105. Teaching and Learning Strategies	
Strategy	<p>Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve problems</p> <ul style="list-style-type: none"> <li>Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate in the lesson.</li> <li>Participatory assessment: This approach involves involving the student in assessment processes and mutual exchanging observations and comments, which enhances their understanding of the material and helps them improve their performance.</li> </ul>

1.6. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The student Should be able To have enough Background About the subject	medical physics	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
2	2	The student Should be able To have enough Background About the subject	energy, work and power of the body	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
3	2	The student Should be able To have enough Background About the subject	Heat and cold medicine.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
4	2	The student Should be able To have enough Background About the subject	specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of through the human body.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
5	2	The student Should be able To have enough Background About the subject	Boyle's law, diffusion and mixture of gases.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
6	2	The student Should be able	Physics of lung and breathing	Show the Theoretical	By attendance And

		To have enough Background About the subject		Lecture	Discussion The outcome Of lecture
	2	The student Should be able To have enough Background About the subject	poration of liquids, vap pressure and boiling po humidity, laminar trubulant flow in liquid	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture

#### ١٠٧. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

#### ١٠٨. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

### Course Description Form

١٠٩.	Course Name: physics medical 1
١١٠.	Course Code:
١١١.	Semester / Year: 2024-2023
١١٢.	Description Preparation Date:
١١٣.	Available Attendance Forms: physical attendance
١١٤.	Number of Credit Hours (Total) / Number of Units (Total)
١١٥.	Course administrator's name (mention all, if more than one

name)

Name:

Email:

### ۱۱۶. Course Objectives

#### Course Objectives

- .....

At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that the subject addresses and link them to what the student needs of the medical phenomena that he observes during his practical work. Such as blood flow, a device that reads heart or brain rate, the temperature of the human body, and pressures.....

- .....

### ۱۱۷. Teaching and Learning Strategies

#### Strategy

Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve problems

- Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate in the lesson.
- Participatory assessment: This approach involves involving the student in assessment processes and mutual exchanging observations and comments, which enhances their understanding of the material and helps them improve their performance.

### ۱۱۸. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The student Should be able To have enough Background About the subject	medical physics	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture

2	2	The student Should be able To have enough Background About the subject	energy, work and power of the body	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
3	2	The student Should be able To have enough Background About the subject	Heat and cold medicine.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
4	2	The student Should be able To have enough Background About the subject	Specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of through the human body.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
5	2	The student Should be able To have enough Background About the subject	Boyle's law, diffusion and mixing of gases.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
6	2	The student Should be able To have enough Background About the subject	Physics of lung and breathing	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
7	2	The student Should be able To have enough Background About the subject	Evaporation of liquids, vapour pressure and boiling point humidity, laminar turbulent flow in liquid	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture

#### 119. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

١٢٠. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

### Course Description Form

١٢١.	Course Name: physics medical 1
١٢٢.	Course Code:
١٢٣.	Semester / Year: 2024-2023
١٢٤.	Description Preparation Date:
١٢٥.	Available Attendance Forms: physical attendance
١٢٦.	Number of Credit Hours (Total) / Number of Units (Total)
١٢٧.	Course administrator's name (mention all, if more than one name) Name: Email:
١٢٨.	Course Objectives
Course Objectives	<ul style="list-style-type: none"> <li>.....</li> </ul> <p>At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that the subject addresses and link them to what the student needs of the medical phenomena that he observes during his practical lab. Such as blood flow, a device that reads</p>

heart or brain rate, the temperature of human body, and pressures.....

- .....

١٢٩. Teaching and Learning Strategies

<b>Strategy</b>	<p>Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve problems</p> <ul style="list-style-type: none"> <li>• Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate in the lesson.</li> <li>• Participatory assessment: This approach involves involving the student in assessment processes and mutually exchanging observations and comments, which enhances their understanding of the material and helps them improve their performance.</li> </ul>
-----------------	---

١٣٠. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The student Should be able To have enough Background About the subject	medical physics	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
2	2	The student Should be able To have enough Background About the subject	energy, work and power of the body	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
3	2	The student Should be able To have enough Background	Heat and cold medicine.	Show the Theoretical Lecture	By attendance And Discussion The outcome

		About the subject			Of lecture
4	2	The student Should be able To have enough Background About the subject	Specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of through the human body.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
5	2	The student Should be able To have enough Background About the subject	Boyle's law, diffusion and mixing of gases.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
6	2	The student Should be able To have enough Background About the subject	Physics of lung and breathing	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
7	2	The student Should be able To have enough Background About the subject	Evaporation of liquids, vapour pressure and boiling point, humidity, laminar and turbulent flow in liquid	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture

### ۱۳۱. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

### ۱۳۲. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

## Course Description Form

۱۳۳. Course Name: physics medical 1

١٣٤.	Course Code:
١٣٥.	Semester / Year: 2024-2023
١٣٦.	Description Preparation Date:
١٣٧.	Available Attendance Forms: physical attendance
١٣٨.	Number of Credit Hours (Total) / Number of Units (Total)
١٣٩.	Course administrator's name (mention all, if more than one name)
Name:	
Email:	
١٤٠.	Course Objectives
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>• .....</li> </ul> <p><b>At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that the subject addresses and link them to what the student needs of the medical phenomena that he observes during his practical lab. Such as blood flow, a device that reads heart or brain rate, the temperature of the human body, and pressures.....</b></p> <ul style="list-style-type: none"> <li>• .....</li> </ul>
١٤١.	Teaching and Learning Strategies
<b>Strategy</b>	<p>Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve problems</p> <ul style="list-style-type: none"> <li>• Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate in the lesson.</li> <li>• Participatory assessment: This approach involves involving the student in assessment processes and mutual exchanging observations and comments, which enhances the</li> </ul>

understanding of the material and helps them improve their performance.

#### ١٤٢. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The student Should be able To have enough Background About the subject	medical physics	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
2	2	The student Should be able To have enough Background About the subject	energy, work and power of the body	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
3	2	The student Should be able To have enough Background About the subject	Heat and cold medicine.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
4	2	The student Should be able To have enough Background About the subject	specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of through the human body.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
5	2	The student Should be able To have enough Background About the subject	Boyle's law, diffusion and mixtures of gases.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture

	6	2	The student Should be able To have enough Background About the subject	Physics of lung and breathi	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture
	7	2	The student Should be able To have enough Background About the subject	poration of liquids, vap pressure and boiling po humidity, laminar trubulant flow in liquid	Show the Theoretical Lecture	By attendanc And Discussion The outcome Of lecture

### ١٤٣. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

### ١٤٤. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

## Course Description Form

١٤٥.	Course Name: physics medical 1
١٤٦.	Course Code:
١٤٧.	Semester / Year: 2024-2023
١٤٨.	Description Preparation Date:

149. Available Attendance Forms: physical attendance					
150. Number of Credit Hours (Total) / Number of Units (Total)					
151. Course administrator's name (mention all, if more than one name)					
Name:					
Email:					
152. Course Objectives					
<b>Course Objectives</b>		<ul style="list-style-type: none"> <li>.....</li> <li>At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that the subject addresses and link them to what the student needs of the medical phenomena that he observes during his practical lab. Such as blood flow, a device that reads heart or brain rate, the temperature of human body, and pressures.....</li> <li>.....</li> </ul>			
153. Teaching and Learning Strategies					
<b>Strategy</b>		<p>Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve problems</p> <ul style="list-style-type: none"> <li>Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate in the lesson.</li> <li>Participatory assessment: This approach involves involving the student in assessment processes and mutual exchanging observations and comments, which enhances their understanding of the material and helps them improve their performance.</li> </ul>			
154. Course Structure					
<b>Week</b>	<b>Hours</b>	<b>Required Learning</b>	<b>Unit or subject</b>	<b>Learning</b>	<b>Evaluation</b>

		Outcomes	name	method	method
1	2	The student Should be able To have enough Background About the subject	medical physics	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
2	2	The student Should be able To have enough Background About the subject	energy, work and power of the body	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
3	2	The student Should be able To have enough Background About the subject	Heat and cold medicine.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
4	2	The student Should be able To have enough Background About the subject	Specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of through the human body.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
5	2	The student Should be able To have enough Background About the subject	Boyle's law, diffusion and mixing of gases.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
6	2	The student Should be able To have enough Background About the subject	Physics of lung and breathing	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
7	2	The student	Evaporation of liquids, vapour	Show the	By attendance

	Should be able To have enough Background About the subject	pressure and boiling po humidity, laminar trubulant flow in liquid	Theoretical Lecture	And Discussion The outcome Of lecture
١٥٥. Course Evaluation				
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc				
١٥٦. Learning and Teaching Resources				
Required textbooks (curricular books, if any)				
Main references (sources)				
Recommended books and references (scientific journals, reports...)				
Electronic References, Websites				

### Course Description Form

١٥٧.	Course Name: physics medical 1
١٥٨.	Course Code:
١٥٩.	Semester / Year: 2024-2023
١٦٠.	Description Preparation Date:
١٦١.	Available Attendance Forms: physical attendance
١٦٢.	Number of Credit Hours (Total) / Number of Units (Total)
١٦٣.	Course administrator's name (mention all, if more than one name) Name: Email:
١٦٤.	Course Objectives
Course Objectives	• .....

At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that the subject addresses and link them to what the student needs of the medical phenomena that he observes during his practical work. Such as blood flow, a device that reads heart or brain rate, the temperature of the human body, and pressures.....

- .....

١٦٥. Teaching and Learning Strategies

<b>Strategy</b>	<p>Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve problems</p> <ul style="list-style-type: none"> <li>• Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate in the lesson.</li> <li>• Participatory assessment: This approach involves involving the student in assessment processes and mutual exchanging observations and comments, which enhances their understanding of the material and helps them improve their performance.</li> </ul>
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١٦٦. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The student Should be able To have enough Background About the subject	medical physics	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
2	2	The student Should be able	energy, work and power of the body	Show the Theoretical	By attendance And

		To have enough Background About the subject		Lecture	Discussion The outcome Of lecture
3	2	The student Should be able To have enough Background About the subject	Heat and cold medicine.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
4	2	The student Should be able To have enough Background About the subject	Specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of through the human body.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
5	2	The student Should be able To have enough Background About the subject	Boyle's law, diffusion and mixture of gases.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
6	2	The student Should be able To have enough Background About the subject	Physics of lung and breathing	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
7	2	The student Should be able To have enough Background About the subject	Evaporation of liquids, vapour pressure and boiling point, humidity, laminar and turbulent flow in liquid	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture

#### ۱۶۷. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

#### ۱۶۸. Learning and Teaching Resources

Required textbooks (curricular books, if any)

Main references (sources)

Recommended books and references

(scientific journals, reports...)	
Electronic References, Websites	

## Course Description Form

١٦٩.	Course Name: physics medical 1
١٧٠.	Course Code:
١٧١.	Semester / Year: 2024-2023
١٧٢.	Description Preparation Date:
١٧٣.	Available Attendance Forms: physical attendance
١٧٤.	Number of Credit Hours (Total) / Number of Units (Total)
١٧٥.	Course administrator's name (mention all, if more than one name)
	Name:
	Email:
١٧٦.	Course Objectives
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>• .....</li> <li><b>At the end of the academic year, the student will be able to: Identify the physical phenomena of the five chapters that the subject addresses and link them to what the student needs of the medical phenomena that he observes during his practical lab. Such as blood flow, a device that reads heart or brain rate, the temperature of human body, and pressures.....</b></li> <li>• .....</li> </ul>
١٧٧.	Teaching and Learning Strategies

<b>Strategy</b>	<p>Cooperative Learning: This approach encourages teamwork and knowledge sharing among students. Students can collaborate to solve problems</p> <ul style="list-style-type: none"> <li>• Interactive lessons: This strategy involves using interactive methods such as discussions and interactive activities to attract student attention and encourage them to actively participate in the lesson.</li> <li>• Participatory assessment: This approach involves involving the student in assessment processes and mutually exchanging observations and comments, which enhances their understanding of the material and helps them improve their performance.</li> </ul>
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#### ١٧٨. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The student Should be able To have enough Background About the subject	medical physics	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
2	2	The student Should be able To have enough Background About the subject	energy, work and power of the body	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
3	2	The student Should be able To have enough Background About the subject	Heat and cold medicine.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
4	2	The student Should be able To have enough	specific heat, heat capacity, latent heat, thermometer and kinds, heat transfer conduction, convection radiation. Regulation of	Show the Theoretical Lecture	By attendance And Discussion

		Background About the subject	through the human body.		The outcome Of lecture
5	2	The student Should be able To have enough Background About the subject	le's law, diffusion and mix of gases.	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
6	2	The student Should be able To have enough Background About the subject	Physics of lung and breathi	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture
7	2	The student Should be able To have enough Background About the subject	poration of liquids, vap pressure and boiling po humidity, laminar trubulant flow in liquid	Show the Theoretical Lecture	By attendance And Discussion The outcome Of lecture

#### 179. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

#### 180. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	