

**Ministry of Higher Education and Scientific Research
Scientific Supervision and Scientific Evaluation Apparatus
Directorate of Quality Assurance and Academic Accreditation
Sawa Private University
College of Health and Medical Techniques
Department of Anesthesiology**



Academic Program and Course Description Guide

2024

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.

Academic program description form

University name: Sawa private university

Faculty/institute: health and medical technique

Scientific department: Department of anesthesia techniques

Academic or professional program name

Final certificate name

Academic system: yearly

Description preparation date: 10/4/2024

File completion date: 11/4/2024



Signature:

Head of department name

Dr. Dheyaa Yahaia Aziz

Date

11-4-2024

Signature:

Scientific associate name

Date

The file is checked by: Assist.Prof.Dr Nada sami naser

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance

Department:

Date:

11-4-2024

Signature:

A handwritten signature in green ink, appearing to be 'Nada Sami Naser', written over the date '11-4-2024'.

Approval of the Dean

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1. Program Vision

The Department of Anesthesia aspires to obtain global recognition in the fields of scientific research and teaching by achieving academic quality, as well as local recognition in the field of supplying the labor market with highly qualified scientific and technical personnel.

2. Program Mission

Increasing the efficiency of anesthesia sciences in health application effectively, supporting various medical specialties with high-level graduates, contributing to the health renaissance, and developing application methods to obtain the level of health service.

3. Program Objectives

1. Providing students with knowledge and learning of modern principles and methods in anesthesia.
2. .Introducing students to the importance of patient safety through proper application and follow-up.
3. Graduating an elite group of students who have the ability to develop anesthesia and intensive care systems.

4. Program Accreditation

The program has program accreditation from Al-Furat Al-Awsat technical university / College of Health and Medical technologies/ department of Anesthesia and intensive care technologies.

5. Other external influences

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

6. Program Structure				
Program Structure	Number of Course	Credit hours	Percentage	Reviews*
Institution Requirements	9	20	7.3	
College Requirements	7	32	11.6	
Department Requirements	38	223	81.1	
Summer Training	-	-	-	
Other	-	-	-	

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

7. Program Description				
First Year First course				
Course Name	Course Code	Credit Hours		Units
		Theoretical	Practical	
Medical Physics (1)	An1101	2	4	4
Anatomy (1)	An1102	2	4	4
General physiology (1)	An1103	2	4	4
General chemistry	An1104	2	4	4
Biology	An1105	2	4	4
Computer principles 1	An1106	1	2	2
Human Rights & Democracy	An1107	2	-	2
English Language	An1108	3		3
Total		16	22	27

7. Program Description				
First Year Second course				
Course Name	Course Code	Credit Hours		Units
		Theoretical	Practical	
Medical Physics (2)	An1209	2	4	4
Anatomy (2)	An1210	2	4	4
General physiology (2)	An1211	2	4	4
Biochemistry	An1212	2	4	4
microbiology	An1213	2	4	4
Computer principles 2	An1214	1	2	2
Arabic language	An1215	2	-	2
Total		13	22	24

7. Program Description				
Second Year First course				
Course Name	Course Code	Credit Hours		Units
		Theoretical	Practical	
Basics of anesthesia (1)	An2116	2	4	4
Basics of anesthetic equipment (1)	An2117	2	4	4
Applied Physiology (1)	An2118	2	4	4
Basics of Surgery (1)	An2119	1	4	3
Basics of Medicine (1)	An2120	2	4	4
Pharmacology (1)	An2121	2	2	3
Medical terminology	An2122	2	-	2
جرائم حزب البعث	An2123	2		2
Total		15	22	23

7. Program Description				
Second Year second course				
Course Name	Course Code	Credit Hours		Units
		Theoretical	Practical	
Basics of anesthesia (2)	An2224	2	4	4
Basics of anesthetic equipment (2)	An2225	2	4	4
Applied Physiology (2)	An2226	2	4	4
Basics of Surgery (2)	An2227	1	4	3
Basics of Medicine (2)	An2228	2	4	4
Pharmacology (2)	An2229	2	2	3
Statistics	An2230	1	2	2
Total		12	24	24

7. Program Description				
third Year first course				
Course Name	Course Code	Credit Hours		Units
		Theoretical	Practical	
Anesthesia (1)	An3131	2	5	4
Basics of Intensive Care (1)	An3132	2	4	4
Anaesthetic Equipment Technology (1)	An3133	2	4	4
(1) Medicine	An3134	2	4	4
(1) Surgery	An3135	1	3	2
Computer Applications 1	An3136	1	2	2
Total		10	22	20

7. Program Description				
third Year second course				
Course Name	Course Code	Credit Hours		Units
		Theoretical	Practical	
Anesthesia (2)	An3237	2	5	4
Basics of Intensive Care (2)	An3238	2	4	4
Anesthesia Equipment Technology (2)	An3239	2	4	4
Medicine(2)	An3240	2	4	4
Surgery (2)	An3241	1	3	2
Computer Applications 2	An3242	1	2	2
Total		10	24	20

7. Program Description				
fourth Year first course				
Course Name	Course Code	Credit Hours		Units
		Theoretical	Practical	
Anesthesia Advance (1)	An4143	2	5	4
Advanced anaesthetic Equipment Technology (1)	An4144	2	4	4
Intensive Care Technology (1)	An4145	2	4	4
Advance Medicine (1)	An4146	2	4	3
Pain medicine	An4147	1	3	3
Professional ethics	An4148	2	–	2
Total		11	20	20

7. Program Description				
fourth Year second course				
Course Name	Course Code	Credit Hours		Units
		Theoretical	Practical	
Anetehsia Advance (2)	An4249	2	5	4
Advanced anaesthetic Equipment Technology (2)	An4250	2	4	4
Intensive Care Technology (2)	An4251	2	4	4
Advance Medicine (2)	An4252	2	4	3
Emergency Medicine	An4253	1	3	3
Project	An4254		6	4
Total		9	26	22

8. Expected learning outcomes of the program	
Knowledge	
A1- Enabling the student to understand anesthesia. A2- Preparing qualified personnel to work in health institutions. .	
Skills	
B1- That the student acquires anesthesia skills. B2- That the student acquires development skills. B3- The student should be able to link information And experiences.	1. The correct scientific thinking method. 2. How it works 3. Daily, monthly and annual tests.
C1- The method of discussion and dialogue between the student and the professor. C2- Conclusion.	1. Through daily and monthly tests. 2. Discussions. 3. Practical and applied tests.
Ethics	
D1- Benefiting from the information gained. D2- Personal development through reading and Update knowledge.	

D3- Practicing the profession of anesthesia.
D4- Participation in seminars and conferences Specialized workshops.
9. Teaching and Learning Strategies
Theoretical and practical teaching of anesthesia sciences, graduate research, etc.
10. Evaluation methods
1. Theoretical and practical tests .2. Discussions. 3. Final exams.

11. Faculty					
Faculty Members					
Academic Rank	Specialization		Special Requirements/Skills (if applicable)	Number of the teaching staff	
	General	Special		Staff	Lecturer
Dr. Ali Awad Abaes	Biology	Biology		Yes	
Dr. Asaad Mohan Mohammed	Pathology	Immune pathology		Yes	
Dr. Dheyaa Yahaia Aziz	chemistry	Analytical chemistry		Yes	
Dr. Fadhil Abbas Abd	Anesthesia	Anesthesia		Yes	
Lec. Assisst. Adnan Sahib Alwan	surgery	Surgery		Yes	
Lec. Assisst. Ali Metaeb Khalaf	Clinic analysis	Clinic analysis		Yes	
Lec. Assisst. Kadhim Raheem Alwan	Biology	Microbiology		Yes	
Lec. Assisst. Mohammed Hussein Hindi	Physiology	Physiology		Yes	
Lec. Assisst. Rabab Sameer Kadhim	Surgery	Surgery		Yes	
Lec. Assisst. Sabrin Falih Hassan	Biology	Biology		Yes	
Lec. Assisst. Sami Rahim Hassan	Anesthesia Equipment	Anesthesia Equipment		Yes	
Lec. Assisst. Shakir Kadhim Tahir	Medicine	Medicine		Yes	

Course description

Educational institution	Sawa private university
scientific department	Anesthesia
Course Title	General chemistry
Available attendance forms	One course
Semester/year	First/2023-2024
Number of study hours (total)	90
The date this description was prepared	3/4/2024
1. Course objectives	
<ul style="list-style-type: none">❖ <i>Providing students with knowledge of the basic concepts of the chemical principles.</i>❖ <i>Students' knowledge of the equipment needed in analytical laboratories.</i> ❖ <i>Students' ability to conduct patient analyzes and use equipment and chemicals accurately</i>	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	
A- Cognitive objectives A1- Introduction to chemical devices A2- Knowing how to maintain the optional devices and how to use them A3- Students understood how to solve the problem through exposure to it while conducting analyses	

B. The skills objectives of the course.

B1 - Knowledge of laboratory tools, devices and laboratory materials

B2 - How to use each laboratory device or material for a specific analysis.

B3 - Knowing and understanding the normal numbers for tests and communicating the information to the patient

3. Teaching and learning methods

Presentation of lecture in PowerPoint format

Show explanatory videos

Presentation of sources at the end of a lecture

4. Evaluation methods

The exams. Students take exams, experiments, and conduct seminars

5. Graduation goals

Preparing graduates capable of conducting various chemical analyzes for the patient using laboratory equipment

6. Teaching and learning methods

Books, manuals and practical application

7. Transferable general and qualifying skills (other skills related to employability and personal development).

Students' ability to use laboratory equipment, how to maintain it, and how to understand and read results to patients.

8. Course structure

Week	Hour	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
1	6	Scope of biochemistry	Introduction to Biochemistry and cell constituencies	Theoretical + Practical I	Tests

2	6	Physical chemistry	Introduction to physical , gas laws	Theoretical + Practical	Tests
3	6	Radio activity	Introduction Radio activity	Theoretical + Practical	Tests
4	6	Solutions	Expressing to the concentration	Theoretical + Practical	Tests
5	6	pH concept	Introduction to pH, acid base balance	Theoretical + Practical	Tests
6	6	Buffer system	Introduction to buffer system, physiological importance in living systems	Theoretical + Practical	Tests
7	6	Blood	Blood constituents	Theoretical + Practical	Tests
8	6	Water	Electroplate balance-osmotic pressure	Theoretical + Practical	Tests
9	6	Carbohydrate	Classification, main carbohydrate in body	Theoretical + Practical	Tests
10	6	Metabolism	Metabolism of carbohydrate	Theoretical + Practical	Tests

11	6	Glucose	Glucose abnormality, diabetes	Theoretical + Practical	Tests
12	6	lipid	Lipid classification	Theoretical + Practical	Tests
13	6	lipid	Metabolism of lipid	Theoretical + Practical	Tests
14	6	protein	Protein classification	Theoretical + Practical	Tests
15	6	Nucleic acid	Nucleic acid and their expression, DNA Replication	Theoretical + Practical	Tests

9. Reference

Martin crook
Lippincotte
lehniger

Course description

Educational institution	Sawa private university
scientific department	Anesthesia
Course Title	biochemistry
Available attendance forms	One course
Semester/year	Second/2023-2024
Number of study hours (total)	90
The date this description was prepared	3/4/2024
1. Course objectives	
<ul style="list-style-type: none">❖ <i>Providing students with knowledge of the basic concepts of the chemical machine.</i>❖ <i>Students' knowledge of the equipment needed in analytical laboratories.</i>❖ <i>Students' ability to conduct patient analyzes and use equipment and chemicals accurately</i>	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	
A- Cognitive objectives A1- Introduction to chemical devices A2- Knowing how to maintain the optional devices and how to use them A3- Students understood how to solve the problem through exposure to it while conducting analyses	

B. The skills objectives of the course.

B1 - Knowledge of laboratory tools, devices and laboratory materials

B2 - How to use each laboratory device or material for a specific analysis.

B3 - Knowing and understanding the normal numbers for tests and communicating the information to the patient

3. Teaching and learning methods

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5. Graduation goals

Preparing graduates capable of conducting various chemical analyzes for the patient using laboratory equipment

6. Teaching and learning methods

Books, manuals and practical application

7. Transferable general and qualifying skills (other skills related to employability and personal development).

Students' ability to use laboratory equipment, how to maintain it, and how to understand and read results to patients.

8. Course structure

week	Hour	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
1		Proteins	Introducing students to proteins and the biological metabolism of abnormal proteins	Theoretical	Tests

2	4	Enzymes	Its definition, classification, functions and general characteristics	Theoretical	Tests
3	4	Enzymes	Factors affecting enzyme activity	Theoretical	Tests
4	4	Vitamins	Their types and characteristics of their solubility in fats and water.	Theoretical	Tests
5	4	Nutrition	Nutrition and energy	Theoretical	Tests
6	4	Hormones	Its types and classification	Theoretical	Tests
7	4	Liver	Liver function and tests for liver enzymes	Theoretical	Tests
8	4	Liver	Various liver diseases, including cirrhosis and hepatitis	Theoretical	Tests
9	4	Liver	Changes in liver enzymes during liver disease	Theoretical	Tests
10	4	liver disease	change in serum enzyme in liver disease	Theoretical	Tests

11	4	Steroids	Steroids, their manufacture and nitrogen metabolism	Theoretical	Tests
12	4	Kidney functions	Tests of kidney function, renal filtration, and blood flow	Theoretical	Tests
13	4	Urine	Physical and chemical characteristics of changes in urine tests	Theoretical	Tests
14	4	urine	formation and composition of urine	Theoretical	Tests
15	4	Kidney tests	Urea and creatinine	Theoretical	Tests

9. Reference

Martin crook
Lippincotte
lehniger

Course description

Educational institution	Sawa private university
scientific department	Anesthesia
Course Title	Anatomy
Available attendance forms	One course
Semester/year	First /2023-2024
Number of study hours (total)	90
The date this description was prepared	5/4/2024
1. Course objectives	
<ul style="list-style-type: none">❖ <i>Providing students with knowledge of the basic concepts of the anatomical structure of human body .</i>❖ <i>Students' knowledge of the equipment needed in anatomical study .</i>❖ <i>Students' ability to description of structure of body system</i>	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	
A- Cognitive objectives A1- Introduction to anatomical structure A2- Knowing how to maintain the optional devices and how to use them A3- Students understood how to solve the problem through exposure to it while conducting analyses	

B. The skills objectives of the course.

B1 - Knowledge of laboratory tools, devices and laboratory materials

B2 - How to use each laboratory device or material for a understanding anatomical structure of body .

B3 - Knowing and understanding organs of body system

3. Teaching and learning methods

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4. Evaluation methods

The exams. Students take exams, experiments, and conduct seminars

5. Graduation goals

Preparing graduates capable of understanding anatomical structure of body

6. Teaching and learning methods

Books, manuals and practical application

7. Transferable general and qualifying skills (other skills related to employability and personal development).

Students' ability to of understanding anatomical structure of body

8. Course structure

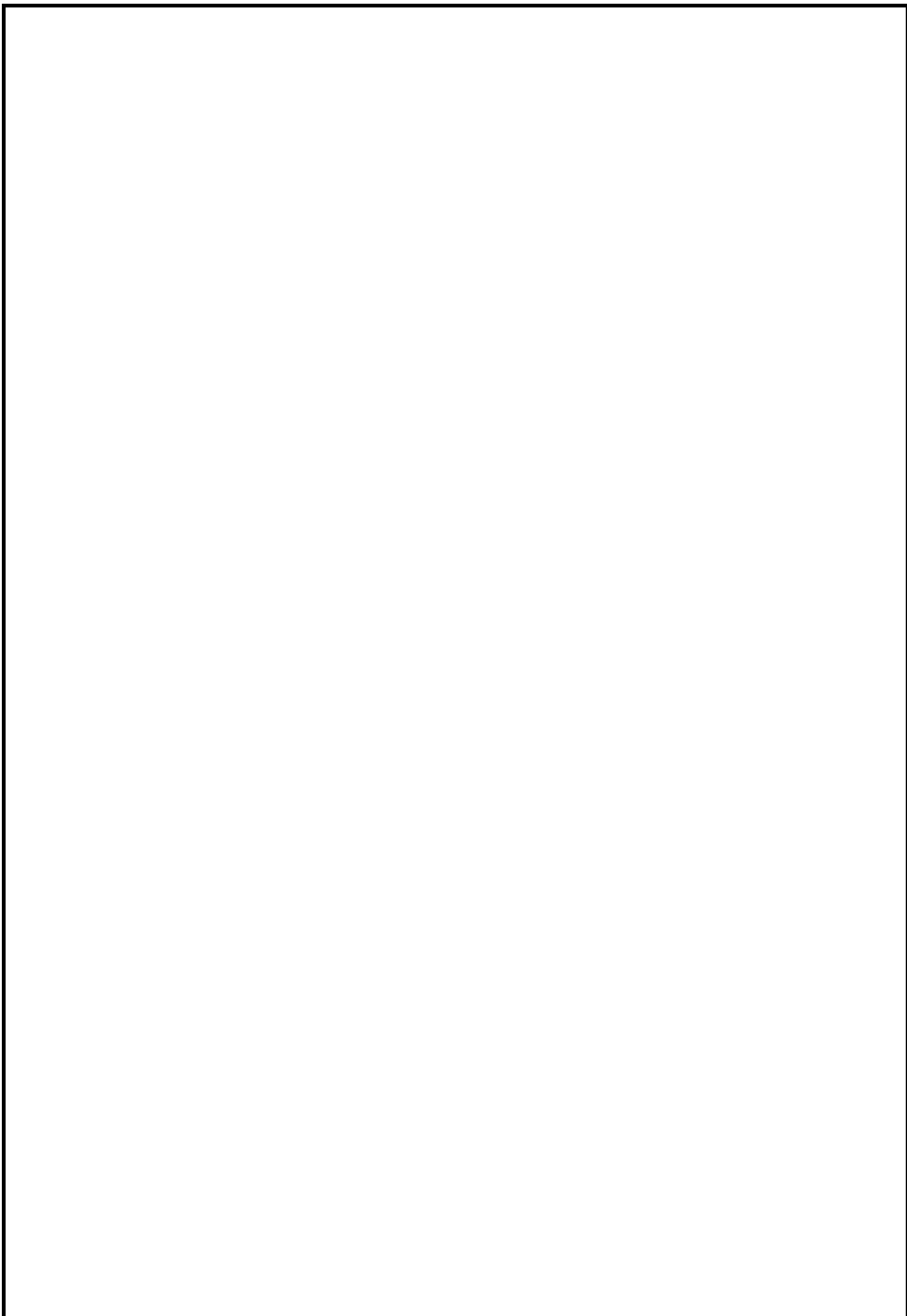
week	Hour	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
1		INTRODUCTION	Introduction about anatomy science	Theoretical	Tests

2	4	BODY CAVITIES	Its definition and classification body cavities	Theoretical	Tests
3	4	Surface Anatomy	classification body surface	Theoretical	Tests
4	4	Tissues	Their types , characteristics and structure of theirs body tissue	Theoretical	Tests
5	4	Skin	Structure of skin body	Theoretical	Tests
6	4	SKELETAL SYSTEM 1	Its structure and classification of skeletal system	Theoretical	Tests
7	4	SKELETAL SYSTEM 2	Its structure and classification of skeletal system	Theoretical	Tests
8	4	Vertebral column	(structure, number)	Theoretical	Tests
9	4	Upper Respiratory system	Its definition structure Upper part of respiratory system	Theoretical	Tests
10	4	Lower Respiratory system	Its definition structure Lower parts of respiratory system	Theoretical	Tests

11	4	Nerves system	Its definition structure Nerves system	Theoretical	Tests
12	4	Lymphatic system	Its definition structure and parts Lymphatic system	Theoretical	Tests
13	4	Structure of blood vessels	Structure and types of blood vessels	Theoretical	Tests
14	4	Heart	Anatomical structure of heart	Theoretical	Tests
15	4	Upper and lower limb	Anatomical structure of Upper and lower limb	Theoretical	Tests

9. Reference

- Human Anatomy
- Atlas Human Anatomy



Course description

Educational institution	Sawa private university
scientific department	Anesthesia
Course Title	Anatomy
Available attendance forms	One course
Semester/year	Second /2023-2024
Number of study hours (total)	90
The date this description was prepared	5/4/2024
1. Course objectives	
<ul style="list-style-type: none">❖ <i>Providing students with knowledge of the basic concepts of the anatomical structure of human body .</i>❖ <i>Students' knowledge of the equipment needed in anatomical study .</i>❖ <i>Students' ability to description of structure of body system</i>	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	
A- Cognitive objectives A1- Introduction to anatomical structure A2- Knowing how to maintain the optional devices and how to use them A3- Students understood how to solve the problem through exposure to it while conducting analyses	

B. The skills objectives of the course.

B1 - Knowledge of laboratory tools, devices and laboratory materials

B2 - How to use each laboratory device or material for a understanding anatomical structure of body .

B3 - Knowing and understanding organs of body system

3. Teaching and learning methods

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4. Evaluation methods

The exams. Students take exams, experiments, and conduct seminars

5. Graduation goals

Preparing graduates capable of understanding anatomical structure of body

6. Teaching and learning methods

Books, manuals and practical application

7. Transferable general and qualifying skills (other skills related to employability and personal development).

Students' ability to of understanding anatomical structure of body

8. Course structure

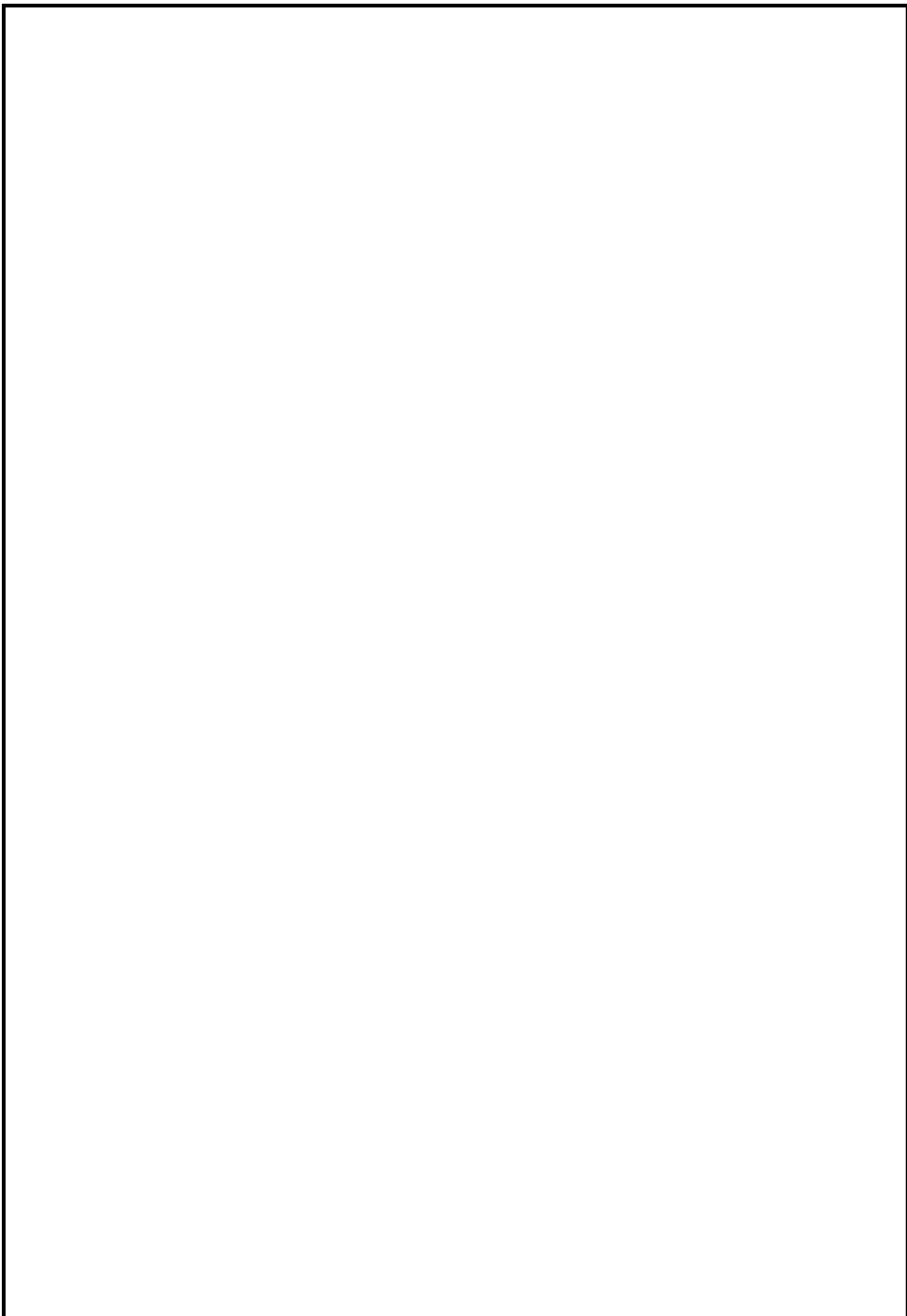
week	Hour	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
1		CNS structure and function	Structure and function of central nerves system	Theoretical	Tests

2	4	PNS spinal nerve	Its classification and structure PNS spinal nerve	Theoretical	Tests
3	4	Sensory and motor nerves system	Its types , structure and function Sensory and motor nerves system	Theoretical	Tests
4	4	GIT system parts and structure of wall and stomach	Structure parts of GIT	Theoretical	Tests
5	4	Salivary gland structure , pancreas and gall bladder	Anatomical Structure of (salivary gland , pancreas , gall bladder)	Theoretical	Tests
6	4	Liver anatomy	Its structure of liver	Theoretical	Tests
7	4	Reproductive system (male)	Anatomical structure of male reproductive system	Theoretical	Tests
8	4	Reproductive system (female)	Anatomical structure of female reproductive system	Theoretical	Tests
9	4	Endocrine glands (anatomy , structure) 1	Its structure and function of endocrine glands	Theoretical	Tests
10	4	Endocrine glands (anatomy , structure) 2	Its structure and function of endocrine glands	Theoretical	Tests

11	4	Urinary system kidney , ureter , urinary bladder , urethra	Its anatomical structure of urinary system	Theoretical	Tests
12	4	Muscular system	Its definition anatomical structure of muscle	Theoretical	Tests
13	4	Special sense anatomy	Structure and types of Special sense	Theoretical	Tests
14	4	Skeletal system anatomy	Anatomical structure of Skeletal system	Theoretical	Tests
15	4	The development and inheritance	The development and inheritance of human body	Theoretical	Tests

9. Reference

- Human Anatomy
- Atlas Human Anatomy



Course description

Educational institution	Sawa private university
scientific department	Anesthesia
Course Title	Computer principles
Available attendance forms	One course
Semester/year	First/2023-2024
Number of study hours (total)	45
The date this description was prepared	3/4/2024
1. Course objectives	
<ul style="list-style-type: none">❖ <i>Giving students knowledge of the basic concepts of dealing with a computer.</i>❖ <i>The ability to increase the student's knowledge by using computer foundations and applications.</i>❖ <i>Achieving a deep understanding of the foundations of information security and protecting sensitive data from electronic threats.</i>❖ <i>To improve communication and work collaboration by sharing files and data and working on joint projects via Internet technologies.</i>	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	
A- Cognitive objectives	
<ol style="list-style-type: none">1. Introduction to the types of computer devices and auxiliary accessories2. Identify the types of computer systems3. Teaching the student the basics of the Windows system	

B. The skills objectives of the course.

.١ Understanding the Windows system

.٢ Understanding how to deal with computer input and output devices

.٣ The skill of managing folders and files

Application of the program to protect the computer from viruses and electronic hacking

3. Teaching and learning methods

Ways to manage the Windows system and computer settings

4. Evaluation methods

Practical and theoretical tests

5. Graduation goals

1. Urging students to solve intellectual questions.

2. Conduct intellectual competitions related to scientific material.

3. Preparing students with the ability to deal with computers, the Windows system, and data protection

4. Urging students to compete with each other to achieve advanced positions within the academic subject to obtain grades and moral awards.

6. Teaching and learning methods

Books, manuals, and practical computer applications.

7. Transferable general and qualifying skills (other skills related to employability and personal development).

Students' ability to handle the computer and its peripherals by entering and outputting data, managing the Windows system, and the ability to write articles and reports..

8. Course structure

week	H ou r	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
1	٣	Computer basics	Computer basics, computer concept; Phases of the computer life cycle, development of computer generations	Theoretical &practical	Tests

			- Practical examples of browsing, opening and closing windows and dialog boxes, and the correct way to deal with the palette		
2	۳	Computer advantages	Computer advantages and areas of use. Computer classification in terms of purpose, size and type of data - Practical examples of customization, dealing with icons, and changing screen resolution.	Theoretical & practical	Tests
3	۳	Computer's components	Computer's components Computer components The physical parts of a computer and the software entities - Training the student to create a new user, maximize windows, show the keyboard, and identify components Physical Calculator	Theoretical & practical	Tests
4	۳	computer security	Your personal computer, the concept of computer security and software licenses. - Training the student on dealing with computer software licenses and their types and dealing with the original source For programs	Theoretical & practical	Tests
5	۳	Computer security	Computer security and software licenses. Training the student to deal with computer security	Theoretical & practical	Tests

6	۳	Computer security	<p>Ethics of the electronic world, forms of transgressions; Computer security: computer privacy.</p> <p>Training the student to deal with computer privacy.</p>	Theoretical & practical	Tests
7	۳	Computer software licenses	<p>Computer software licenses and their types</p> <p>Intellectual property »</p> <p>Electronic hacking</p> <p>Malicious software » The most important steps necessary to protect against hacking operations: Computer harm to health.</p> <p>Types and recipes of viruses, how to create a computer image for protection.</p>	Theoretical & practical	Tests
8	۳	Operating Systems	<p>Operating Systems</p> <p>Definition of Operating System; Jobs. Objectives. Classification examples</p> <p>For some operating systems.</p> <p>Training the student to deal with operating systems, formatting and partitioning the hard disk, internally and externally.</p>	Theoretical & practical	Tests
9	۳	Operating Systems	<p>Operating Systems</p> <p>Windows 7 operating system.</p> <p>Train the student on the Start menu and taskbar, create a file and store it with the student's name on a desktop the desk</p>	Theoretical & practical	Tests

10	۳	Desktop components	Desktop components Start menu taskbar. To manipulate the program's windows and scroll bars. .-Training the student on the uses of the keyboard.	Theoretical & practical	Tests
11	۳	Folders and files	Folders and files icons. -Create a folder with a specific name and train on changing the name, hiding, retrieving, deleting, and the path to it.	Theoretical & practical	Tests
12	۳	Operations on windows and desktop backgrounds	Operations on windows and desktop backgrounds. Training the student to perform operations on windows and desktop backgrounds	Theoretical & practical	Tests
13	۳	Control Panel	Control Panel Windows Control Panel Category. Training the student to use the control panel	Theoretical & practical	Tests
14	۳	Control Panel	From the Defragment control panel, organize files inside the computer, install and delete programs. Training the student to delete a specific program and install it again.	Theoretical & practical	Tests
15	۳	settings	Some common conditions and settings in the computer, managing the printer, setting the time and date, maintaining the initial disks. Training the student on common computer settings, installing the printer and how to deal with it, setting the time	Theoretical & practical	Tests

			and date, and maintaining the primary disks.		
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9. Reference

1. Computer Basics and Office Applications Book, Part One, written by A.M.D. Ziad Muhammad Abboud and others – – – 2014.
2. Computer and ready-made software book Basic Skills, written by Dr. Muhammad Bilal Al-Zoghbi and others – – – 2013.
3. A number of Arabic and foreign articles from the Internet
4. All sites that contain computer basics, the hardware and software parts of the computer, types of electronic fraud and ways to protect against them.

Course description

Educational institution	Sawa private university
scientific department	Medical Laboratory
Course Title	Medical physics
Available attendance forms	One course
Semester/year	Second/2023-2024
Number of study hours (total)	90
The date this description was prepared	٢٤/٣/2024
1. Course objectives	
<p><i>Course objectives .^١ ❖</i></p> <p><i>Identify the general concepts of medical physics -^١ ❖</i></p> <p><i>Identify the most important branches and general specializations in -^٢ ❖</i> <i>medical physics</i></p> <p><i>Identify the most important types of bones -^٣ ❖</i></p> <p><i>Learn how to deal with x-rays in hospitals and other medical -^٤ ❖</i> <i>institutions</i></p> <p><i>Learn how to solve all physics problems -^٥ ❖</i></p> <p style="text-align: center;"><i>❖ 6- The student's ability to link physics and medicine</i></p>	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	

A- Cognitive objectives

A1 Identify the most important physical phenomena. -

A2 Identify how to use linking physical phenomena to medical phenomena. -

A3 Identify pressures, fluids, viscosity and temperature. -

A4 Identify the nature of substances that affect medical phenomena. -

A5 The student knows how to link and synthesize what he learns in this course for what he will use in the future in his field of work. -

A6 Learn how to detect and distinguish rays and their effect on the body.

B - The skills objectives of the course.

B1 Applying what he learns practically by performing calculations for some physics problems. -

B2 Conducting detection and identification of the types of radiation and their use in hospitals and their impact on –
the body.

B3 To be able to identify the laws of gases, real and ideal gases, and methods of heat transfer.

The laws of thermodynamics and electricity.

B4 Teaching the student to conduct scientific dialogue and discussion on topics of skeletal physics.

And the natural conditions it is exposed to, such as pressure, temperature, etc.

B5 Possibility of evaluating results and self-evaluation. -

B6: To be able to identify the medical phenomena that he observes

during his working life. Like blood flow -

A device that reads heart or brain rates, human body temperature, and pressure.

3. Teaching and learning methods

1- Lecture, use of the blackboard, and delivery

2- Demonstration (using diagrams and educational pictures using the datashow)

3- Interactive discussion

4- Self-education

4. Evaluation methods

1. Student participation during the lecture, presentation of seminars, and short-time quick exams.

2. Quarterly exams for theoretical and practical subjects.

5. Graduation goals

C- Emotional and value goals

1. Urging students to solve intellectual questions.

2. Conduct intellectual competitions related to scientific material.

3. Putting students in a scientific and practical environment related to the subject of medical physics to deduce diagnoses from the data.

4. Urging students to compete with each other to achieve advanced positions within the academic subject to obtain grades and moral awards

6. Teaching and learning methods

Books, manuals and practical application

7. Transferable general and qualifying skills (other skills related to employability and personal development).

Students' ability to use laboratory equipment, how to maintain it, and how to understand and read results to patients.

8. Course structure

week	Hour		Name of the unit/subject	Teaching method	Evaluation method
1			Physics of skeleton, pressure	Theoretical	Tests
2	4		Energy, work and power of the body	Theoretical	Tests
3	4		Heat and cold in medicine	Theoretical	Tests
4	4		Specific heat, latent heat, heat transfer by conduction, convection and radiation. Regulation of heat through the human body.	Theoretical	Tests

5	4		Boyles law, diffusion	Theoretical	Tests
6	4		Physical of lung and breathing	Theoretical	Tests
7	4		Evaporation of liquids, vapoure pressure and boiling point, humidity	Theoretical	Tests
8	4		Physics of cardiovascular system Physics of eye and vision.	Theoretical	Tests
9	4		Electricity within the body	Theoretical	Tests
10	4		Application of electricity and magnetism in medicine	Theoretical	Tests
11	4		Light in medicine, sound in medicine	Theoretical	Tests

12	4		Physics of nuclear medicine, radiotherapy protectionradiation	Theoretical	Tests
9. Reference					
Introduction to Physics in Modern Medicine, (Suzanne Amador 2002), Radiation Physics for Medical Physicists (Ervien B, Poodgorasak, 2006).					
Elsevier Journals in medical physics, Nature Journal of Nanotechnology					
Science Direct, Google Scholar, Web of Science					

Sawa nuiversity	1. Educational institution
Anesthesia	2. .Scientific department/center
Biology	3. Course name/code
Daily attendance	4. Available forms of attendance
٢٠٢٤-٢٠٢٣ / الفصل الاول	Semester/year
٩٠	2. Number of study hours (total)

٢٠٢٤/٣/٢٦

3. The date this description was prepared

5. Course objectives

\ Distinguishing cells, their types, different groups, and the structure of each one, learning about cell division, as well as distinguishing between genetic material and how it works, reproduces, and translates it to produce protein. Studying human tissues and the function of everything.

10. course outcomes and teaching, learning and evaluation methods

أ- A- Cognitive objectives

1-define the cell

1. Determine the types of cells

2. Differentiation between cell types

3. Identify methods of cellular transport.

4. Identify the types of cell division

5. Identify the tissues of the human body and the function of each one

B - The skills objectives of the course.

Study of cell properties.

The difference between cell types and their classification.

Using laboratory equipment through which we can know the components of human cells and tissues.

Teaching and learning methods

Lecture, use of the blackboard, and delivery-

-Demonstration using diagrams and educational pictures using the datashow(

Interactive discussion-

self education-

Evaluation methods

1. Student participation during the lecture, presentation of seminars, and short-time quick exams.

2. Quarterly exams for theoretical and practical subjects.

3- Daily exams (Quaz)

C- Emotional and value goals

1. Urging students to solve intellectual questions.

2. Conduct intellectual competitions related to scientific material.

3. Putting students in a scientific and practical environment related to biology.

4. Urging students to compete with each other to achieve advanced positions within the academic subject to obtain grades and moral awards.

Teaching and learning methods

Books, manuals and practical application

Evaluation methods

Practical and theoretical tests

D - Transferable general and qualifying skills (other skills related to employability and personal development).

1. Access to a greater amount of scientific sources.

2. Presenting the topics recently raised globally through a presentation with everyone's participation through it.

3. Have students lead discussion circles as well as provide presentations on scientific subject topics to develop and strengthen their personalities

1. Course structure

Evaluation method	Method of learn	Name of the unit or topic	Required learning outcomes	hours	week
Theoretical, practical/oral and written exams (daily and monthly) and scientific reports	ture and use keyboard and recitation no diagrams and picture educational using ashow(ractive discussion education n rows onGoogle class room	Defin theBiology and study of the living organisms	Knowledge	۲	۱
=====	-----	Study of The cell organelles	Knowledge	۲	۲
=====	-----	Cell Transport &types	Knowledge	۲	۳
=====	-----	Cell division :miosis &mitosis	Knowledge	۲	۴
=====	-----	. Cell division :miosis &mitosis	Knowledge	۲	۵
=====	-----	Definition of Meiosis	Knowledge	۲	۶
=====	-----	Definition of Mitosis	Knowledge	۲	۷
=====	-----	Molecular Biology	Knowledge	۲	۸
=====	-----	DNA REPLICATI ON	Knowledge	۲	۹
=====	-----	DNA TRANSCR EPTION	Knowledge	۲	۱۰
=====	-----	MUTATIO	Knowledge	۲	۱۱

		N.			
=====	-----	human tissue(type s and classificati on(Knowledge	٢	١٢
=====	-----	human tissue(type s and classificati on)	Knowledge	٢	١٣
=====	-----	human tissue(type s and classificati on)	Knowledge	٢	١٤
=====	-----	human tissue(type s and classificati on)	Knowledge	٢	١٥

1. Course evaluation

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

٤٠ annual examination marks (10 first monthly exam + 2.5 attendance marks + 5 practical exam marks first month(

٢,٥+kuzat and attendance) + also the second month(

٦٠ marks (25 marks final practical exam + 35 marks final theoretical exam(

2. مصادر التعلم والتدريس

لا توجد	Required textbooks (methodology, if any)
	Main references (sources)
1- Levinson microbiology 2- human biology	Recommended supporting books and references (scientific journals, reports...).
المواقع الالكترونية المتوفرة على Google Chrome	Electronic references, Internet sites

10. Infrastructure

Human biology.
The cell.
Microbiology.

1- Required prescribed books

Same as above REFERENCES	2- Main references (sources)
The sources mentioned above are sufficient	A-Recommended books and references (scientific journals, reports,...)
All sites that contain the C++ programming language, with YouTube, files uploaded to the electronic classroom, and presentations uploaded to the electronic classroom, in addition to electronic interactive lessons, in addition to the electronic classroom, files uploaded to the classroom, and YouTube for the subject.	B - Electronic references, Internet sites...

. Course development plan

We rely on vocabulary from the sectoral committee

Sawa nuiversity	Educational institution .١
Anesthesia	Scientific . .٢ department/center
Microbiology	Course name/code .٣
Daily attendance	Available forms of .٤ attendance
٢٠٢٤-٢٠٢٣ / الفصل الثاني	Semester/year
٩٠	2. Number of study hours (total)
٢٠٢٤/٣/٢٦	3. The date this description was prepared
Course objectives .٥	
Identifying sterilization methods and their types, identifying microorganisms	

and their classification, identifying bacteria, viruses, fungi, identifying their forms and how to grow, isolate and diagnose them. Identifying how to differentiate between negative and positive bacteria. Identifying the growth of .microbes, identifying the genetic material of bacteria

course outcomes and teaching, learning and evaluation methods
A- Cognitive objectives
.Introduction to microscopic organisms Classification of these objects . Differentiate between its types . Identify the shapes of bacteria . Identify the difference between positive and negative . bacteria (Identifying the genetic material of microbes (bacteria .
.B - The skills objectives of the course Study the properties of microscopic organisms Classification of microorganisms Using laboratory equipment through which we can know the components of human cells and tissues
Teaching and learning methods
-Lecture, use of the blackboard, and delivery -Demonstration using diagrams and educational pictures (using the datashow -Interactive discussion -self education
Evaluation methods
1. Student participation during the lecture, presentation of seminars, and short-time quick exams. 2. Quarterly exams for theoretical and practical subjects. 3- Daily exams (Quaz)
C- Emotional and value goals 1. Urging students to solve intellectual questions. 2. Conduct intellectual competitions related to scientific material. 3. Putting students in a scientific and practical environment related to biology. 4. Urging students to compete with each other to achieve advanced positions within the academic subject to obtain grades and moral awards.

Teaching and learning methods
Books, manuals and practical application
Evaluation methods
Practical and theoretical tests
D - Transferable general and qualifying skills (other skills related to employability and personal development).
1. Access to a greater amount of scientific sources.
2. Presenting the topics recently raised globally through a presentation with everyone's participation through it.
3. Have students lead discussion circles as well as provide presentations on scientific subject topics to develop and strengthen their personalities

1. Access to a greater amount of scientific sources.
2. Presenting the topics recently raised globally through a presentation with everyone's participation through it.
3. Have students lead discussion circles as well as provide presentations on scientific subject topics to develop and strengthen their personalities

1. Course structure

Evaluation method	Method of learn	Name of the unit or topic	Required learning outcomes	hours	week
Theoretical, practical/oral and written exams (daily and monthly) and scientific reports	Lecture and use Blackboard and recitation Demo Use diagrams and pictures) Educational using (Datashow Interactive discussion self education open rows onGoogle class room	Definition of Sterilization &types	Knowledge	۲	۱
=====	-----	Definition of Sterilization &types	Knowledge	۲	۲
=====	-----	Microorganism	Knowledge	۲	۳
=====	-----	Bacteria:classification,structure	Knowledge	۲	۴
=====	-----	. media and structure	Knowledge	۲	۵
=====	-----	Antibiotic and antibiotic resistance	Knowledge	۲	۶
=====	-----	Fungi;classification and structure	Knowledge	۲	۷
=====	-----	Viruse :classification and structure	Knowledge	۲	۸
=====	-----	Parasite introduction and helimenthis	Knowledge	۲	۹
=====	-----	Parasite introduction and helimenthis	Knowledge	۲	۱۰
=====	-----	The immune system :adaptive and annate	Knowledge	۲	۱۱
=====	-----		Knowledge	۲	۱۲
=====	-----	The immune system :adaptive and annate	Knowledge	۲	۱۳
=====	-----		Knowledge	۲	۱۴
=====	-----	Antigene – antibody	Knowledge	۲	۱۵

Course evaluation .\)

Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, reports, etc
 annual examination marks (10 first monthly exam + 2.5 attendance marks + 5 practical ۴۰

(exam marks first month
(kuzat and attendance) + also the second month ٢,٥+
(marks (25 marks final practical exam + 35 marks final theoretical exam ٦٠

٢. مصادر التعلم والتدريس

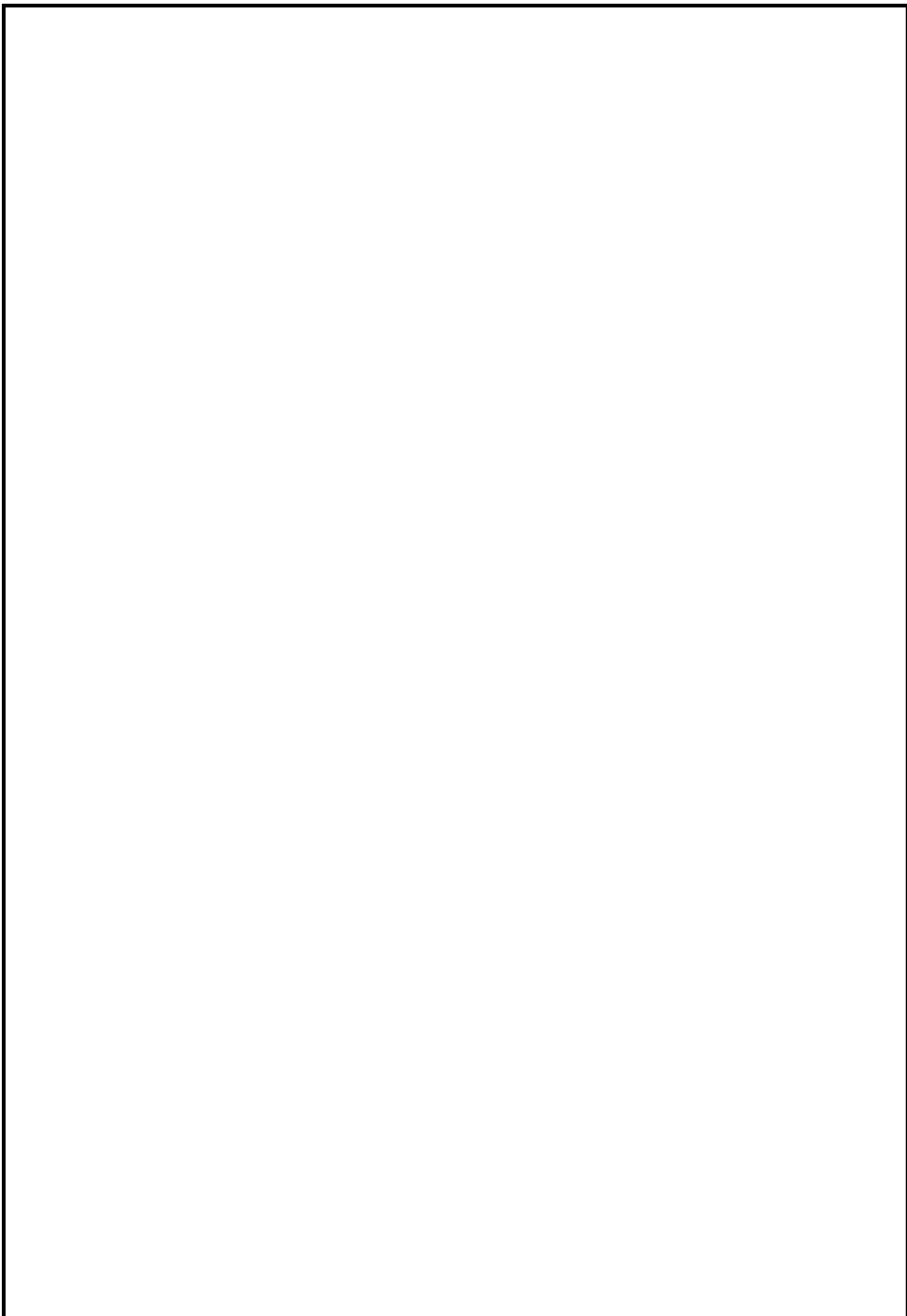
لا توجد	Required textbooks (methodology, if any)
	Main references (sources)
1- Levinson microbiology 2- human biology	Recommended supporting books and references (scientific journals, reports...).
المواقع الالكترونية المتوفرة على Google Chrome	Electronic references, Internet sites

10. Infrastructure

Human biology. Microbiology.	1- Required prescribed books
Same as above REFERANCES	2- Main references (sources)
The sources mentioned above are sufficient	A-Recommended books and references (scientific journals, reports,...)
All sites that contain the C++ programming language, with YouTube, files uploaded to the electronic classroom, and presentations uploaded to the electronic classroom, in addition to electronic interactive lessons, in addition to the electronic classroom, files uploaded to the classroom, and YouTube for the subject.	B - Electronic references, Internet sites...

. Course development plan

We rely on vocabulary from the sectoral committee



Course description form

Course description:

This course description provides a summary of the most important characteristics of the course and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most of the learning opportunities available. It must be linked to the program description.

Sawa National University / College of Health and Medical Technologies	1. 1. Educational institution,
Anesthesiology	2. Scientific Department/Center
Physiology 1/code	3. Name/code of the course
courses/daily attendance	4. Available forms of attendance:
First Semester/2023-2024	5. Semester/Year
160	6. Number of study hours (total):
16/4/2024	The date this description was prepared 7.
8. Course objectives ¹	
1- Study the functions of the body's organs in detail. 2- Know the internal and external structure and shape of the body's members. 3- Distinguish between the functions of the body's organs.	

10. Course outcomes and teaching, learning and evaluation methods

A.Cognitive objectives

- 1- Conducting the necessary medical analyzes and knowing the structure and function of body parts.
- 2- Understanding and studying the basic body organs.

1.

B.Course-specific skills objectives.

- 1-Clarify the mechanism of action of the body's systems.
- 2-Explain and work the practical side of member functions, purpose, and use.

1.

Teaching and learning methods

- 1- Lecture, use of the blackboard, and delivery
- 2- Demonstration (using diagrams and educational pictures using the datashow)
- 3- Interactive discussion
- 4- Self-education

1-

Evaluation methods

1. Student contributions during the lecture, presentation of seminars
2. Rapid exams with short time
3. Quarterly exams for theoretical and practical subjects.

C- Emotional and value goals

1. Urging students to solve intellectual questions.
2. Conduct intellectual competitions related to scientific material.
3. Putting students in a scientific and practical environment
4. Urging students to compete with each other to achieve advanced positions within the academic subject to obtain grades and moral awards.

1.

Teaching and learning methods

Books, notebooks, and the use of the Internet

Evaluation methods

Practical and theoretical tests

D - Transferable general and qualifying skills (other skills related to employability and personal development).

1. Access to a greater amount of scientific sources.
2. Presenting the topics recently raised globally through a presentation with everyone's participation through it.
3. Have students lead discussion circles as well as provide presentations on scientific subject topics to develop and strengthen their personalities

1.

1. Course structure

Evaluation method	Teaching method	Unit name	Education outcomes	Hours	Week
Theoretical, practical/oral and written exams (daily and monthly) and scientific reports	Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports	Introduction to the respiratory system	Knowledge	4	1
=====	Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and	The study of the alveoli	Knowledge	4	2

	written exams (daily and monthly) and scientific reports				
=====	<p>Knowledge</p> <p>Introduction to the respiratory system</p> <p>Lecture and use Blackboard and recitation</p> <p>Demo (Use diagrams and pictures</p> <p>Educational using Datashow)</p> <p>Interactive discussion</p> <p>self education</p> <p>Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	The study of the lungs	Knowledge	4	3
=====	<p>Knowledge</p> <p>Introduction to the respiratory system</p> <p>Lecture and use Blackboard and recitation</p> <p>Demo (Use diagrams and pictures</p> <p>Educational using Datashow)</p> <p>Interactive discussion</p> <p>self education</p> <p>Open rows on Google class</p>	Introduction to the renal system	Knowledge	4	4

	room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports				
=====	<p>Knowledge</p> <p>Introduction to the respiratory system</p> <p>Lecture and use Blackboard and recitation</p> <p>Demo (Use diagrams and pictures</p> <p>Educational using Datashow)</p> <p>Interactive discussion</p> <p>self education</p> <p>Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	Study of the kidneys		Knowledge 4	5
=====	<p>Knowledge</p> <p>Introduction to the respiratory system</p> <p>Lecture and use Blackboard and recitation</p> <p>Demo (Use diagrams and pictures</p> <p>Educational using Datashow)</p> <p>Interactive discussion</p> <p>self education</p>	Study of the body fluids		Knowledge 4	6

	Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports				
=====	<p>Knowledge</p> <p>Introduction to the respiratory system</p> <p>Lecture and use Blackboard and recitation</p> <p>Demo (Use diagrams and pictures</p> <p>Educational using Datashow)</p> <p>Interactive discussion self education</p> <p>Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	Introduction to the endocrine system	Knowledge	4	7
=====	<p>Knowledge</p> <p>Introduction to the respiratory system</p> <p>Lecture and use Blackboard and recitation</p> <p>Demo (Use diagrams and pictures</p> <p>Educational using Datashow)</p> <p>Interactive</p>	Study the endocrine system	Knowledge	4	8

	<p>discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>				
=====	<p>المحاضرة واستخدام Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	Study the endocrine system		Knowledge 4	9
=====	<p>المحاضرة واستخدام Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams</p>	Hearing study and examination		Knowledge ٤	١٠

	<p>and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>				
=====	<p>Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	Vision study and examination		Knowledge 4	11
=====	<p>Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation</p>	Oral structure study.		Knowledge 4	12

	<p>Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>				
=====	<p>Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	Oral structure.	Knowledge	4	13
=====	<p>Knowledge Introduction to the respiratory system Lecture and use</p>	Study of the structure and functions of	Knowledge	4	14

	<p>Blackboard and recitation Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	<p>the gastrointestinal tract</p>			
=====	<p>Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	<p>Study of the structure and functions of the gastrointestinal tract.</p>			<p>Knowledge 4 15</p>

2. Course evaluation

Distribution of the grade out of 100 according to the tasks assigned to the student, such as

daily preparation, daily, oral, monthly, written exams, reports, etc.
 40 annual endeavor marks (10 first month exams + 10 second month exams + 2.5 daily exams + 2.5 daily and monthly student attendance and evaluations)
 60 marks (20 marks final practical exam + 40 marks final theoretical exam)

3. Learning resources

<p>Learning package in medical physiology –Designed by Dr. Rawaa adnan 2009-2010Edition KD</p>	<p>Required textbooks</p>
<p>1- Elatine N.Marteb,R.N. (2006) . Essentials of Human Anatomy and Physiology(eight edition). 2- Memmler,Ruth Lundeen . (1990). structure and function of the human body (fourth edition) 3- Gerard j.Tortora , Nichdas p. Anagnostakos . (1987). Principles of anatomy and physiology (fifth edition)</p>	<p>Electronic references</p>

11. Infrastructure

<p>Essentials of Medical Pharmacology Seventh Edition KD TRIPATHI MD Ex-Director- Professor and Head of Pharmacology, 2013</p> <p>MEDICAL PHARMACOLOGY &THERAPEUTICS Fifth Edition Derek G. Waller BSc (HONS), DM MBBS (HONS), FRCP, University of Southampton, Southampton, United Kingdom</p>	<p>-^ Required books</p>
	<p>-۲</p>

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12. Course development plan

Add more technical skills through introducing more laboratory and analytical tests

Course description form

Course description:

This course description provides a summary of the most important characteristics of the course and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most of the learning opportunities available. It must be linked to the program description.

Sawa National University / College of Health and Medical Technologies	1. 1. Educational institution,
Anesthesiology	2. Scientific Department/Center
Physiology 1/code	3. Name/code of the course
courses/daily attendance	4. Available forms of attendance:
First Semester/2023-2024	5. Semester/Year
160	6. Number of study hours (total):
16/4/2024	The date this description was prepared 7.
8. Course objectives ¹	
1- Study the functions of the body's organs in detail. 2- Know the internal and external structure and shape of the body's members. 3- Distinguish between the functions of the body's organs.	

10. Course outcomes and teaching, learning and evaluation methods

A. Cognitive objectives

- 1- Conducting the necessary medical analyzes and knowing the structure and function of body parts.
- 2- Understanding and studying the basic body organs.

1.

B. Course-specific skills objectives.

- 1- Clarify the mechanism of action of the body's systems.
- 2- Explain and work the practical side of member functions, purpose, and use.

1.

Teaching and learning methods

- 1- Lecture, use of the blackboard, and delivery
- 2- Demonstration (using diagrams and educational pictures using the datashow)
- 3- Interactive discussion
- 4- Self-education

1-

Evaluation methods

1. Student contributions during the lecture, presentation of seminars
2. Rapid exams with short time
3. Quarterly exams for theoretical and practical subjects.

C- Emotional and value goals

1. Urging students to solve intellectual questions.
2. Conduct intellectual competitions related to scientific material.
3. Putting students in a scientific and practical environment
4. Urging students to compete with each other to achieve advanced positions within the academic subject to obtain grades and moral awards.

1.

Teaching and learning methods

Books, notebooks, and the use of the Internet

Evaluation methods

Practical and theoretical tests

D - Transferable general and qualifying skills (other skills related to employability and personal development).

1. Access to a greater amount of scientific sources.
2. Presenting the topics recently raised globally through a presentation with everyone's participation through it.
3. Have students lead discussion circles as well as provide presentations on scientific subject topics to develop and strengthen their personalities

1.

1. Course structure

Evaluation method	Teaching method	Unit name	Education outcomes	Hours	Week
Theoretical, practical/oral and written exams (daily and monthly) and scientific reports	Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports	Cell physiology	Knowledge	4	1
=====	Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and	Nerve and muscle Microanatomy	Knowledge	4	2

	written exams (daily and monthly) and scientific reports				
=====	<p>Knowledge</p> <p>Introduction to the respiratory system</p> <p>Lecture and use Blackboard and recitation</p> <p>Demo (Use diagrams and pictures</p> <p>Educational using Datashow)</p> <p>Interactive discussion</p> <p>self education</p> <p>Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	Nerves(types of nerves lungs)		Knowledge 4	3
=====	<p>Knowledge</p> <p>Introduction to the respiratory system</p> <p>Lecture and use Blackboard and recitation</p> <p>Demo (Use diagrams and pictures</p> <p>Educational using Datashow)</p> <p>Interactive discussion</p> <p>self education</p> <p>Open rows on Google class</p>	Nerve (Types of muscles)		Knowledge 4	4

	room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports				
=====	<p>Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	Nervous System		Knowledge 4	5
=====	<p>Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education</p>	Nervous System		Knowledge 4	6

	Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports				
=====	<p>Knowledge</p> <p>Introduction to the respiratory system</p> <p>Lecture and use Blackboard and recitation</p> <p>Demo (Use diagrams and pictures</p> <p>Educational using Datashow)</p> <p>Interactive discussion self education</p> <p>Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	Nervous System		Knowledge 4	7
=====	<p>Knowledge</p> <p>Introduction to the respiratory system</p> <p>Lecture and use Blackboard and recitation</p> <p>Demo (Use diagrams and pictures</p> <p>Educational using Datashow)</p> <p>Interactive</p>	Red blood cells		Knowledge 4	8

	<p>discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>				
=====	<p>المحاضرة واستخدام Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	White blood cells		Knowledge 4	9
=====	<p>المحاضرة واستخدام Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams</p>	Blood groups on		Knowledge ٤	١٠

	<p>and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>				
=====	<p>Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	<p>Blood coagulation on</p>	Knowledge	4	11
=====	<p>Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation</p>	<p>Cardiovasc ular system</p>	Knowledge	4	12

	<p>Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>				
=====	<p>Knowledge Introduction to the respiratory system Lecture and use Blackboard and recitation Demo (Use diagrams and pictures Educational using Datashow) Interactive discussion self education Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	<p>Study of blood vesselse.</p>	<p>Knowledg 4</p>	<p>4</p>	<p>13</p>
=====	<p>Knowledge Introduction to the respiratory system Lecture and use</p>	<p>Study of veins and arteries</p>	<p>Knowled 4</p>	<p>4</p>	<p>14</p>

	<p>Blackboard and recitation</p> <p>Demo (Use diagrams and pictures)</p> <p>Educational using Datashow)</p> <p>Interactive discussion</p> <p>self education</p> <p>Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>				
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=====	<p>Knowledge</p> <p>Introduction to the respiratory system</p> <p>Lecture and use Blackboard and recitation</p> <p>Demo (Use diagrams and pictures)</p> <p>Educational using Datashow)</p> <p>Interactive discussion</p> <p>self education</p> <p>Open rows on Google class room: Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>	<p>Cardiovascular system</p> <p>.</p>			<p>Knowledge 4</p> <p>15</p>
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2. Course evaluation

Distribution of the grade out of 100 according to the tasks assigned to the student, such as

daily preparation, daily, oral, monthly, written exams, reports, etc.
 40 annual endeavor marks (10 first month exams + 10 second month exams + 2.5 daily exams + 2.5 daily and monthly student attendance and evaluations)
 60 marks (20 marks final practical exam + 40 marks final theoretical exam)

3. Learning resources

<p>Learning package in medical physiology –Designed by Dr. Rawaa adnan 2009-2010Edition KD</p>	<p>Required textbooks</p>
<p>1- Elatine N.Marteb,R.N. (2006) . Essentials of Human Anatomy and Physiology(eight edition). 2- Memmler,Ruth Lundeen . (1990). structure and function of the human body (fourth edition) 3- Gerard j.Tortora , Nichdas p. Anagnostakos . (1987). Principles of anatomy and physiology (fifth edition)</p>	<p>Electronic references</p>

11. Infrastructure

<p>Essentials of Medical Pharmacology Seventh Edition KD TRIPATHI MD Ex-Director- Professor and Head of Pharmacology, 2013</p> <p>MEDICAL PHARMACOLOGY &THERAPEUTICS Fifth Edition Derek G. Waller BSc (HONS), DM MBBS (HONS), FRCP, University of Southampton, Southampton, United Kingdom</p>	<p>-^ Required books</p>
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12. Course development plan

Add more technical skills through introducing more laboratory and analytical tests
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Course description

Educational institution	Sawa private university
scientific department	Anesthesia department
Course Title	Applied Physiology (^)
Available attendance forms	One course
Semester/year	First semester/2023-2024
Number of study hours (total)	90
The date this description was prepared	9/4/2024
1. Course objectives	
<ol style="list-style-type: none"> 1. <i>Information in applied physiology is provided to the student.</i> 2. <i>By the end of the academic year, understanding of the functions of the body's various systems and how to act in emergency and medical situations, and their relationship to anesthesia, will be achieved by the student.</i> 3. <i>Information that qualifies him to work in scientific circles, scientific research facilities, and state ministries is provided to him.</i> 4. <i>Sufficient information that qualifies him to complete his graduate studies is provided to him.</i> 	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	
<ol style="list-style-type: none"> 1. The importance and function of some vital body organs such as the respiratory, cardiac, and vascular systems, and their relationship with anesthesia, are recognized by the student. 2. Some disorders and medical conditions in these vital organs and their impact on the nature of anesthesia work are understood by the student. 3. The ability to perform various clinical examinations of the body is acquired by the student. 	

3. Teaching and learning methods

Presentation of lecture in PowerPoint format
Show explanatory videos and pictures
Presentation of sterilization
Presentation of how putting on and taking off of PPE
Presentation of sources at the end of a lecture

4. Evaluation methods

The exams. Students take exams, experiments, and conduct seminars

5. Graduation goals

Preparing graduates capable of conducting various basic and principles
Teaching the signs and symptoms of physiology disorders

6. Teaching and learning methods

Books, manuals and practical application

7. Transferable general and qualifying skills (other skills related to employability and personal development).

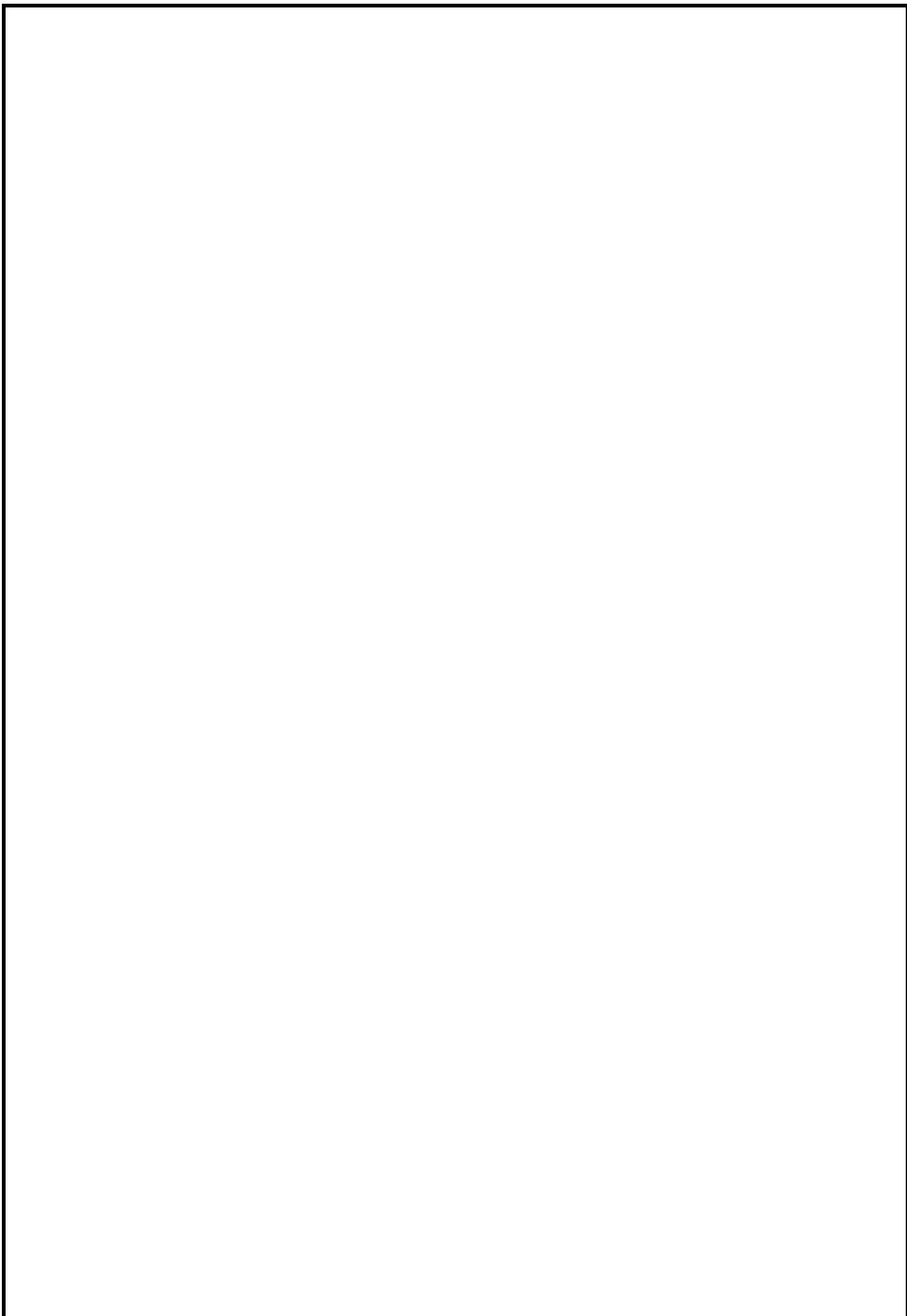
8. Course structure

week	Hour	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
1	ξ+ϒ	electrical components and activity of the heart	Introducing students to the electrical components of the heart, the electrical generation system in the heart, and its effect on heart activity	Theoretical	Tests
2	ξ+ϒ	the cardiac action potential in ventricular muscle and pacemaker tissues	Teaching students how nerve impulses are generated in the heart muscles and how they are organized and transmitted through the nerves	Theoretical	Tests
3	ξ+ϒ	contractile cardiomyocytes and excitation-contraction coupling	The student identifies the mechanism of heart muscle contractions and the nervous excitation resulting from a nerve impulse	Theoretical	Tests
4	ξ+ϒ	ECG and arrhythmia	Explain what the ECG test is and how it can be used to diagnose arrhythmia.	Theoretical	Tests
5	ξ+ϒ	cardiac cycle	Students know the details of the cardiac circulation, its parts, and how it works	Theoretical	Tests
6	2+4	heart sound and waveforms generated during cardiac cycle	Knowing the types of heart sounds and their relationship to the cardiac circulation	Theoretical	Tests
7	2+4	the left ventricle pressure-volume loop	Knowing how pressure is generated in the left ventricle of the heart and its effect on pumping blood to the body	Theoretical	Tests

8	2+4	cardiac innervation and control of heart rate	Teaching students what heart rate is and how heartbeats are regulated in the body	Theoretical	Tests
9	2+4	cardiac reflexes	How adverse reactions of the heart are generated and their connection to cardiac disorders	Theoretical	Tests
10	2+4	systemic circulation	Explaining to students the amount of systemic blood circulation in the body and its parts	Theoretical	Tests
11	2+4	blood pressure regulation	How blood pressure is generated in the human body and the vital mechanisms for its regulation by the heart and nervous system	Theoretical	Tests
12	2+4	physiology of microcirculation (starling law of capillary)	How to know the components of blood flow in small blood vessels and the methods of its spread	Theoretical	Tests
13	2+4	venous circulation and venous return	Knowing the details of venous blood, how it is organized, and the details of the return of blood from the veins to the heart	Theoretical	Tests
14	2+4	coronary circulation	Explain the importance of coronary circulation and its vital details	Theoretical	Tests
15	2+4	spirometry and lung volumes	Explain how to conduct a lung volume and breathing test	Theoretical	Tests

9. Reference

- Pharmacology and physiology for anesthesia, foundation and clinical application, 2nd edition, Hugh C. Hemmings, Jr., MD, PhD, FRCA, 2013
- Pharmacology and physiology in anesthetic practice, fifth edition, Pamela Flood, MD, MA, 2015



Educational institution	Sawa private university
scientific department	Anesthesia department
Course Title	Applied Physiology (2)
Available attendance forms	One course
Semester/year	second semester/2023-2024
Number of study hours (total)	90
The date this description was prepared	9/4/2024
1. Course objectives	
<ol style="list-style-type: none"> 1. <i>Information in applied physiology is provided to the student.</i> 2. <i>By the end of the academic year, understanding of the functions of the body's various systems and how to act in emergency and medical situations, and their relationship to anesthesia, will be achieved by the student.</i> 3. <i>Information that qualifies him to work in scientific circles, scientific research facilities, and state ministries is provided to him.</i> 4. <i>Sufficient information that qualifies him to complete his graduate studies is provided to him.</i> 	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	
<ol style="list-style-type: none"> 1. The importance and function of some vital body organs such as the respiratory, cardiac, and vascular systems, and their relationship with anesthesia, are recognized by the student. 2. Some disorders and medical conditions in these vital organs and their impact on the nature of anesthesia work are understood by the student. 3. The ability to perform various clinical examinations of the body is acquired by the student. 	

3. Teaching and learning methods

Presentation of lecture in PowerPoint format
Show explanatory videos and pictures
Presentation of sterilization
Presentation of how putting on and taking off of PPE
Presentation of sources at the end of a lecture

4. Evaluation methods

The exams. Students take exams, experiments, and conduct seminars

5. Graduation goals

Preparing graduates capable of conducting various basic and principles
Teaching the signs and symptoms of physiology disorders

6. Teaching and learning methods

Books, manuals and practical application

7. Transferable general and qualifying skills (other skills related to employability and personal development).

8. Course structure

weak	Hour	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
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1	$\xi+\gamma$	lung mechanics (compliance, resistant)	Introducing students to the electrical components of the heart, the electrical generation system in the heart, and its effect on heart activity	Theoretical	Tests
2	$\xi+\gamma$	ventilation perfusion	Teaching students how nerve impulses are generated in the heart muscles and how they are organized and transmitted through the nerves	Theoretical	Tests
3	$\xi+\gamma$	preoxygenation. apneic oxygenation and diffusion hypoxia)	The student identifies the mechanism of heart muscle contractions and the nervous excitation resulting from a nerve impulse	Theoretical	Tests
4	$\xi+\gamma$	transport of gases(O ₂ ,CO ₂)	Explain what the ECG test is and how it can be used to diagnose arrhythmia.	Theoretical	Tests
5	$\xi+\gamma$	systemic effect of hypoxia and hyperoxia	Students know the details of the cardiac circulation, its parts, and how it works	Theoretical	Tests
6	2+4	control of ventilation	Knowing the types of heart sounds and their relationship to the cardiac circulation	Theoretical	Tests
7	2+4	non respiratory function of lung	Knowing how pressure is generated in the left ventricle of the heart and its effect on pumping blood to the body	Theoretical	Tests
8	2+4	preoperative smoking and physiological effects of cessation of smoking	Teaching students what heart rate is and how heartbeats are regulated in the body	Theoretical	Tests
9	2+4	thermoregulatory response to prevent hypothermia and hyperthermia	How adverse reactions of the heart are generated and their connection to cardiac disorders	Theoretical	Tests

10	2+4	heat loss during anaesthesia	Explaining to students the amount of systemic blood circulation in the body and its parts	Theoretical	Tests
11	2+4	body fluids and electrolytes	How blood pressure is generated in the human body and the vital mechanisms for its regulation by the heart and nervous system	Theoretical	Tests
12	2+4	vomiting and dehydration	How to know the components of blood flow in small blood vessels and the methods of its spread	Theoretical	Tests
13	2+4	acid base balance	Knowing the details of venous blood, how it is organized, and the details of the return of blood from the veins to the heart	Theoretical	Tests
14	2+4	cerebral physiology	Explain the importance of coronary circulation and its vital details	Theoretical	Tests
15	2+4	physiological differences between child and adult in general	Explain how to conduct a lung volume and breathing test	Theoretical	Tests

9. Reference

- Pharmacology and physiology for anesthesia, foundation and clinical application, 2nd edition, Hugh C. Hemmings, Jr., MD, PhD, FRCA, 2013
- Pharmacology and physiology in anesthetic practice, fifth edition, Pamela Flood, MD, MA, 2015

Course description

Educational institution	Sawa private university
scientific department	Anesthesia
Course Title	Basic of anesthesia /1
Available attendance forms	One course
Semester/year	1st /2023-2024
Number of study hours (total)	90
The date this description was prepared	4/4/2024
1. Course objectives	
<ul style="list-style-type: none"> ❖ <i>Providing students with knowledge of the basic concepts of anesthesia</i> ❖ <i>Students' knowledge of the equipment needed in anesthesia.</i> ❖ <i>Students' ability for writing and reading of important investigations needed for patient anesthesia</i> ❖ <i>Students' ability to take a full history from the patient</i> ❖ <i>Students' ability to understand preoperative visit and assessment of patient and who to use preoperative medications</i> ❖ <i>Students' ability to choose the type of anesthesia which is suitable to the patient surgical condition and according to results of investigations and patient medical history</i> ❖ <i>Students' ability to observe the patient under anesthesia and monitoring of vital signs intraoperative and postoperative</i> ❖ <i>Students' ability to observe the patient in recovery room and learning the signs of discharge from recovery room to the intensive care unit or the surgical ward</i> 	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	

A- Cognitive objectives

A1- Introduction to anesthesiology

A2- Knowing how to maintain the anesthesia equipments and how to use them specifically

A3- Students understood how to choose the type of anesthesia suitable to the patient surgical condition and in a safe manner according to the patient medical condition

B. The skills objectives of the course.

B1 - Knowledge of laboratory tools, devices and laboratory materials

B2 - How to use each laboratory device or material for a specific condition.

B3 - Knowing and understanding the use of each device for specific condition

3. Teaching and learning methods

Presentation of lecture in PowerPoint format

Show explanatory videos

Presentation of sources at the end of a lecture

4. Evaluation methods

The exams. Students take exams, experiments, and conduct seminars

5. Graduation goals

Preparing graduates capable of conducting anesthesia for the patient in a safe method by choosing a suitable type of anesthesia according to the patient medical condition and type of surgery

6. Teaching and learning methods

Books, manuals and practical application

7. Transferable general and qualifying skills (other skills related to employability and personal development).

Students' ability to use anesthesia equipment, how to maintain it, and how to understand the use of each one.

8. Course structure

week	Hour	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
1	6	History of anesthesia and introduction +scope of anesthesiology	History of anesthesia and introduction +scope of anesthesiology	Theoretical	Tests
2	6	Choice of anesthetic technique	Choice of anesthetic technique	Theoretical	Tests
3	6	Preanesthetic visit and assessment	Preanesthetic visit and assessment	Theoretical	Tests
4	6	Premedication aims and therapeutic management	Premedication aims and therapeutic management	Theoretical	Tests
5	6	General pharmacology	General pharmacology	Theoretical	Tests
6	6	General pharmacology	General pharmacology	Theoretical	Tests
7	6	Inhalational anesthetic agents (in details)	Inhalational anesthetic agents (in details)	Theoretical	Tests

8	6	Inhalational anesthetic agents (in details)	Inhalational anesthetic agents (in details)	Theoretical	Tests
9	6	Inhalational anesthetic agents (in details)	Inhalational anesthetic agents (in details)	Theoretical	Tests
10	6	Inhalational anesthetic agents (in details)	Inhalational anesthetic agents (in details)	Theoretical	Tests
11	6	Intravenous anesthetic agents	Intravenous anesthetic agents	Theoretical	Tests
12	6	Intravenous anesthetic agents	Intravenous anesthetic agents	Theoretical	Tests
13	6	Intravenous anesthetic agents	Intravenous anesthetic agents	Theoretical	Tests
14	6	Muscle relaxant and reversal	Muscle relaxant and reversal	Theoretical	Tests
15	6	Muscle relaxant and reversal	Muscle relaxant and reversal	Theoretical	Tests

9. Reference

- 1.Fundamentals of Anaesthesia ,fourth edition ,Ted Lin,Tim Simth ,and Colin pinock
- 2.Lecture note on clinical anesthesia ,2nd edition CARL GWINNUTT,2004
- 3.Clinical anesthesiology ,fifth edition ,Morgan and Mikhail ,2013

4. Clinical anesthesia ,eighth edition,Paul G. Barash, MD et al .2017

Course description

Educational institution	Sawa private university
scientific department	Anesthesia
Course Title	Basic of anesthesia /2
Available attendance forms	One course
Semester/year	Second/2023-2024
Number of study hours (total)	90
The date this description was prepared	4/4/2024
1. Course objectives	
<ul style="list-style-type: none">❖ <i>Providing students with knowledge of the basic concepts of anesthesia</i>❖ <i>Students' knowledge of the equipment needed in anesthesia.</i>❖ <i>Students' ability for writing and reading of important investigations needed for patient anesthesia</i>❖ <i>Students' ability to take a full history from the patient</i>❖ <i>Students' ability to understand preoperative visit and assessment of patient and who to use preoperative medications</i> ❖ <i>Students' ability to choose the type of anesthesia which is suitable to the patient surgical condition and according to results of investigations and patient medical history</i>❖ <i>Students' ability to observe the patient under anesthesia and monitoring of vital signs intraoperative and postoperative</i>❖ <i>Students' ability to observe the patient in recovery room and learning the signs of discharge from recovery room to the intensive care unit or the surgical ward</i>	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	

A- Cognitive objectives

A1- Introduction to anesthesiology

A2- Knowing how to maintain the anesthesia equipments and how to use them specifically

A3- Students understood how to choose the type of anesthesia suitable to the patient surgical condition and in a safe manner according to the patient medical condition

B. The skills objectives of the course.

B1 - Knowledge of laboratory tools, devices and laboratory materials

B2 - How to use each laboratory device or material for a specific condition.

B3 - Knowing and understanding the use of each device for specific condition

3. Teaching and learning methods

Presentation of lecture in PowerPoint format

Show explanatory videos

Presentation of sources at the end of a lecture

4. Evaluation methods

The exams. Students take exams, experiments, and conduct seminars

5. Graduation goals

Preparing graduates capable of conducting anesthesia for the patient in a safe method by choosing a suitable type of anesthesia according to the patient medical condition and type of surgery

6. Teaching and learning methods

Books, manuals and practical application

7. Transferable general and qualifying skills (other skills related to employability and personal development).

Students' ability to use anesthesia equipment, how to maintain it, and how to understand the use of each one.

8. Course structure

week	Hour	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
1	6	Drugs used in premedication and sedative, analgesic drugs	Drugs used in premedication and sedative, analgesic drugs	Theoretical	Tests
2	6	Drugs used in premedication and sedative, analgesic drugs	Drugs used in premedication and sedative, analgesic drugs	Theoretical	Tests
3	6	Drugs used in premedication and sedative, analgesic drugs	Drugs used in premedication and sedative, analgesic drugs	Theoretical	Tests
4	6	Anesthetic crisis	Laryngospasm and Bronchospasm	Theoretical	Tests
5	6	Anesthetic crisis	Hypoxia and malignant hyperthermia	Theoretical	Tests
6	6	Intravenous fluid types and usage	Intravenous fluid types and usage	Theoretical	Tests

7	6	Intravenous fluid types and usage	Intravenous fluid types and usage	Theoretical	Tests
8	6	Blood and blood products	Blood and blood products	Theoretical	Tests
9	6	Blood and blood products	Blood and blood products	Theoretical	Tests
10	6	Surgical position and their complications	Surgical position and their complications	Theoretical	Tests
11	6	Surgical position and their complications	Surgical position and their complications	Theoretical	Tests
12	6	Cardiopulmonary resuscitation and CPR	Cardiopulmonary resuscitation and CPR	Theoretical	Tests
13	6	Cardiopulmonary resuscitation and CPR	Cardiopulmonary resuscitation and CPR	Theoretical	Tests
14	6	Intraoperative patient monitoring	Intraoperative patient monitoring	Theoretical	Tests
15	6	Safety measures in operating room	Safety measures in operating room	Theoretical	Tests

9. Reference

1. Fundamentals of Anaesthesia ,fourth edition ,Ted Lin, Tim Simth ,and Colin pinock
2. Lecture note on clinical anesthesia ,2nd edition CARL GWINNUTT,2004
3. Clinical anesthesiology ,fifth edition ,Morgan and Mikhail ,2013
4. Clinical anesthesia ,eighth edition,Paul G. Barash, MD et al .2017

Course description

Educational institution	Sawa private university
scientific department	Anesthesia
Course Title	Pharmacology
Available attendance forms	Courses
Semester/year	First /2023-2024
Number of study hours (total)	270
The date this description was prepared	4/4/2024
1. Course objectives	
<i>❖ Introducing the student to medications and emphasizing the medications used in anesthesia.</i>	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	
A- Cognitive objectives 1 .Understanding the mechanism of action of the drug at the molecular and cellular level, including the beneficial and harmful effects of the drug. 2 .To understand the kinetics of the drug within the body, including absorption, distribution, metabolism, and elimination. 3 .Introduce the student to the fact that medications can affect all body systems 4 .Know the serious side effects and contraindications for each drug in the group. 5. Identify the basic principles of acute drug poisoning	

B - The skills objectives of the course.

1. Identify the basics of how the drug works, the ways it affects the body, and how the body is affected by it
2. Distinguish the medications used for each body system, such as the circulatory and respiratory systems
3. Knowledge of the medications used in general and spinal anesthesia

3. Teaching and learning methods

- 1 -Lectures, use of the blackboard, and delivery
- 2 -Demonstration (using diagrams, educational pictures and data-show)
- 3 -Interactive discussion
- 4 -Self-education
- 5 -Presentation of lecture in PowerPoint format
- 6 -Show explanatory videos
- 7 -Presentation of sources at the end of a lecture

4. Evaluation methods

- 1- The exams, experiments, and conduct seminars
- 2- Student contributions during the lecture, presentation of seminars
- 3- Rapid exams with short time (Quiz)
- 4- Quarterly exams for theoretical and practical subjects.

5. Graduation goals

Preparing graduates capable of knowing drug groups with their mechanism of work in the body plus its important side effects, as well as the most use drugs in anesthesia

6. Teaching and learning methods

Books, manuals, practical application and use of the Internet

7. Transferable general and qualifying skills (other skills related to employability and personal development).

- 1 .Access to a greater amount of scientific sources.
- 2 .Presenting the topics recently raised globally through a presentation with everyone's participation through it.
3. Have students lead discussion circles as well as provide presentations on scientific subject topics to develop and strengthen their personalities

8. Course structure

week	Hour	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
1	4 hr.	Knowledge	Principles of Drug Therapy Pharmacokinetics. Absorption, distribution, metabolism and excretion of the drugs Pharmacodynamics Drug-receptors interaction. Efficacy, potency, agonists, antagonists.	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
2	4 hr.	Knowledge	Cholinergic agonists and antagonists	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
3	4 hr.	Knowledge	Adrenergic agonists and adrenergic antagonists	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports

4	4 hr.	Knowledge	<p>Drugs affecting cardiovascular system:</p> <p>Antihypertensive drugs.</p> <p>Heart Failure</p>	<p>Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room</p>	<p>Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>
5	4 hr.	Knowledge	<p>Drugs affecting cardiovascular system:</p> <p>Anti-arrhythmic.</p> <p>Antianginal drugs</p>	<p>Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room</p>	<p>Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>
6	4 hr.	Knowledge	<p>Diuretics.</p>	<p>Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room</p>	<p>Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>
7	4 hr.	Knowledge	<p>Antihistamines</p>	<p>Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room</p>	<p>Theoretical, practical/oral and written exams (daily and monthly) and scientific reports</p>

8	4 hr.	Knowledge	Drugs for Disorders of the Respiratory System	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
9	4 hr.	Knowledge	Drugs for Disorders of the Respiratory System	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
10	4 hr.	Knowledge	Drugs for anemia	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
11	4 hr.	Knowledge	Anticoagulants and Antiplatelet Agents	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports

12	4 hr.	Knowledge	Skeletal muscle relaxants.	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
13	4 hr.	Knowledge	Local anesthetics.	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
14	4 hr.	Knowledge	general anesthetics.	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
15	4 hr.	Knowledge	general anesthetics.	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
9. Reference					

Edition KD TRIPATHI MD Ex-Director-Professor and Head of Pharmacology,
2013

MEDICAL PHARMACOLOGY & THERAPEUTICS Fifth Edition Derek G.
Waller BSc (HONS), DM MBBS (HONS), FRCP, University of Southampton,
Southampton, United Kingdom

Course description

Educational institution	Sawa private university
scientific department	Anesthesia
Course Title	Pharmacology
Available attendance forms	Courses
Semester/year	Second /2023-2024
Number of study hours (total)	270
The date this description was prepared	4/4/2024
1. Course objectives	
<i>❖ Introducing the student to medications and emphasizing the medications used in anesthesia.</i>	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	
A- Cognitive objectives 1 .Understanding the mechanism of action of the drug at the molecular and cellular level, including the beneficial and harmful effects of the drug. 2 .To understand the kinetics of the drug within the body, including absorption, distribution, metabolism, and elimination. 3 .Introduce the student to the fact that medications can affect all body systems 4 .Know the serious side effects and contraindications for each drug in the group. 5. Identify the basic principles of acute drug poisoning	

B - The skills objectives of the course.

1. Identify the basics of how the drug works, the ways it affects the body, and how the body is affected by it
2. Distinguish the medications used for each body system, such as the circulatory and respiratory systems
3. Knowledge of the medications used in general and spinal anesthesia

3. Teaching and learning methods

- 1 -Lectures, use of the blackboard, and delivery
- 2 -Demonstration (using diagrams, educational pictures and datashow)
- 3 -Interactive discussion
- 4 -Self-education
- 5 -Presentation of lecture in PowerPoint format
- 6 -Show explanatory videos
- 7 -Presentation of sources at the end of a lecture

4. Evaluation methods

- 1- The exams, experiments, and conduct seminars
- 2- Student contributions during the lecture, presentation of seminars
- 3- Rapid exams with short time (Quiz)
- 4- Quarterly exams for theoretical and practical subjects.

5. Graduation goals

Preparing graduates capable of knowing drug groups with their mechanism of work in the body plus its important side effects, as well as the most use drugs in anesthesia.

6. Teaching and learning methods

Books, manuals, practical application and use of the Internet

7. Transferable general and qualifying skills (other skills related to employability and personal development).

- 1 .Access to a greater amount of scientific sources.
- 2 .Presenting the topics recently raised globally through a presentation with everyone's participation through it.
3. Have students lead discussion circles as well as provide presentations on scientific subject topics to develop and strengthen their personalities

8. Course structure

week	Hour	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
1	4 hr.	Knowledge	Hypnotic and sedative drugs	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
2	4 hr.	Knowledge	Hypnotic and sedative drugs	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
3	4 hr.	Knowledge	Narcotics (Opioid), Analgesic	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
4	4 hr.	Knowledge	Analgesic, Antipyretic, Anti-inflammatory agents	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports

				education, open classes on Google class room	
5	4 hr.	Knowledge	Analgesic, Antipyretic, Anti-inflammatory agents	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
6	4 hr.	Knowledge	Gastrointestinal and Antiemetic drugs	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
7	4 hr.	Knowledge	Gastrointestinal and Antiemetic drugs	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
8	4 hr.	Knowledge	Drugs for Diabetes	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports

				Google class room	
9	4 hr.	Knowledge	Adrenal hormones, corticosteroids, inhibitors of adrenocorticocorticoid biosynthesis or function ,	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
10	4 hr.	Knowledge	Antimicrobial agents, cell wall inhibitors, protein synathesis inhibitors, Quinolones and folic acid antagonists	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
11	4 hr.	Knowledge	Antimicrobial agents, cell wall inhibitors, protein synathesis inhibitors, Quinolones and folic acid antagonists	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
12	4 hr.	Knowledge	Antifungal drugs, Antiviral drugs	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports

				Google class room	
13	4 hr.	Knowledge	Anti-Epileptic drugs	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
14	4 hr.	Knowledge	Anti-Parkinson drugs	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports
15	4 hr.	Knowledge	Clinical Toxicology	Lecture, use of the blackboard, and presentation (using diagrams and educational pictures using the datashow) Interactive discussion, self-education, open classes on Google class room	Theoretical, practical/oral and written exams (daily and monthly) and scientific reports

9. Reference

- 1- Essentials of Medical Pharmacology Seventh Edition KD TRIPATHI MD Ex-Director-Professor and Head of Pharmacology, 2013
- 2- MEDICAL PHARMACOLOGY & THERAPEUTICS Fifth Edition Derek G. Waller BSc (HONS), DM MBBS (HONS), FRCP, University of Southampton, Southampton, United Kingdom

Course description

Educational institution	Sawa private university
scientific department	Anesthesia
Course Title	Anesthesia equipment's
Available attendance forms	One course
Semester/year	Second/2023-2024
Number of study hours (total)	120
The date this description was prepared	13/4/2024
1. Course objectives	
❖ Introducing students to the basics of anesthesia machines and their maintenance.	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	
A- Cognitive objectives	
1- Identify the basics of how anesthesia machines work 2- Dealing with all patient monitoring devices 3- Maintaining and maintaining anesthesia and monitoring equipment 4- Knowledge of modern technologies used in anesthesia devices.	
B. Skills objectives of the course.	
B1- Knowledge of anesthesia devices and materials B2- How to use all anesthesia devices B3- Knowledge and understanding of anesthesia devices and patient monitoring devices	
3. Teaching and learning methods	
Presentation of lecture in PowerPoint format Show explanatory videos	

Presentation of sources at the end of a lecture

4. Evaluation methods

The exams. Students take exams, experiments, and conduct seminars

5. Graduation goals

Preparing graduates capable of using the anesthesia cart and various patient monitoring devices for the patient, how to maintain them, and knowing their problems and how to solve them.

6. Teaching and learning methods

Books, manuals and practical application

7. Transferable general and qualifying skills (other skills related to employability and personal development).

Students' ability to use anesthesia equipment, how to maintain it, and how to understand and read results to patients.

8. Course structure

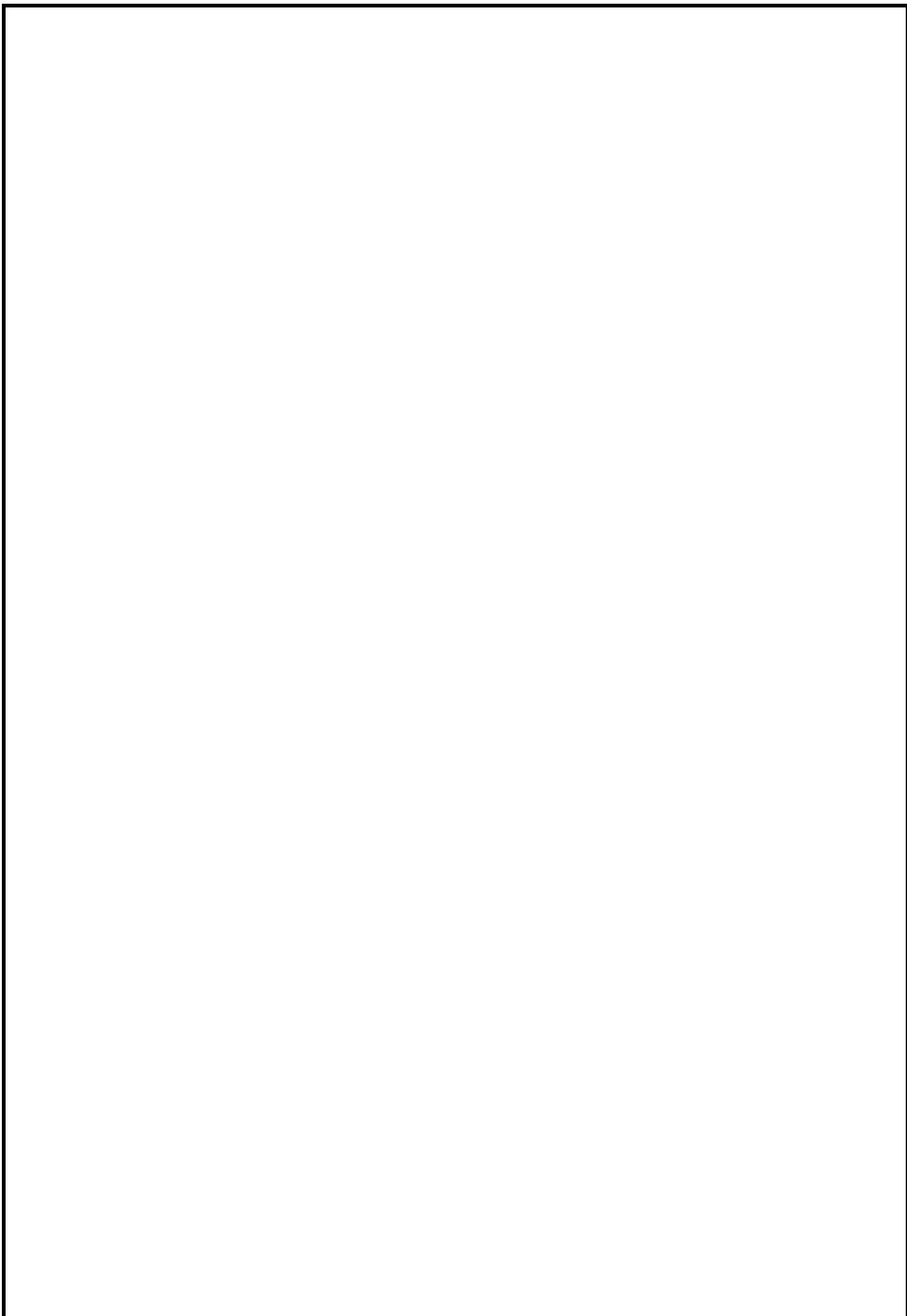
week	Hour	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
1	8	Operating room design	Knowing the design of the operating room, its distinction from other rooms, and what its advantages are	Lecture and practical lesson	Questions and answers mini practical lesson
2	8	cannula	Knowing what the parts of the cannula are, their types, how to use them, and knowing their problems	Lecture and practical lesson	Listen and ask questions
3	8	IV giving sets devices	What is a IV giving sets device, what are its types, how it works, and how to use each type	Lecture and practical lesson	Listen and ask questions

4	8	Soda lime	Get to know Lime Soda, explain its ingredients, how to package it, and explain its benefits	Lecture and practical lesson	Practical exercise, meeting and work groups
5	8	flowmeter	Identify the flow meter, explain its importance, and how to use it	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
6	8	Tracheal tubes	What is a tracheal tube, what are its types and how it works, what are its problems and how to solve them	Lecture and practical lesson	Case study Practical exercise and work
7	8	laryngoscope	Learn about laryngoscopy, its types Identify the oropharyngeal tube and explain the importance of how to use it and what its problems are and how it works	Lecture and practical lesson	Questions and answers mini practical lesson
8	8	Oropharyngeal airway	Identify the oropharyngeal tube and explain the importance of how to use it and what its problems are	Lecture and practical lesson	Case study Practical exercise and work
9	8	Laryngeal mask airway	Identify Laryngeal mask airway the and explain the importance of how to use it and what its problems are	Lecture and practical lesson	Case study Practical exercise and work
10	8	tracheostomy	Identify tracheostomy and explain the importance of how to use it and what its problems are	Lecture and practical lesson	Questions and answers mini practical lesson
11	8	Facemask	Identify Facemask and explain the importance of how to use it and what its problems are	Lecture and practical lesson	Questions and answers mini practical lesson

12	8	Breathing circuit components	Explaining what the respiratory circuit is and what its components are, explaining each part and explaining its importance	Lecture and practical lesson	Questions and answers mini practical lesson
13	8	Breathing circuit Classification	Explaining what the respiratory circuit is and its types, explaining each part and explaining its importance	Lecture and practical lesson	Questions and answers mini practical lesson
14	8	Anesthesia machine maintain	Explaining how to maintain all parts of the anesthesia machine	Lecture and practical lesson	Case study Practical exercise and work
15	8	Breathing circuit Working	Explaining the work of the respiratory circuit and the benefits of each part of it	Lecture and practical lesson	Questions and answers mini practical lesson

9. Reference

- 1- Anesthesia equipment, principle and application, Jan Ethrenwerth, MD
- 2- The MGH textbook of Anesthesia Equipment.
- 3- Miller book



Course description

Educational institution	Sawa private university
scientific department	Anesthesia
Course Title	Anesthesia equipment's
Available attendance forms	Two course
Semester/year	Second/2023-2024
Number of study hours (total)	120
The date this description was prepared	13/4/2024
1. Course objectives	
Introducing students to the basics of anesthesia machines, their maintenance, and the use of modern technologies used in them.	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	
<p>A- Cognitive objectives</p> <ol style="list-style-type: none"> 1. Identify the sources of operating room pollution and methods of treating them 2. He is able to deal with methods of sterilizing and maintaining some devices used in anesthesia. 3. He is able to know the basics of work, problems, and methods of using equipment and methods in anesthesia and the operating room, including fluid administration devices, anesthetic gas vaporizers, and pressure and flow measurement devices. 	
<p>B. Skills objectives of the course.</p> <p>B1- Knowledge of anesthesia devices and materials</p> <p>B2- How to use all anesthesia devices</p> <p>B3- Knowledge and understanding of anesthesia devices and patient monitoring devices</p>	

3. Teaching and learning methods

Presentation of lecture in PowerPoint format
Show explanatory videos
Presentation of sources at the end of a lecture

4. Evaluation methods

The exams. Students take exams, experiments, and conduct seminars

5. Graduation goals

Preparing graduates capable of using the anesthesia cart and various patient monitoring devices for the patient, how to maintain them, and knowing their problems and how to solve them.

6. Teaching and learning methods

Books, manuals and practical application

7. Transferable general and qualifying skills (other skills related to employability and personal development).

Students' ability to use anesthesia equipment, how to maintain it, and how to understand and read results to patients.

8. Course structure

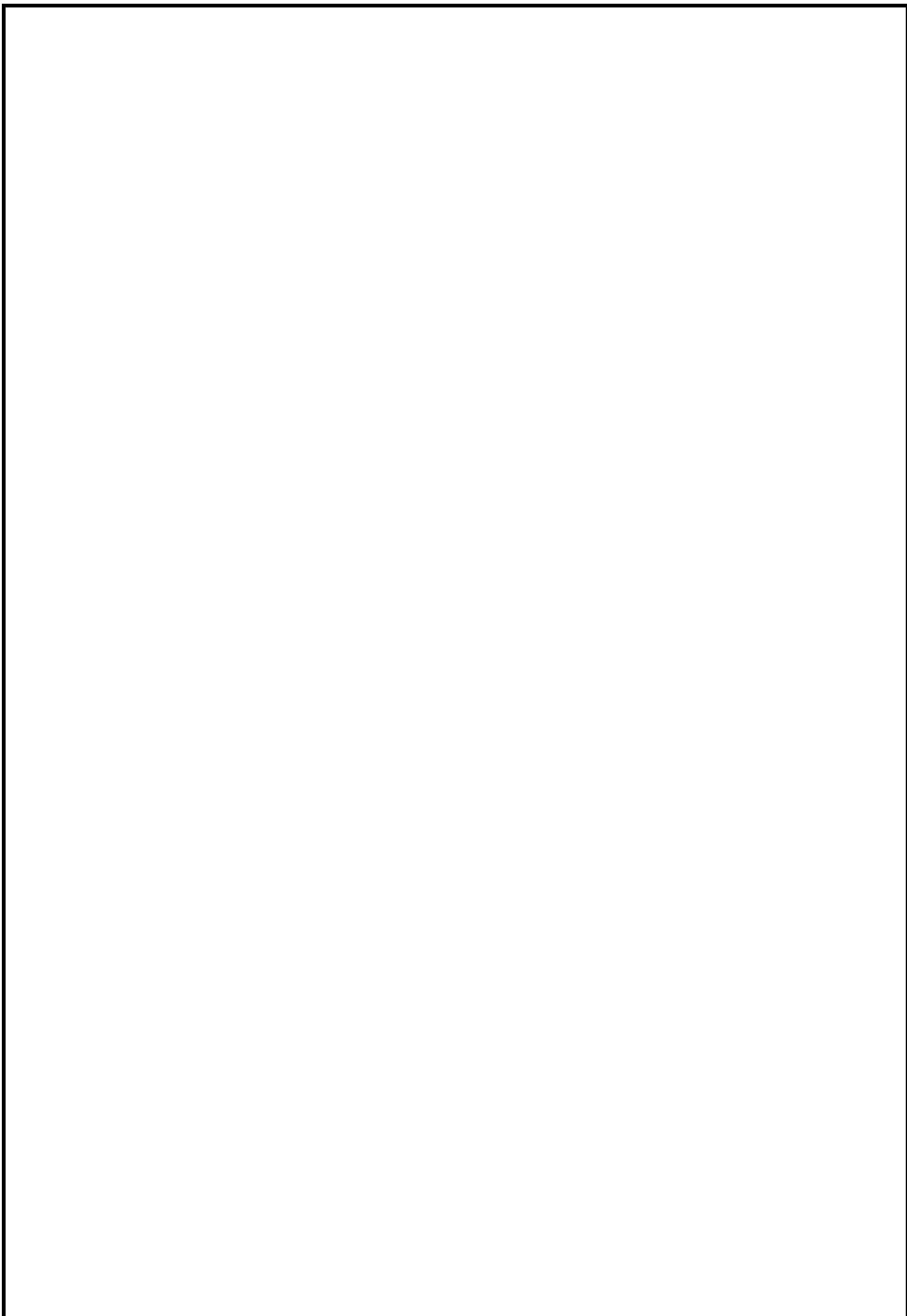
week	Hour	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
1	8	Atmospheric pollution	Knowledge of atmospheric pollution and how to get rid of it	Lecture and practical lesson	Questions and answers mini practical lesson
2	8	Scavenging system	Learn about the scavenging system, how to use it, find out its problems, and explain its benefits	Lecture and practical lesson	Listen and ask questions

3	8	Infusion equipment	What is Infusion equipment, what are its types, how it works, and how to use each type	Lecture and practical lesson	Listen and ask questions
4	8	Patient control analgesia	Get to know Patient control analgesia, explain its ingredients, how to package it, and explain its benefits	Lecture and practical lesson	Practical exercise, meeting and work groups
5	8	Medical gas cylinder	Identify the Medical gas cylinder, explain its importance, and how to use it	Lecture and practical lesson	Mini Lesson Discussion Practical Exercise and Workgroups
6	8	Piped medical gases	What is a Piped medical gases, what are its types and how it works, what are its problems and how to solve them	Lecture and practical lesson	Case study Practical exercise and work
7	8	Terminal outlet	Learn about Terminal outlet, and explain the importance of how to use it and what its problems are and how it works	Lecture and practical lesson	Questions and answers mini practical lesson
8	8	vaporizer	Identify the vaporizer and explain the importance of how to use it and what its problems are	Lecture and practical lesson	Case study Practical exercise and work
9	8	Type of vaporizer	Identify Type of vaporizer the and explain the importance of how to use it and what its problems are	Lecture and practical lesson	Case study Practical exercise and work
10	8	Filling of vaporizer	Identify Filling of vaporizer and explain the importance of how to use it and what its problems are	Lecture and practical lesson	Questions and answers mini practical lesson
11	8	Flowmeter	Identify Flowmeter and explain the importance of how to use it and what its problems are	Lecture and practical lesson	Questions and answers mini practical lesson

12	8	Pressure gauge	Explaining what the Pressure gauge is and what its components are, explaining each part and explaining its importance	Lecture and practical lesson	Questions and answers mini practical lesson
13	8	Reducing valve	Explaining what the Reducing valve and its types, explaining each part and explaining its importance	Lecture and practical lesson	Questions and answers mini practical lesson
14	8	Decontamination	Explaining how Decontamination of the anesthesia machine	Lecture and practical lesson	Case study Practical exercise and work
15	8	Sterilization	Explaining the Sterilization work of the and the benefits of each part of it	Lecture and practical lesson	Questions and answers mini practical lesson

9. Reference

- 1- Anesthesia equipment, principle and application, Jan Ethrenwerth, MD
- 2- The MGH textbook of Anesthesia Equipment.
- 3- Miller book





Ministry of Higher Education and Scientific

Research

Scientific supervision and evaluation device

Department of Quality Assurance and Academic

Academic program description form for colleges and institutes

University: Sawa National University

College: Health and Medical Technologies

Scientific Department: Anesthesia Techniques

Date of filling out the file: 10/2/2024

Check the file before

Division of Quality Assurance and University Performance

Name of the Director of the Quality Assurance and University

Performance Division:

the date

the signature

Authentication of the Dean

**Description of the academic program of the Department of
(Anesthesiology):**

This academic program description provides a necessary summary of the most important characteristics of the program and the learning outcomes that the student is expected to achieve, demonstrating whether he has made the most of the available opportunities. It is accompanied by a description of each course within the program

1. Educational institution	Sawa National University / College of Health and Medical Technologies
2. Scientific department/center	Anesthesia techniques
3. Name of the academic or professional program	
4. Name of the final certificate	Bachelor's
5. Academic system: Annual/courses/other	Other
6. The corresponding section	
7. Other external influences	

8. Date the description was prepared	10 / 2/ 2024
9. Objectives of the academic program:	

Required program outcomes and teaching, learning and evaluation methods
<p>A- Cognitive objectives</p> <p>A1 provides information in statistics.</p> <p>A2- He is provided with information that qualifies him to work in scientific circles, scientific research facilities, and state ministries.</p> <p>A3- He is provided with sufficient information that qualifies him to complete his graduate studies.</p> <p>A4- He is provided with information that helps him prepare educational lessons.</p>
<p>B - The program's skill objectives</p> <p>B1 - Provides information on how to tabulate data, frequency distribution tables, and establish correlations between different variables</p> <p>B2 - Confronting the developments imposed by the world due to the rapid change in the</p>

subject of statistics

Teaching and learning methods

The students worked in groups for the purposes of seminars in order to encourage them to self-educate, in addition to assigning students to work on projects through these groups and using statistical information to complete the work?

Evaluation methods

Theoretical and practical tests, in addition to reports and seminars

C- Emotional and value goals.

C1- Covering a large portion of the information taught in graduate studies

C2- It is provided with information that helps in achieving the connection between variables and finding results and solutions to research problems

C3- Provide him with information to help him prepare educational lessons

11. Program structure

Credit hours		Name of the course or course	Course or course code	Educational level
practical	theoretical			
1	1	Life statistics		The second /

				second course
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12. Planning for personal development

The department seeks to encourage students to use the Internet through individual research, graduation projects, and seminars

13. Admission standard (setting regulations related to admission to the college or institute)

Central admission / branch ()

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Central admission / branch ()

14. The most important sources of information about the program

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Course description form

Course description

This course description provides a summary of the most important characteristics of the course and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most of the learning opportunities available. It must be linked to the program description.

1. The educational institution,	Sawa University
2. Scientific department/center	Anesthesia techniques
3.Course name/code	Life statistics
4.Available attendance forms	Only one course
5.Semester/year	The second phase
6.Number of study hours (total)	30
7.Date this description was prepared	10/2/2024
Course objectives	
1- Introducing the student to how to classify and tabulate statistical data and benefit from it, such as creating graphical shapes or knowing the relationship of two variables, in addition to	

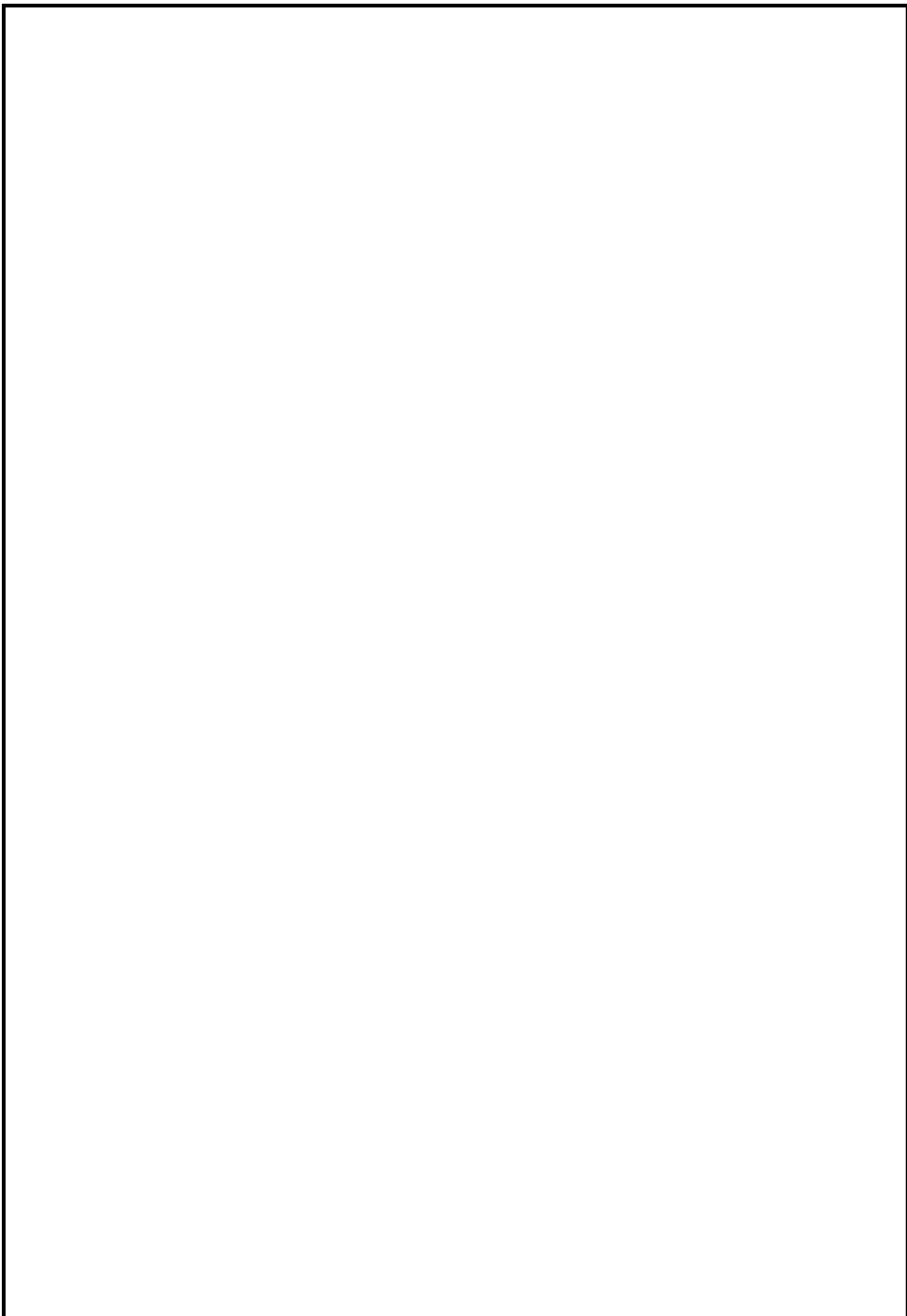
giving an accurate statistical decision about that relationship.

10. Course structure

Evaluation method	Teaching method	Name of the unit/topic	Required learning outcomes	hours	the week
the exams	Theoretical and practical	Data classification	Data classification	2	1
the exams	Theoretical and practical	Tabular display of data	Tabular display of data	2	2
the exams	Theoretical and practical	Arithmetic mean (unclassified data)	Arithmetic mean (unclassified data)	2	3
the exams	Theoretical and practical	Arithmetic mean (classified data)	Arithmetic mean (classified data)	2	4
the exams	Theoretical and practical	Mode (unclassified data)	Mode (unclassified data)	2	5
the exams	Theoretical and practical	Mode (classified data)	Mode (classified data)	2	6
the exams	Theoretical and practical	Median (unclassified data)	Median (unclassified data)	2	7
the exams	Theoretical and practical	Median (classified data)	Median (classified data)	2	8
the exams	Theoretical and practical	Intersection ratio	Intersection ratio	2	9

10. Infrastructure	
1- Required prescribed books	1- Abd al-Jalil Abd al-Wahab Abd al-Razzaq, Simplified Geographical Statistics, International Printing Press, Al-Muthanna / Samawah, Tabgha, 2016.
2- Main references (sources)	Previous source
A.Recommended books and references (scientific journals, reports,...)	Abdul Jalil Abdul Wahab Abdul Razzaq, Standards in Geographical Statistics, International Printing, Al-Muthanna / Samawah, 2019.
B - Electronic references, Internet sites...	All sites that contain mathematical formulas for statistical operations

10. Course development plan
We rely on vocabulary from the sectoral committee



Course description

Educational institution	Sawa private university
scientific department	Anesthesia
Course Title	surgery
Available attendance forms	One course
Semester/year	First/2023-2024
Number of study hours (total)	90
The date this description was prepared	17/4/2024
1. Course objectives	
<ul style="list-style-type: none"> ❖ <i>Teaching of basic general surgery like anatomy and physiology</i> ❖ <i>Teaching of principal of surgery</i> ❖ <i>Providing students the knowledge about infections and inflammations</i> ❖ Teaching of common surgical diseases such as pediatric surgery , blood disease ,gynecological disease , ulcers and fistulae ❖ Teaching the relationship between surgery and anesthesia 	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	
<p>A- Cognitive objectives</p> <p>A1- Introduction to basic and principal of surgery</p> <p>A2- Knowing how to deal with infection and how to avoid and how prevent</p> <p>A3- Students teaching how do the sterilization and how do putting on and taking off of PPE</p> <p>A4 – teaching the signs and symptoms of surgical diseases</p>	

A5 – teaching students diagnosis and treatment of surgical disease
A6 – teaching the instruments of surgery
A7- teaching the students how deal with risky patients in theater

3. Teaching and learning methods

Presentation of lecture in PowerPoint format
Show explanatory videos and pictures
Presentation of sterilization
Presentation of how putting on and taking off of PPE
Presentation of sources at the end of a lecture

4. Evaluation methods

The exams. Students take exams, experiments, and conduct seminars

5. Graduation goals

Preparing graduates capable of conducting various basic and principles
Teaching the signs and symptoms of surgical diseases

6. Teaching and learning methods

Books, manuals and practical application

7. Transferable general and qualifying skills (other skills related to employability and personal development).

Students' ability to use sterile instruments
Teaching about how to use the gown , gloves , mask , cap and face shields

8. Course structure

week	Hour	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
1	4	Metabolic response to injury	Hormonal and inflammatory changes to trauma	Theoretical	Tests
2	4	inflammation	Sign and symptoms and types of inflammation	Theoretical	Tests
3	4	shock	Types of shock, signs and symptoms of shock	Theoretical	Tests
4	4	wounds	Cause, types and management of wounds	Theoretical	Tests
5	4	Patient safety	How to save the patient from infection and to avoid complications	Theoretical	Tests
6	4	Preoperative and intraoperative care	How to prepare the patient before and after the surgery	Theoretical	Tests
7	4	Head injury	Causes, signs, types and management	Theoretical	Tests

8	4	Abscess and non-specific	Causes, routes, signs and complications of infection	Theoretical	Tests
9	4	gangrene	Causes, types, complications of gangrene	Theoretical	Tests
10	4	Fluids therapy	Types, indications and uses of fluids in surgery	Theoretical	Tests
11	4	nutrition	Types, routes, indications and complications of nutrition	Theoretical	Tests
12	4	Acid base balance	Causes, signs, symptoms, disturbance of fluids and acidity	Theoretical	Tests
13	4	Spinal injury	Causes, types, signs of spinal cord and peripheral nerve injury	Theoretical	Tests
14	4	Surgical infection	Causes, types, signs and symptoms of surgical infection	Theoretical	Tests
15	4	Principles of laparoscopic surgery	Indications, complications and advantage of laparoscopy	Theoretical	Tests
9. Reference					

Baily and loves of surgery

Clinical signs and symptoms of surgery

Pediatric surgery principles

Davidsones medical book

Course description

Educational institution	Sawa private university
scientific department	Anesthesia
Course Title	surgery
Available attendance forms	One course
Semester/year	Second/2023-2024
Number of study hours (total)	210
The date this description was prepared	9/4/2024
1. Course objectives	
<ul style="list-style-type: none">❖ <i>Teaching of basic general surgery like anatomy and physiology</i>❖ <i>Teaching of principal of surgery</i> ❖ <i>Providing students the knowledge about infections and inflammations</i> ❖ Teaching of common surgical diseases such as pediatric surgery , blood disease ,gynecological disease , ulcers and fistulae ❖ Teaching the relationship between surgery and anesthesia	
2. LEARNING OUTCOMES: By the end of this course, students will be able:	
A- Cognitive objectives	
A1- Introduction to basic and principal of surgery	
A2- Knowing how to deal with infection and how to avoid and how prevent	
A3- Students teaching how do the sterilization and how do putting on and taking off of PPE	
A4 – teaching the signs and symptoms of surgical diseases	

A5 – teaching students diagnosis and treatment of surgical disease
A6 – teaching the instruments of surgery
A7- teaching the students how deal with risky patients in theater

3. Teaching and learning methods

Presentation of lecture in PowerPoint format
Show explanatory videos and pictures
Presentation of sterilization
Presentation of how putting on and taking off of PPE
Presentation of sources at the end of a lecture

4. Evaluation methods

The exams. Students take exams, experiments, and conduct seminars

5. Graduation goals

Preparing graduates capable of conducting various basic and principles
Teaching the signs and symptoms of surgical diseases

6. Teaching and learning methods

Books, manuals and practical application

7. Transferable general and qualifying skills (other skills related to employability and personal development).

Students' ability to use sterile instruments
Teaching about how to use the gown , gloves , mask , cap and face shields

8. Course structure

week	Hour	Required learning outcomes	Name of the unit/subject	Teaching method	Evaluation method
1		Principles of pediatric surgery	Teaching about anatomy and physiology of children and how to deal with them during surgery	Theoretical	Tests
2	4	Warfare injuries	Principles of war injuries and how to deal with them in the operative room	Theoretical	Tests
3	4	Day case surgery	How to deal with surgical cases that do not need admission to hospital just for a few hours	Theoretical	Tests
4	4	Reaction of the body to injuries	Metabolic response and hormonal and inflammatory response to trauma	Theoretical	Tests
5	4	Infection of joints and bones	Causes, signs, and symptoms of bone infection How to manage the infection	Theoretical	Tests
6	4	Ulcer, sinus, and fistula	Signs, symptoms, causes, and treatment of them	Theoretical	Tests
7	4	Hereditary and congenital diseases	Types of diseases that are passed from parents to offspring due to abnormal genes and chromosomes	Theoretical	Tests

8	4	Sterile precaution and aids	Method of sterilization Putting on and taking off of PPE Materials for sterilization	Theoretical	Tests
9	4	Calcium metabolism	Storage , physiology , diseases , signs , symptoms and treatment of calcium disorder	Theoretical	Tests
10	4	coagulopathy and blood disorders	Types clotting disease and bleeding disorder How deal with them	Theoretical	Tests
11	4	Specific infections	Types signs and treatment of specific disease like TB	Theoretical	Tests
12	4	Types of bacteria	How know types of bacteria Diagnosis of these and antibiotics	Theoretical	Tests
13	4	Venous diseases	Inflammation and thrombosis and clotting of veins in surgery and anesthesia	Theoretical	Tests
14	4	Oncology	Types of cancer diseases Diagnosis and treatment	Theoretical	Tests
15	4	Abortion , C S and hysterectomy	Types , signs , symptoms and management of abortion C S and hysterectomy	Theoretical	Tests

9. Reference

Baily and loves of surgery
Clinical signs and symptoms of surgery
Pediatic surgery principles
Davidsones medical book



Sawa University	1. Educational Institution
Internal Medicine Center	2. Scientific Department
Internal Medicine Course	Name/Code Icon 3.
Daily Attendance	4. Available Attendance Forms
Year Second Semester/ 2023-2024	5. . Semester
160	6. Number of credit hours (total)\
٢٠٢٤/٣/٢٤	7. Date of preparation of this description
8. Course Objectives	
<p>1- Identify the external shape, life cycle, pathogenicity and laboratory. Diagnosis of all parasites of medical importance.</p> <p>2- Identify the epidemiology of parasites with special reference to those endemic in Iraq</p>	

9. Course Outcomes and Methods of Teaching, Learning and Assessment

A- Cognitive objectives

- 1- The main diseases and methods of treatment and prevention**
- 2- Focus on the most prevalent points of diseases in the community**
- 3- Focusing on the transmission of diseases and respiratory tract because of its importance in the specialty of anesthesia**
 - 1- 4- Presenting scenes of diseases that occur in society, such as short stature, capable of treatment with hormones if adeson or cushing disease and others**

B - Skills objectives of the course.

Knowing the outline of internal diseases that affect humans and how to deal with them correctly

Teaching and learning methods

- 1- Lecture, blackboard use and diction**
- 2- Presentation (use of educational charts and images using datacho)**
- 3- Interactive discussion**
- 4- Self-education**

Evaluation methods

- 1. Students' participation during the lecture, presenting seminars, quick exams with a short time**
- 2. Semester exams for theoretical and practical subjects.**

C. Emotional and value goals

- 1. Encourage students to solve intellectual questions.**
- 2. Conducting intellectual competitions related to the scientific material.**
- 3. Making students in a scientific and practical environment related to the subject of science**

Teaching and learning methods

Books, lieutenants and practical application

Evaluation methods

Practical and theoretical tests

d. General and rehabilitative skills transferred (other skills related to employability and personal development).

- 1. Access to more scientific sources.**
- 2. Presenting newly presented topics globally through a presentation and the participation of everyone through it.**
- 3. Making students run panel discussions as well as make progressive presentations on scientific topics to develop and enhance their personalities**

1. بنية المقرر

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	week
Theoretical, practical/oral and written exams (daily and monthly) and scientific reports	re and use board and recitation diagrams and pictures ational using (show) active discussion ducation rows on e class room	Infection disease	Knowledge	٢	١
=====	re and use board and recitation diagrams and pictures ational using (show) active discussion ducation rows on Google class room	Disease of respiratory system.	Knowledge	٢	٢
=====	re and use board and recitation diagrams and pictures ational using (show) active discussion ducation rows on Google class room	Disease of C.V.S	Knowledge	٢	٣
=====	re and use board and recitation diagrams and pictures ational using (show) active discussion ducation rows on Google class room	E.C.G	Knowledge	٢	٤
=====	re and use board and recitation diagrams and pictures ational using (show) active discussion ducation rows on Google class room	AIDS	Knowledge	٢	٥
=====	re and use board and recitation diagrams and pictures ational using	Disease of G.I.T	Knowledge	٢	٦

	(show) active discussion education rows on Google class room				
=====	re and use board and recitation diagrams and pictures ational using (show) active discussion education rows on Google class room	Kidney disease	Knowledge	٢	٧

2- Course evaluation

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

٤٠ marks for an annual endeavor (5 marks for the first monthly exam + 5 marks for the second monthly exam + 15 marks for the midterm exam) + 5 marks for daily preparation and daily exams + 15 marks for the second monthly exam(60 marks (20 marks final practical exam + 40 marks final theoretical exam)

3- Learning and teaching resources

	Required textbooks (methodology, if any)
	Main references (sources)
Harson Meckab	Recommended supporting books and references (scientific journals, reports...).
المواقع الالكترونية المتوفرة على Google Chrome	Electronic references, Internet sites

10. Infrastructure

Harson meckab	-١ Required prescribed books
Same as above	-٢ Main references (sources)
Same as above	-٣ Recommended books and references (scientific journals, reports,....)
All sites that contain the C++ programming language, with YouTube, files uploaded to the electronic classroom, and presentations uploaded to the electronic classroom, in addition to electronic interactive lessons, in addition to the electronic classroom, files	١ - ب Electronic references, Internet sites....

uploaded to the classroom, and YouTube for the subject.	
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11. Course development plan

We rely on vocabulary from the sectoral committee

Sawa University	1. Educational Institution
Internal Medicine Center	2. Scientific Department
Internal Medicine Course	Name/Code Icon 3.
Daily Attendance	4. Available Attendance Forms
Year Second Semester/ 2023-2024	5. . Semester
160	6. Number of credit hours (total)\
٢٠٢٤/٣/٢٤	7. Date of preparation of this description
8. Course Objectives	
<p>1- Identify the external shape, life cycle, pathogenicity and laboratory. Diagnosis of all parasites of medical importance.</p> <p>2- Identify the epidemiology of parasites with special reference to those endemic in Iraq</p>	

9. Course Outcomes and Methods of Teaching, Learning and Assessment
<p>A- Cognitive objectives</p> <p>1- The main diseases and methods of treatment and prevention</p> <p>2- Focus on the most prevalent points of diseases in the community</p> <p>3- Focusing on the transmission of diseases and respiratory tract because of its importance in the specialty of anesthesia</p> <p>1- 4- Presenting scenes of diseases that occur in society, such as short stature, capable of treatment with hormones if adeson or cushing disease and others</p>
<p>B - Skills objectives of the course.</p> <p>Knowing the outline of internal diseases that affect humans and how to deal with them correctly</p>

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=====	re and use board and recitation diagrams and pictures ational using (show) active discussion ducation rows on Google class room	Anemia	Knowledge	٢	٢
=====	re and use board and recitation diagrams and pictures ational using (show) active discussion ducation rows on Google class room	Disease of endocrine gland	Knowledge	٢	٣
=====	re and use board and recitation diagrams and pictures ational using (show) active discussion ducation rows on Google class room	Disease of connective tissue	Knowledge	٢	٤
=====	re and use board and recitation diagrams and pictures ational using (show) active discussion ducation rows on Google class room	hypothalams	Knowledge	٢	٥
=====	re and use board and recitation diagrams and pictures ational using	Disease of nervous system	Knowledge	٢	٦

	(show) active discussion education rows on Google class room				
=====	re and use board and recitation diagrams and pictures ational using (show) active discussion education rows on Google class room	Organ failure	Knowledge	۲	۷

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