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

Academic Program and Course Description Guide

Anesthesia Techniques Department

2025-2026

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 th course and the learning outcomes expected of the students to achieve, proving whether th 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 then and defines the program's development paths and directions.

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

Curriculum Structure: All courses / subjects included in the academic program accordir 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.

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 th program's goals. This description is very important because it is the main part of getting tl program accredited, and it is written by the teaching staff together under the supervision c 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 th 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 tl 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.

Academic Program Description Form

University Name: Al-Furat Al-Awsat Technical University

Faculty/Institute: College of Health and Medical Techniques

Scientific Department: Anesthesia Techniques

Academic or Professional Program Name: Anesthesia Techniques Final Certificate

Name: Anesthesia Techniques

Academic System: Courses

Description Preparation Date: 3/3/2026

File Completion Date: 3/3/2026

Signature:

Head of Department Name:Dr. Aqeel AbdulAdheem Jawad

Date:3 /3/2026

Signature:

Scientific Associate Name: Ahmed Fadhil Ouda

Date: 4/3/2026

The file is checked by: Assit. lec. Inas Ickdhum Alkhazraji

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date: 4/3/2026

Signature:

Approval of the Dean

1. Program Vision

To be a leading academic department in anesthesia techniques, distinguished in education, scientific research, and community service, and contributing effectively to the development of the health care system locally and regionally.

2. Program Mission

The Department of Anesthesia Techniques is dedicated to preparing highly competent and ethically responsible graduates equipped with scientific knowledge, practical skills, and critical thinking abilities in the field of anesthesia and intensive care. The department strives to enhance scientific research, support innovation, and engage in community-oriented activities to achieve sustainable health development.

3. Program Objectives

The department seeks to achieve the following goals:-

1. Prepare qualified anesthesia technologists capable of applying modern scientific knowledge and advanced practical techniques in anesthesia and intensive care.
2. Promote continuous professional development through updating curricula to align with advances in medical and technological sciences.
3. Encourage scientific research and innovation to support community health needs and contribute to sustainable development.
4. Enhance teamwork and ethical practice by fostering collaboration with medical teams and ensuring respect and compassion in patient care.
5. Develop critical decision-making skills for recognizing and managing emergencies and perioperative situations effectively.
6. Strengthen clinical training and recovery care competence to prepare graduates for professional performance in operating and recovery rooms.
7. Establish graduate-level programs to advance the education and expertise of anesthesia technologists, providing opportunities for specialized training and research. This will enable the department to cultivate a new generation of experts capable of addressing complex clinical challenges and contributing to the development of the field at both national and international levels.

4. Program Accreditation

Does the program have program accreditation? And from which agency?

NO

5. Other external influences
Is there a sponsor for the program?
Laboratories - Hospitals - Library – Internet

6 .Program Structure				
Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	45	180	100%	
College Requirements				
Department Requirements	45	180	100%	
Summer Training	2	Satisfied	100%	
Other				

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

7. Program Description				
Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	Practical
The first/first course	ATU13ANT111CE	medical physics (1)	2	4
The first/first course	ATU13ANT112CE	anatomy (1)	2	4
The first/first course	ATU13ANT113CE	General physiology (1)	2	4
The first/first course	ATU13ANT114CE	general chemistry)1)	2	4
The first/first course	ATU13ANT115CE	Biology	2	4
The first/first course	ATU13ANT116CE	Medical terminology	2	
The first/first course	ATU12	computer principles (1)	1	2

The first/first course	ATU13	Human rights and democracy	2	-
First/second course	ATU13ANT121CE	medical physics (2)	2	4
First/second course	ATU13ANT122CE	anatomy (2)	2	4
First/second course	ATU13ANT123CE	General physiology (2)	2	4
First/second course	ATU13ANT124CE	Biochemistry	2	4
First/second course	ATU13ANT125CE	Microbiology	2	4

First/second course	ATU11	Arabic	2	-
The second/first course	ATU13ANT211CE	Basics of anesthesia1	2	4
The second/first course	ATU13ANT217CE	Basics Anaesthetic equipment (1)	2	4
The second/first course	ATU13ANT212CE	Applied physiology1	2	4
The second/first course	ATU13ANT214CE	Basics of Medicine (1)	1	4
The second/first course	ATU13ANT213CE	Basics of surgery1	2	4
The second/first course	ATU13ANT215CE	Pharmacology (1)	2	2
The second/first course	ATU24	Baath Party crimes	2	-

The second/second course	ATU13ANT221CE	Basics of anesthesia2	2	4
The second/second course	ATU13ANT227CE	Basics Anaesthetic equipment (2)	2	4
The second/second course	ATU13ANT222CE	Applied physiology2	2	4
The second/second course	ATU13ANT223CE	Basics of medicine2	1	4

The second/second course	ATU13ANT225 CE	Basics of surgery2	2	4
The second/second course	ATU13ANT224 CE	Pharmacology (2)	2	2
The second/second course	ATU13ANT226 CE	Statistics	1	2
The second/second course	ATU21	Arabic	2	0
Third/first course	ATU13ANT311 CE	Anesthesia1	3	5
Third/first course	ATU13ANT312 CE	Intensive care basics1	2	5
Third/first course	ATU13ANT315 CE	Anesthesia device techniques1	2	5
Third/first course	ATU13ANT313 CE	Internal Medicine1	2	3
Third first course	ATU13ANT314 CE	Surgery1	1	3
Third/ Second course	ATU13ANT321 CE	Anesthesia2	3	5
Third/ Second course	ATU13ANT322 CE	Intensive care basics 2	2	5

Third/ Second course	ATU13ANT326 CE	Anesthesia device techniques2	2	5
Third/ Second course	ATU13ANT323 CE	Internal Medicine2	2	3
Third/ Second Course	ATU13ANT325 CE	Surgery2	1	3
Fourth/ first course	ATU13ANT411 CE	Advance Anesthesia1	2	4
Fourth/ first Course	ATU13ANT415 CE	Advance Anesthesia device Techniques1	4	2

Fourth/ first course	ATU13ANT412 CE	Intensive care Techniques1	2	4
Fourth/ first course	ATU13ANT416 CE	Professional ethics	2	0
Fourth/ first course	ATU13ANT413 CE	Surgical internal Medicine 1	2	3
Fourth/ first course	ATU13ANT414 CE	Pain medicine	2	3
Fourth/ Second Course	ATU13ANT421 CE	Advance Anesthesia2	2	4
Fourth/ Second course	ATU13ANT424 CE	Advance Anesthesia device Techniques2	2	4

Fourth/ Second course	ATU13ANT422 CE	Intensive care techniques2	2	4
Fourth/ Second course	ATU13ANT423 CE	Surgical internal Medicine 2	2	3
Fourth/ Second Course	ATU13ANT425 CE	Emergency Medicine	2	3

8. Expected learning outcomes of the program

Knowledge	
1 - Graduation of scientific cadres in the specialty 2- Operates and maintains the medical equipment used in the intensive care room and the intensive care room 3 - Enabling students to obtain knowledge, intellectual understanding, and skills to identify anesthesia devices and methods of maintaining them. 4- The student learns the skills required to deal with different cases in anesthesia and intensive care 5- The student is able to contribute to resuscitation and intervention cases as necessary.	1- The student learned how to prepare the medications and solutions required for anesthesia 2- That the student knows the basics of the required sciences 3- That the student understand the required scientific details
Skills	
1- The student should use the tools correctly	1- The student must bring the necessary materials
2- That the student applies what he has learned in practice	2- That the student performs the appropriate procedures for the situations he faces
1- Good knowledge of the principles of anesthesiology and related sciences 2- Technical ability in his field of work and monitoring the patient's vital signs during anesthesia.	1- Good knowledge of medical terminology 2- Good knowledge of the English language
Ethics	
1- Working as a team	1- Commitment to the ethics of the university institution
2- That the student recognizes the importance of the academic subjects.	2- Receiving information and cognitive receptivity

9. Teaching and Learning Strategies

1-Classroom education through theoretical and practical lectures

2-Learning through hospitals

3-Preparing scientific reports and research

10. Evaluation methods

1. Daily exams
2. Homework.
3. Semester and final exams

11. Teaching staff

Faculty members

Names	Specialization		Requirements/ Tasks Private art) that I found(		numbers The Authority The teacher	
	General flour				angel	lecturer
Asst. Prof. Dr. Aqeel Abdul-Adheem Jawad	Biology	Microbiology			/	
Asst. Prof. Dr. Zahraa Hameed Ouda	Biology	Microbiology			/	
Asst. Prof. Dr. Ahmed Adnan Abdul Ameer	Chemistry	Physical Chemistry			/	
Asst. Prof. Dr. Abu Talib Hashim Ahmed	Law	Law			/	
Asst. Prof. Dr. Khamayel Aref Mahdi	Biology	Microbiology			/	
Prof. Ahmed Rahi Abd	Biology	Genetics			/	
Lecturer Dr. Muntadhar Riyadh Lafta	Biology	Microbiology			/	
Lecturer Dr. Ahmed Adnan Abdul Hussein	Chemistry	Biochemistry			/	
Lecturer Dr. Huraa Hadi Jiyad	Physics	Physics			/	
Assistant Lecturer Haider Yahya Ahmed	Chemistry	Biochemistry			/	
Assistant Lecturer Inaam Mahdi Dawood	Physiology	Physiology			/	
Asst. Lecturer Hadeel Thaer Ahmed	Biology	Biology			/	
Asst. Lecturer Zeina Mohammed Hatem	Chemistry	Biochemistry			/	
Assistant Lecturer Zahraa Falah Abdul Ali	Pathological Analysis	Physiology			/	
Asst. Lecturer Mais Kadhim Alawi	Biology	Parasitology			/	
Asst. Lecturer Ruqayya Saad Naji	Biology	Parasitology			/	

Asst. Lecturer Haider Abdul-Munim Mohammed	Biology	Techniques			/	
Asst. Lecturer Mayada Mardan Abd	Physics	Physics			/	
Asst. Lecturer Elaf Sabeeh Jawad	Chemistry	Biochemistry			/	
Asst. Lecturer Aqeel Muslim Adel	Nursing	Nursing			/	
Asst. Lecturer Salam Razzaq Muftah	Biology	Microbiology			/	
Asst. Lecturer Rawiya Abdullah Salman	Physical Education	Physical Education			/	
Asst. Lecturer Ihsan Adnan Hashim	Biology	Microbiology			/	
Lecturer Ashwaq Kadhim Mutashar	Computer Science	Computer Science			/	
Asst. Lecturer Doaa Abdul Zahra Dali	Biology	Physiology			/	
Asst. Lecturer Zahraa Hussein Kadhim	Biology	Physiology			/	
Asst. Lecturer Saif Abdul Hussein	—	—			/	
Asst. Lecturer Sadiq Kareem Jabbar	—	—			/	
Asst. Lecturer Faisal Abdullah Abbas	—	—			/	
Asst. Lecturer Haider Ghassan Hakim	—	—			/	
Asst. Lecturer Asaad Musayyab Musayyab	Nursing	Nursing			/	
Abdul Hadi Ajeel Abdul Redha	Administration & Economics	Administration & Economics				
Doaa Alaa Hassan	Biology	Biology			/	
Osama Qasim Abdul Zaid	—	—			/	
Prof. Dr. Ali Hussein Khudhair	Anesthesia	Anesthesia				/
Dr. Basim Mohammed Jabbar	Anesthesia Techniques	Anesthesia Techniques				/
Dr. Sajjad Mohammed Maher	Anesthesia Techniques	Anesthesia Techniques				/
Dr. Mohammed Abdul Zahra Sasa	Anesthesia Techniques	Anesthesia Techniques				/
Dr. Tamim Yaqoub Ibrahim	Surgery	Surgery				/
Dr. Bahaa Hussein Mahmood	Board-Certified Anesthesiologist	Anesthesia				/

Asst. Lecturer Ali Dawood Salman	Nursing	Nursing				/
Asst. Lecturer Ali Rahim Wahab	General Medicine & Surgery	General Medicine & Surgery				/
Dr. Sabah Mreesin Dhabab	Physics	Physics				/
Asst. Lecturer Redha Dawood Abdul Redha	Medical Laboratories	Physiology				/
Asst. Lecturer Noor Madin Atheem	Physics	Physics				/
Lecturer Dr. Qasim Mohammed Hashim	Biology	Physiology & Histology				/
Asst. Lecturer Ashraf Jameel Mohsen	Pharmacy	Pharmacy				/
Lecturer Dr. Adel Abdulzahra Atiya	Nursing	Nursing				/
Asst. Lecturer Muthanna Hassan Abdul Hussein	Nursing	Nursing				/
Dunia Razzaq Hussein	Anesthesia	Anesthesia				/
Dr. Hamad Turki Numan	General Medicine & Surgery	General Medicine & Surgery				/
Ameer Jaseb Jabbar	Anesthesia	Anesthesia				/
Mohammed Qasim Abdul Hassan Jabbar	Anesthesia	Anesthesia				/
Salam Malik Kareem Abd	Anesthesia	Anesthesia				/
Hanan Hameed Shaker	Anesthesia	Anesthesia				/
Shahad Saleem Jabbar	Anesthesia	Anesthesia				/
Zaid Luay Mohammed Ali	Pharmacy	Pharmacy				/
Mohammed Hameed Raheem	General Medicine & Surgery	General Medicine & Surgery				/

Professional Development
Mentoring new faculty members
Directing new faculty members to the necessity of working on developing the scientific curriculum, methods of delivering scientific lectures, and how to deliver the scientific material to the student.
Professional development of faculty members
Working to find development ideas and working to develop scientific laboratories and the practical aspect, since the students' specialization is a scientific specialization.

12. Acceptance Criterion
1. Average for secondary studies and central admission according to the regulations of the Ministry of Higher Education and Scientific Research 2. Interview the student and determine his personal and physical qualifications.

13. The most important sources of information about the Program
1- Textbooks prescribed by the Ministry of Higher Education and Scientific Research 2- External scientific sources 3- Use of libraries and the Internet

14. Program Development Plan
The department has many methodological and research plans in order to develop the department and the scientific environment, as the department presidency, the department council, and the scientific committee work to provide all requirements for the development of the department.

Program Skills Outline														
				Required program Learning outcomes										
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics		
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
2025-2026 The first stage The first course	ATU13ANT111CE	medical physics (I)	Basic	√	√	√	√	√	√	√	√	√	√	√	
	ATU13ANT112CE	anatomy (I)	Basic	√	√	√	√	√	√	√	√	√		√	√
	ATU13ANT113CE	General physiology (I)	Basic	√	√	√	√	√	√	√	√		√	√	√
	ATU13ANT114CE	general chemistry)1)	Basic	√	√	√	√	√	√	√	√		√	√	√
	ATU13ANT115CE	Biology	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT116CE	Medical terminology	Optional	√	√	√	√	√				√	√	√	
	ATU12	computer principles (1)	Optional	√	√	√	√	√	√	√	√				

	ATU13	Human rights and democracy	Optional	√	√	√	√					√	√	√	√	
2025-2026 The first stage The second course	ATU13ANT121CE	medical physics (2)	Basic	√	√	√	√	√	√	√	√	√	√	√		
	ATU13ANT122CE	anatomy (2)	Basic	√	√	√	√	√	√	√	√		√		√	
	ATU13ANT123CE	General physiology (2)	Basic	√	√	√	√	√	√	√	√	√	√			
	ATU13ANT124CE	Biochemistry	Basic	√	√	√	√	√	√	√		√	√		√	
	ATU13ANT125CE	Microbiology		√	√	√	√	√	√	√	√	√	√	√		
	ATU11	Arabic	Optional	√	√	√	√		√	√	√	√	√	√	√	
2025-2026	ATU13ANT211CE	Basics of anesthesia1	Basic	√	√	√	√	√	√	√	√	√	√	√	√	

The second stage The first course	ATU13ANT217CE	Basics Anaesthetic equipment (1)	Basic	√	√	√	√	√	√	√	√	√	√	√		
	ATU13ANT212CE	Applied physiology1	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT214CE	Basics of Medicine (1)	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT213CE	Basics of surgery1	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT215CE	Pharmacology (1)	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU24	Baath Party crimes	Optional	√	√	√	√	√	√	√	√	√	√	√	√	√
2025-2026 The second phase	ATU13ANT221CE	Basics of anesthesia2	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√
The second course	ATU13ANT227CE	Basics Anaesthetic equipment (2)	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√

	ATU13ANT222CE	Applied physiology2	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT223CE	Basics of medicine2	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT225CE	Basics of surgery2	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT224CE	Pharmacology (2)	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT226CE	Statistics	optional	√	√	√	√	√	√	√	√		√			
	ATU21	Arabic	optional	√	√	√	√	√			√	√	√	√	√	
2025-2026 third stage (First course)	ATU13ANT311CE	Anesthesia1	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT312CE	Intensive care basics1	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT315CE	Anesthesia device techniques1	Basic	√	√	√	√	√	√	√	√		√	√		
	ATU13ANT313CE	Internal Medicine1	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√

	ATU13ANT3 14CE	Surgery1	Basic	√	√	√	√	√	√	√	√	√	√	√	√
2025-2026 third stage (second course)	ATU13ANT3 21CE	Anesthesia2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT3 22CE	Intensive care basics 2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT3 26CE	Anesthesia device techniques2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT3 23CE	Internal Medicine2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT3 25CE	Surgery2	Basic	√	√	√	√	√	√	√	√	√	√	√	√
2025-2026 The fourth Stage (first course)	ATU13ANT4 11CE	Advance Anesthesia1	Basic	√	√	√	√	√	√	√	√		√	√	√
	ATU13ANT4 15CE	Advance Anesthesia device Techniques1	Basic	√	√	√	√	√	√	√	√	√	√	√	√

	ATU13ANT 412CE	Intensive care Techniques1	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT 416CE	Professional ethics	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT 413CE	Surgical internal Medicine 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√	√
2025-2026 The fourth Stage (second course)	ATU13ANT 414CE	Pain medicine	Basic	√	√	√	√	√	√	√	√	√		√	√	√	√
	ATU13ANT 421CE	Advance Anesthesia2	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT 424CE	Advance Anesthesia device Techniques2	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT 423CE	Surgical internal medicine	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√	√
	ATU13ANT 425CE	Emergency Medicine	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√	√

First Stage

Course description form

1. Course Name	
Medical physics1	
2. Course Code	
ATU13ANT111CE	
3. Semester/year	
the first /2025-2026	
4. Date this description was prepared	
8 /10/2024	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
90 hours – 4 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Dr. Sabah Marisen Dhabab Ubaid	
8. Course objectives	
Identifying the physical phenomena of the five chapters that the course deals with and linking them to the medical phenomena that the student needs that he observes during his practical life. Such as blood flow, a device that reads the heart or brain rate, the temperature of the human body, and pressures	Objectives of the study subject
9. Teaching and learning strategies	
Theoretical and practical laboratory methods, hospitals, lectures, photo and video illustrations, three-dimensional models, and open discussion method.	The strate

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Physics of skeleton, pressure	Understand the lecture	2- Theoretical 4- Practical	1-2
Actual theoretical tests - practical tests in laboratories	Lecture given and practical application in the laboratory	Energy, work and power of the body	Understand the lecture	2- Theoretical 4- Practical	3-5
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Heat and cold in medicine	Understand the lecture	2- Theoretical 4- Practical	6-7
Actual theoretical tests - practical	Lecture given	Specific heat,	Understand the lecture	2- Theoretical	8-9

tests in laboratories	Practical application in the laboratory	heat capacity, latent heat, thermometer and it's kinds, heat transfer by conduction, convection and radiation. Regulation of heat through the human body.		4- Practical	
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Boyle's law, diffusion and mixing of gases.	Understand the lecture	2- Theoretical 4- Practical	10
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Physics of lung and breathing	Understand the lecture	2- Theoretical 4- Practical	11-13
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Evaporation of liquids, vapor pressure and boiling point, humidity, laminar and trubulant flow in liquid.	Understand the lecture	2- Theoretical 4- Practical	14-15

11. Course evaluation

the audience
Share
Peer evaluation
Weekly reports

12. Learning and teaching resources

Medical Physics. 12th ed., Sylvia et al., 2012. Essential of Medical Physics. 3rd ed., Albert Barry et al.,2010.	Main references (sources)
Scientific journals	Recommended supporting books and references (scientific journals, reports....)
Medical website	Electronic references, Internet sites

Course description form

1. Course Name
Anatomy1
2. Course Code
ATU13ANT112CE
3. Semester/year
the first /2025-2026
4. Date this description was prepared
2/10/2025
5. Available attendance forms
My presence
6. Number of study hours (total)/number of units (total)
90 hours – 4 credits
7. Name of the course administrator (if more than one name is mentioned)
Name: Dr. Qasim Mohammed Hashim
8. Course objectives

Introducing the student to the body's organs and tissues. Identify the parts that make up each organ Identify the tissues that make up each organ Identify the specialized functions of organs and tissues	**Objectives of the study subject**
9. Teaching and learning strategies	
Theoretical and practical laboratory methods, hospitals, lectures, photo and video illustrations, three-dimensional models, and open discuss method.	**The strategy**

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Introduction, Anatomical terms.	Understand the lecture	2- Theoretical 2- Practical	1.
Actual theoretical tests - practical tests in laboratories	Lecture given and practical application in the laboratory	Body cavities and its organs.	Understand the lecture	2- Theoretical 2- Practical	2.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Superficial anatomy of human body.	Understand the lecture	2- Theoretical 2- Practical	3.
Actual theoretical tests - practical tests	Lecture given Practical application in	Human body tissues; types and characteristics.	Understand the lecture	2- Theoretical 2- Practical	4.

in laboratories	the laboratory				
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Skin anatomy and its functions skin color.	Understand the lecture	2- Theoretical 2- Practical	5.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	General skeletal stricture (Skull, limbs).	Understand the lecture	2- Theoretical 2- Practical	6.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Vertebral column stricture, numbers and its function.	Understand the lecture	2- Theoretical 2- Practical	7.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Diaphragm and abdominal wall muscles.	Understand the lecture	2- Theoretical 2- Practical	8.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Anatomy of heart, wall, valve and its function	Understand the lecture	2- Theoretical 2- Practical	9.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Structure of blood vessels wall arteries, veins and capillaries.	Understand the lecture	2- Theoretical 2- Practical	10.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Lymphatic system – lymph glands	Understand the lecture	2- Theoretical 2- Practical	11.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Respiratory system – upper respiratory tract.	Understand the lecture	2- Theoretical 2- Practical	12.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Respiratory system- lover respiratory tract.	Understand the lecture	2- Theoretical 2- Practical	13.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Alveoli-lungs-pleural activity.	Understand the lecture	2- Theoretical 2- Practical	14.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Revision	Understand the lecture	2- Theoretical 2- Practical	15.
11. Course evaluation					
the audience Share Peer evaluation Weekly reports					

12. Learning and teaching resources	
Clinical anatomy. 11th ed., Richard. snell, 2014.	Main references (sources)
-Nature -Science E. book and websites	Recommended supporting books and references (scientific journals, reports....)
Medical website	Electronic references, Internet sites

Course description form

1. Course Name

Medical physiology1

2. Course Code

ATU13ANT113CE

3. Semester/year

the first /2025-2026

4. Date this description was prepared

10/10/2025

5. Available attendance forms

My presence

6. Number of study hours (total)/number of units (total)

90 hours – 4 credits

7. Name of the course administrator (if more than one name is mentioned)

Name: Professor Dr. Hassan Ali Farman

8. Course objectives

At the end of the academic year, the student will be able to understand the functions of the various cells and systems the body in general and perform various techniques for analyzing blood and other body fluids.	Objectives of the study subject

9. Teaching and learning strategies

Theoretical and practical laboratory methods, hospitals, lectures, photo and video illustrations, three-dimensional models, and open discussion method.	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Definition of physiology; cell physiology; cell membrane components and structure.	Understand the lecture	2-Theoretical 2- Practical	1.
Actual theoretical tests - practical tests in laboratories	Lecture given and practical application in the laboratory	Movement of fluid, solutes and gases across the cell membrane.	Understand the lecture	2- Theoretical 2- Practical	2.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Muscular tissues: types & characteristics.	Understand the lecture	2- Theoretical 2- Practical	3.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Contraction mechanism, fatigue, muscular pain	Understand the lecture	2- Theoretical 2- Practical	4.
Actual theoretical tests - practical tests	Lecture given Practical application in	Types of nerve cells, functions of nerve impulse, synapses and	Understand the lecture	2- Theoretical 2- Practical	5.

in laboratories	the laboratory	reflexes			
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Action potential of nerve and muscle fiber.	Understand the lecture	2- Theoretical 2- Practical	6.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Blood; functions, component, plasma and serum	Understand the lecture	2- Theoretical 2- Practical	7.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Red blood cells, shape, origin, Hb structure and anemia	Understand the lecture	2- Theoretical 2- Practical	8.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	WBCs, platelets ; functions, origin, structure	Understand the lecture	2- Theoretical 2- Practical	9.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Blood clotting mechanism	Understand the lecture	2- Theoretical 2- Practical	10.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Cardiovascular system, heart valve cycle, HR conductive system.	Understand the lecture	2- Theoretical 2- Practical	11.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Heart sounds and murmers, ECG	Understand the lecture	2- Theoretical 2- Practical	12.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Blood pressure	Understand the lecture	2- Theoretical 2- Practical	13.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Respiratory system, Pleura, Types of mechanism of respiration.	Understand the lecture	2- Theoretical 2- Practical	14.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Oxygen Transport and exchange	Understand the lecture	2- Theoretical 2- Practical	15.

11. Course evaluation

the audience
Share
Peer evaluation
Weekly reports

12. Learning and teaching resources

Williams. (2012).Textbook of humanendocrinology(12th ed). Philadelphia:Elsevier/Saunders., pp.1371-1435 Gyton AC(1996).Introduction toEndocrinology in Text Book of MedicalPhysiology.(9thed),WB Saunders Co.Philadelphia. ,P.925	Main references (sources)
-Nature -Science	Recommended supporting books and references (scientific journals, reports....)

E. book and websites	
Medical website	**Electronic references, Internet sites**

Course description form

1. Course Name	
General chemistry1	
2. Course Code	
ATU1JANT114CE	
3. Semester/year	
the first /2025-2026	
4. Date this description was prepared	
12/10/2025	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
90 hours – 4 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Ahmed Adnan Abdulhussein Lafta	
8. Course objectives	
General objective: At the end of the current academ year, the student will be able to: – Perform various techniques of descriptive and quantitative analyzes components in blood and other body fluids in huma in states of health and illness.	Objectives of the study subject
9. Teaching and learning strategies	
Theoretical and practical laboratory methods, hospitals, lectures, photo and video illustrations, three-dimensional models, and open discussion method.	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Scope of biochemistry in health and disease, cell and cell components.	Understand the lecture	2- Theoretical 2- Practical	1.
Actual theoretical tests - practical tests in laboratories	Lecture given and practical application in the laboratory	Some aspects of physical chemistry, Gas laws, Boyle's law, Graham's Law of diffusion, Dalton's Law of partial pressure, General gas equation, the international system of units.	Understand the lecture	2- Theoretical 2- Practical	2.
Actual theoretical tests -	Lecture given Practical	Radio activity and radioactive isotopes.	Understand the lecture	2- Theoretical 2- Practical	3.

practical tests in laboratories	application in the laboratory				
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Solutions and methods of expressing colloidal solution concentrations.	Understand the lecture	2- Theoretical 2- Practical	4.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	The PH concept, acid-base balance, chemical balance, common ion effect.	Understand the lecture	2- Theoretical 2- Practical	5.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Buffer and buffer systems of physiological importance in living systems.	Understand the lecture	2- Theoretical 2- Practical	6.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Blood, blood components, body fluids, regulation of blood Ph and body fluids.	Understand the lecture	2- Theoretical 2- Practical	7.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Water and electrolyte balance – osmotic pressure of body fluids, control of total electrolytes and body fluids.	Understand the lecture	2- Theoretical 2- Practical	8.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Carbohydrate classification reactions, main carbohydrates in the human body.	Understand the lecture	2- Theoretical 2- Practical	9.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Metabolism of carbohydrates, blood glucose factors controlling glucose level in blood.	Understand the lecture	2- Theoretical 2- Practical	10.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Glucose abnormalities, diabetes mellitus, ketosis, glycosuria, glucose tolerance curve.	Understand the lecture	2- Theoretical 2- Practical	11.
Actual theoretical tests - practical tests in	Lecture given Practical application in the	Lipids, classification, derived lipids, compound, lipids.	Understand the lecture	2- Theoretical 2- Practical	12.

laboratories	laboratory				
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Lipid metabolism, lipid abnormalities.	Understand the lecture	2- Theoretical 2- Practical	13.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Lipid metabolism, lipid abnormalities.	Understand the lecture	2- Theoretical 2- Practical	14.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Nucleic acids and their Expression, DNA Replication, Nutation, RNA Topology.	Understand the lecture	2- Theoretical 2- Practical	15.

11. Course evaluation

the audience
Share
Peer evaluation
Weekly reports

12. Learning and teaching resources

Williams. (2012).Textbook of humanendocrinology(12th ed). Philadelphia:Elsevier/Saunders., pp.1371-1435 Gyton AC(1996).Introduction toEndocrinology in Text Book of MedicalPhysiology.(9thed),WB Saunders Co.Philadelphia. ,P.925	Main references (sources)
-Nature -Science E. book and websites	Recommended supporting books and references (scientific journals, reports....)
Medical website	Electronic references, Internet sites

Course description form

1. Course Name	
Biology	
2. Course Code	
ATU13ANT115CE	
3. Semester/year	
the first /2025-2026	
4. Date this description was prepared	
11/29/2025	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
90 hours – 4 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Enam Mahdi Dawoud	
8. Course objectives	
At the end of the academic year, the student should be able to: - Identify the cell and its structure, describe bacteria and parasites, and explain the immune mechanism of the cell against pathogenic organisms.	**Objectives of the study subject**
9. Teaching and learning strategies	
Theoretical and practical laboratory methods, lectures, photographic and video illustration three-dimensional models, and open discussion method	**The strateg**

).Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	**Lecture given Practical application in the laboratory**	Introduction to biology, the cells, prokaryotic and eukaryotic cells, animal and plant cells	**Understand the lecture**	**2-Theoretical 2- Practical**	**1**
Actual theoretical tests - practical tests in laboratories	**Lecture given and practical application in the laboratory**	The structure of cells, types, shape and size	**Understand the lecture**	**2-Theoretical 2- Practical**	**2-3**
Actual theoretical tests - practical tests in	**Lecture given Practical application**	Movement in and out of cells: diffusion, osmosis, active transport.	**Understand the lecture**	**2-Theoretical 2- Practical**	**4-5**

laboratories	in the laboratory				
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Cell division: Amitosis, Mitosis and Meiosis	Understand the lecture	2-Theoretical 2- Practical	6
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Nucleic acid: DNA and RNA, DNA Replication	Understand the lecture	2-Theoretical 2- Practical	7-8
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Protein biosynthesis	Understand the lecture	2-Theoretical 2- Practical	9
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Human body tissues: Epithelial tissues	Understand the lecture	2-Theoretical 2- Practical	10-11
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Muscular and nervous tissues	Understand the lecture	2-Theoretical 2- Practical	12-13
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Connective tissues: Bone and cartilage	Understand the lecture	2-Theoretical 2- Practical	14
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Blood (RBC and WBC) and lymph	Understand the lecture	2-Theoretical 2- Practical	15

11. Course evaluation

the audience
Share
Peer evaluation
Weekly reports

12. Learning and teaching resources

1- Human Biology. 12th ed., Sylvia et al., 2012	Main references (sources)

2- Review Of Medical Microbiology And Immunology. by Warren Levinson. **1- Essential of Cell Biology. 3rd ed., Albert Barry et al.,2010.**	
-Nature **-Science** **E. book and websites**	**Recommended supporting books and references (scientific journals, reports....)**
Medical website	**Electronic references, Internet sites**

Course description form

1. Course Name	
Medical terms	
2. Course Code	
ATU13ANT216CE	
3. Semester/year	
the first /2025-2026	
4. Date this description was prepared	
19/11/2025	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
30 hours – 2 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: A.L. Mais Kadhim Alawi Houshan	
8. Course objectives	
At the end of the academic year, the student will be able to distinguish the roots, suffixes, prefixes, and word endings of medical terms	Objectives of the study subject
9. Teaching and learning strategies	
Lectures, library, internet	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual presence theory tests -	Theoretical subject	Introduction–structural analysis- Basic rules of medical word building	Understand the lecture	2- Theoretical	1
Actual presence theory tests -	Theoretical subject	Major suffixes- suffixes denoting a state or condition	Understand the lecture	2- Theoretical	2
Actual presence theory tests -	Theoretical subject	Major suffixes-suffixes denoting medical actions	Understand the lecture	2- Theoretical	3
Actual presence theory tests -	Theoretical subject	Prefixes- prefixes of direction & position	Understand the lecture	2- Theoretical	4
Actual presence theory tests -	Theoretical subject	Prefixes- prefixes of size, time & place	Understand the lecture	2- Theoretical	5
Actual presence theory tests -	Theoretical subject	Prefixes- prefixes of size, time & place	Understand the lecture	2- Theoretical	6
Actual presence	Theoretical subject	Prefixes- prefixes of negation	Understand the lecture	2- Theoretical	7

theory tests -					
Actual presence theory tests -	Theoretical subject	Prefixes- prefixes of type	Understand the lecture	2- Theoretical	8
Actual presence theory tests -	Theoretical subject	Roots	Understand the lecture	2- Theoretical	9
Actual presence theory tests -	Theoretical subject	Roots	Understand the lecture	2- Theoretical	10
Actual presence theory tests -	Theoretical subject	Conditions	Understand the lecture	2- Theoretical	11
Actual presence theory tests -	Theoretical subject	The body as a whole	Understand the lecture	2- Theoretical	12
Actual presence theory tests -	Theoretical subject	Skin & its appendages	Understand the lecture	2- Theoretical	13
Actual presence theory tests -	Theoretical subject	Gastrointestinal Tract	Understand the lecture	2- Theoretical	14
Actual presence theory tests -	Theoretical subject	Respiratory system	Understand the lecture	2- Theoretical	15

11. Course evaluation

Exams, writing and presenting reports and research, scientific discussions, attendance and daily activities

12. Learning and teaching resources

Dzuganova, B. (2002): A brief outline of the development of medical English. Bratisl Ready; 103 (6): 223-227.	**Required textbooks (methodolog if any)**
Histology. A Text and Atlas. 6th ed., Michael H. Ross, et al., 2011. 2. Essential of Cell Biology. 3rd ed., Albert Bary et al., 2010. Andrews, E. (1947): A History of Scientific English. The Story of its Evolution Based on a Study of Biomedical Terminology. Richard R. Smith. New York	**Main references (sources)**
Scientific journals	**Recommended supporting books and references (scientific journals, reports....)**
Internet sites and electronic library	**Electronic references, Internet sites**

Course description form

1. Course Name	
Human rights and democracy	
2. Course Code	
ATU13	
3. Semester/year	
the first /2025-2026	
4. Date this description was prepared	
12/1/2026	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
30 hours – 2 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Assistant Professor Dr. Waseem Jabbar Ibrahim	
8. Course objectives	
Identifying the historical stages through which human rights have passed through religious and legal legislation Understanding the concept of personal and public freedoms in accordance with religious laws, constitutions and laws. Understanding equality based on gender, belief and race. Understanding the concepts of democracy	Objectives of the study subject
9. Teaching and learning strategies	
Theoretical and practical laboratory methods, lectures, photographic and video illustrations, three-dimensional models, and open discussion method	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual presence theory tests	Lecture given	Human rights, their definition, and the introduction to human rights in ancient civilizations, especially the civilization of the Arfida Valley, human rights in divine laws, with a focus on human rights in Islam.	Understand the lecture	2- Theoretical	1
Actual presence theory tests	Lecture given	Human rights in contemporary and modern history: international recognition of human rights since World War I. United Nations. Regional recognition of human rights: the European Convention on Human	Understand the lecture	2- Theoretical	2

		Rights,*1950 American Convention on Human Rights, 1969 African Charter on Human Rights, 1981 Arab Charter on Human Rights. 1994 Non-governmental organizations and human rights (International Committee of the Red Cross, Amnesty International, Human Rights Watch, National Human Rights Organizations*			
Actual presence theory tests	Lecture given	Human rights in ethnic constitutions between theory and reality The relationship between human rights and public freedoms: *-1 In the Universal Declaration of Human Rights - 2 in regional charters and national constitutions*	Understand the lecture	2- Theoretical	3
Actual presence theory tests	Lecture given	Economic, social and cultural human rights, civil human rights and modern human rights: facts in development, the right to a clean environment, the right to solidarity, the right to religion.	Understand the lecture	2- Theoretical	4
Actual presence theory tests	Lecture given	Guarantees to respect and protect human rights at the national level, guarantees in the constitution and laws, guarantees in the principle of the rule of law. Guarantees in constitutional oversight, guarantees in freedom of the press and public opinion, the role of non-governmental organizations in respecting and protecting human rights. Guarantees, respect and protection of human rights at the international level: - The role of the United Nations and its specialized agencies in providing	Understand the lecture	2- Theoretical	5

		guarantees - The role of regional organizations (the Arab League, The European Union, the African Union, the Organization of American States, and the ASEAN Organization.) The role of international, regional, non-governmental organizations and public opinion in respecting, respecting and protecting human rights			
Actual presence theory tests	Lecture given	The general theory of freedoms: the origin of rights and freedoms, the project's position on declared rights and freedoms, the use of the term public freedoms. The legal basis for the state of law.	Understand the lecture	2- Theoretical	6
Actual presence theory tests	Lecture given	Regulation of public freedoms by public authorities. Equality: the historical development of the concept of equality. The modern development of the idea of equality - equality between the sexes. - Equality between individuals according to their beliefs and race	Understand the lecture	2- Theoretical	7
Actual presence theory tests	Lecture given	Democracy - its definition - its types, concepts of democracy	Understand the lecture	2- Theoretical	8
Actual presence theory tests	Lecture given	Democracy in the Third World, democratic systems in the world	Understand the lecture	2- Theoretical	9
Actual presence theory tests	Lecture given	The concept of freedoms, classification of public freedoms, basic freedom, intellectual freedoms, economic and social freedoms	Understand the lecture	2- Theoretical	10
Actual presence theory tests	Lecture given	Freedom of security and feeling of reassurance, freedom of coming and going, freedom of education, freedom of the press, freedom of assembly	Understand the lecture	2- Theoretical	11

Actual presence theory tests	Lecture given	Freedom of association, freedom of work, right to own property	Understand the lecture	2- Theoretical	12
Actual presence theory tests	Lecture given	Freedom of trade and industry, freedom of women	Understand the lecture	2- Theoretical	13
Actual presence theory tests	Lecture given	Political parties and public freedoms, scientific and technical progress and public freedoms	Understand the lecture	2- Theoretical	14
Actual presence theory tests	Lecture given	The future of public freedoms	Understand the lecture	2- Theoretical	15

11. Course evaluation

the audience
Share
Peer evaluation
Weekly reports

12. Learning and teaching resources

Riyad Aziz Hadi, Human Rights, Its Development and Implications, Al-Atak Company, Cairo,2013	**Main references (sources)**
Human Rights Watch	**Recommended supporting books and references (scientific journals, reports....)**

Course description form

1. Course Name

Medical physics2

2. Course Code

ATU13ANT121CE

3. Semester/year

the second /2025-2026

4. Date this description was prepared

4 /1/2026

5. Available attendance forms

presence

6. Number of study hours (total)/number of units (total)

90 hours – 4 credits

7. Name of the course administrator (if more than one name is mentioned)

Name: Dr. Sabah Marisen Dhabab Ubaid

8. Course objectives

Identifying the physical phenomena of the five chapters that the course deals with and linking them to the medical phenomena that the student needs that he observes during his practical life. Such as blood flow, a device that reads the heart or brain rate, the temperature of the human body, and pressures	Objectives of the study subject

9. Teaching and learning strategies

Theoretical and practical laboratory methods, hospitals, lectures, photo and video illustrations, three-dimensional models, and open discussion method.	The strategy

).Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Physics of skeleton, pressure	Understand the lecture	2- Theoretical 4- Practical	1-2
Actual theoretical tests - practical tests in laboratories	Lecture given and practical application in the laboratory	Energy, work and power of the body	Understand the lecture	2- Theoretical 4- Practical	3-5
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Heat and cold in medicine	Understand the lecture	2- Theoretical 4- Practical	6-7
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Specific heat, heat capacity, latent heat, thermometer and it's kinds, heat transfer by conduction, convection and radiation. Regulation of heat through the	Understand the lecture	2- Theoretical 4- Practical	8-9

		human body.			
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Boyle's law, diffusion and mixing of gases.	Understand the lecture	2- Theoretical 4- Practical	10
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Physics of lung and breathing	Understand the lecture	2- Theoretical 4- Practical	11-13
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Evaporation of liquids, vapor pressure and boiling point, humidity, laminar and trubulant flow in liquid.	Understand the lecture	2- Theoretical 4- Practical	14-15

11. Course evaluation

the audience
Share
Peer evaluation
Weekly reports

12. Learning and teaching resources

Medical Physics. 12th ed., Sylvia et al., 2012. Essential of Medical Physics. 3rd ed., Albert Barry et al.,2010.	Main references (sources)
Scientific journals	Recommended supporting books and references (scientific journals, reports....)
Medical website	Electronic references, Internet sites

Course description form

1. Course Name

Anatomy-2

2. Course Code

ATU13ANT122CE

3. Semester/year

the first /2025-2026

4. Date this description was prepared

2/20/2026

5. Available attendance forms

presence

6. Number of study hours (total)/number of units (total)

90 hours – 4 credits

7. Name of the course administrator (if more than one name is mentioned)

Name: Dr. Qasim Mohammed Hashim

8. Course objectives

Introducing the student to the body's organs and tissues. Identify the parts that make up each organ Identify the tissues that make up each organ Identify the specialized functions of organs and tissues	Objectives of the study subject

9. Teaching and learning strategies

Theoretical and practical laboratory methods, hospitals, lectures, photo and video illustrations, three-dimensional models, and open discussion method.	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Revision	Understand the lecture	2- Theoretical 2- Practical	1.
Actual theoretical tests - practical tests in laboratories	Lecture given and practical application in the laboratory	CNS structures and functions	Understand the lecture	2- Theoretical 2- Practical	2.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	PNS, spinal nerves	Understand the lecture	2- Theoretical 2- Practical	3.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Sensory and motor nerves	Understand the lecture	2- Theoretical 2- Practical	4.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	GIT system, parts & structure of wall stomach	Understand the lecture	2- Theoretical 2- Practical	5.

Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Salivary glands system, pancreas & gallbladder	Understand the lecture	2- Theoretical 2- Practical	6.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	live anatomy, structure and function	Understand the lecture	2- Theoretical 2- Practical	7.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Urinary system, kidney, ureter, bladder and urethra	Understand the lecture	2- Theoretical 2- Practical	8.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Reproductive system, male genitalia	Understand the lecture	2- Theoretical 2- Practical	9.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Female reproductive organ	Understand the lecture	2- Theoretical 2- Practical	10.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Endocrine glands, anatomy and function	Understand the lecture	2- Theoretical 2- Practical	11.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Endocrine glands, anatomy and function	Understand the lecture	2- Theoretical 2- Practical	12.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Ear anatomy	Understand the lecture	2- Theoretical 2- Practical	13.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Ear function	Understand the lecture	2- Theoretical 2- Practical	14.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Revision	Understand the lecture	2- Theoretical 2- Practical	15.

11. Course evaluation
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12. Learning and teaching resources	
Clinical anatomy. 11th ed., Richard. snell, 2014.	Main references (sources)
-Nature -Science E. book and websites	Recommended supporting books and references (scientific journals, reports....)
Medical website	Electronic references, Internet sites

Course description form

1. Course Name	
Medical physiology-2	
2. Course Code	
ATU13ANT123CE	
3. Semester/year	
the second /2025-2026	
4. Date this description was prepared	
10/1/2026	
5. Available attendance forms	
presence	
6. Number of study hours (total)/number of units (total)	
90 hours – 4 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Professor Dr. Hassan Ali Farman	
8. Course objectives	
At the end of the academic year, the student will be at to understand the functions of the various cells and systems of the body in general and perform various techniques for analyzing blood and other body fluids.	**Objectives of the study subject**
9. Teaching and learning strategies	
Theoretical and practical laboratory methods, hospitals, lectures, photo and vide illustrations, three-dimensional models, and open discussion method.	**The strategy**

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Carbon dioxide transporting and exchange	Understand the lecture	2- Theoretical 2- Practical	1.
Actual theoretical tests - practical tests in laboratories	Lecture given and practical application in the laboratory	Lung vol. and capacity, types and hypoxia	Understand the lecture	2- Theoretical 2- Practical	2.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the	Physiology of digestive system, gastric phases	Understand the lecture	2- Theoretical 2- Practical	3.

	laboratory				
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Steps of digestion (carbohydrate, protein, fat digestion and absorption	Understand the lecture	2- Theoretical 2- Practical	4.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Urinary system, renal functions, urine formationand reflexes	Understand the lecture	2- Theoretical 2- Practical	5.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Role of kidney to maintain body fluids to regulate B. Pre. And balance	Understand the lecture	2- Theoretical 2- Practical	6.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Body temperature regulation and control	Understand the lecture	2- Theoretical 2- Practical	7.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Nervous system, CNS brain function and centers	Understand the lecture	2- Theoretical 2- Practical	8.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Spinal cord, SCF, spinal reflexes	Understand the lecture	2- Theoretical 2- Practical	9.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	PNS autonomic and sensory	Understand the lecture	2- Theoretical 2- Practical	10.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Endocrine system control of hormone, types and secretion	Understand the lecture	2- Theoretical 2- Practical	11.
Actual theoretical	Lecture given	Hormonal secretion from different	Understand the lecture	2- Theoreti	12.

tests - practical tests in laboratories	Practical application in the laboratory	glands		cal 2- Practical	
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Reproductive system, male reproductive system	Understand the lecture	2- Theoreti cal 2- Practical	13.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Female reproductive system	Understand the lecture	2- Theoreti cal 2- Practical	14.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Ear and eye physiology	Understand the lecture	2- Theoreti cal 2- Practical	15.

11. Course evaluation

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Weekly reports

12. Learning and teaching resources

Williams. (2012).Textbook of humanendocrinology(12th ed). Philadelphia:Elsevier/Saunders., pp.1371-1435 Gyton AC(1996).Introduction toEndocrinology in Text Book of MedicalPhysiology.(9thed),WB Saunders Co.Philadelphia. ,P.925	Main references (sources)
-Nature -Science E. book and websites	Recommended supporting books and references (scientific journals, reports....)
Medical website	Electronic references, Internet sites

Course description form

1. Course Name

Biochemistry2

2. Course Code

ATU13ANT124CE

3. Semester/year

the second /2025-2026

4. Date this description was prepared

15/1/2026

5. Available attendance forms

presence

6. Number of study hours (total)/number of units (total)

90 hours – 4 credits

7. Name of the course administrator (if more than one name is mentioned)

Name: Ahmed Adnan Abdulhussein Lafta

8. Course objectives

General objective: At the end of the current academic year, the student will be able to: – Perform various techniques of descriptive and quantitative analyzes of components in blood and other body fluids in humans in states of health and illness.	Objectives of the study subject

9. Teaching and learning strategies

Theoretical and practical laboratory methods, hospitals, lectures, photo and video illustrations, three-dimensional models, and open discussion method.	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Lab. Instructions, receiving lab. Equipments preparation of cleaning solution	Understand the lecture	2- Theoretical 2- Practical	1.
Actual theoretical tests - practical tests in laboratories	Lecture given and practical application in the laboratory	Preparation of solutions, normal solution, molar solution, Part Per Million (PPM). Dilution, % percentage (W/V, V/V)	Understand the lecture	2- Theoretical 2- Practical	2.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Oxidation-reduction litration, standardization of permanganate solution against oxalic acid	Understand the lecture	2- Theoretical 2- Practical	3.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Determination of serum calcium	Understand the lecture	2- Theoretical 2- Practical	4.
Actual theoretical tests - practical tests in	Lecture given Practical application in	Flame photometry. Determination of sodium and potassium in serum	Understand the lecture	2- Theoretical 2- Practical	5.

laboratories	the laboratory				
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Carbohydrates: general reactions for carbohydrates reductions of monosaccharides, Molisch's fehling test, Benedict test, Barfoed's test, Ny-lander's test selivanoff's test, Moor's test Action	Understand the lecture	2- Theoretical 2- Practical	6.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Paper chromatography of carbohydrates	Understand the lecture	2- Theoretical 2- Practical	7.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Disaccharides. Reactions of reducing disaccharides, Molisch.	Understand the lecture	2- Theoretical 2- Practical	8.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Test, fehling test, benedict test, barfood test trummer's test,	Understand the lecture	2- Theoretical 2- Practical	9.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	phenyl hydrazine test	Understand the lecture	2- Theoretical 2- Practical	10.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	reaction of non-reducing disaccharides test for sucrose, acid hydrolysis, hydrochlo red acid test.	Understand the lecture	2- Theoretical 2- Practical	11.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Polysaccharides, reactions of polysacchorides microscopic appearance of starch grains, solubility in water, iodine test, precipitation by alcohol, precipitation by ammonium, sulphate hydrolysis by acid	Understand the lecture	2- Theoretical 2- Practical	12.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Lipid metabolism, lipid abnormalities.	Understand the lecture	2- Theoretical 2- Practical	13.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Lipid metabolism, lipid abnormalities.	Understand the lecture	2- Theoretical 2- Practical	14.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Nucleic acids and their Expression, DNA Replication, Nutation, RNA Topology.	Understand the lecture	2- Theoretical 2- Practical	15.
11. Course evaluation					
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Weekly reports	
12. Learning and teaching resources	
Williams. (2012).Textbook of humanendocrinology(12th ed). Philadelphia:Elsevier/Saunders., pp.1371-1435 Gyton AC(1996).Introduction toEndocrinology in Text Book of MedicalPhysiology.(9thed),WB Saunders Co.Philadelphia. ,P.925	Main references (sources)
-Nature -Science E. book and websites	Recommended supporting books and references (scientific journals, reports....)
Medical website	Electronic references, Internet sites

Course description form

1. Course Name	
Microbiology	
2. Course Code	
ATU13ANT125CE	
3. Semester/year	
the first /2025-2026	
4. Date this description was prepared	
18/1/2026	
5. Available attendance forms	
presence	
6. Number of study hours (total)/number of units (total)	
90 hours – 4 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: lecturer Enam Mahdi Dawoud	
8. Course objectives	
At the end of the academic year, the student should be able to: – Identify the cell and its structure, describe bacteria and parasites, and explain the immune mechanism of the cell against pathogenic organisms.	Objectives of the study subject
9. Teaching and learning strategies	
Theoretical and practical laboratory methods, lectures, photographic and video illustrations, three-dimensional models, and open discussion method	The strateg

).Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	The microorganism	Understand the lecture	2- Theoretical 2- Practical	1
Actual theoretical tests - practical tests in laboratories	Lecture given and practical application in the laboratory	Bacteria: classification, structure and functions.	Understand the lecture	2- Theoretical 2- Practical	2-3
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Media and culture	Understand the lecture	2- Theoretical 2- Practical	4-5
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Antibiotics and Antibiotic resistance	Understand the lecture	2- Theoretical 2- Practical	6
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Fungi: characteristics, reproductive and classification.	Understand the lecture	2- Theoretical 2- Practical	7-8
Actual	Lecture given	Virus: structure,	Understand the	2-	9

theoretical tests - practical tests in laboratories	Practical application in the laboratory	classification and reproduction.	lecture	Theoretical 2- Practical	
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Parasite: introduction, parasite & host relationship, diagnosis	Understand the lecture	2- Theoretical 2- Practical	10-11
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Classes of parasite (protozoa, helminthes and ectoparasites)	Understand the lecture	2- Theoretical 2- Practical	12-13
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Helminthes: structure and classification.	Understand the lecture	2- Theoretical 2- Practical	14
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	The immune system, mechanism of immune system (innate and adaptive immunity).	Understand the lecture	2- Theoretical 2- Practical	15

11. Course evaluation

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Weekly reports

12. Learning and teaching resources

1- Human Biology. 12th ed., Sylvia et al., 2012 2- Review Of Medical Microbiology And Immunology. by Warren Levinson. 1- Essential of Cell Biology. 3rd ed., Albert Barry et al.,2010.	Main references (sources)
-Nature -Science E. book and websites	Recommended supporting books and references (scientific journals, reports....)
Medical website	Electronic references, Internet sites

Course description form

1. Course Name

Computer principles

2. Course Code

ATU13ANT316CE

3. Semester/year

the second /2025-2026

4. Date this description was prepared

20/1/2026

5. Available attendance forms

My presence

6. Number of study hours (total)/number of units (total)

60 hours – 2 credits

7. Name of the course administrator (if more than one name is mentioned)

Name: A.L. Ahmed Younis Abdul Kadhim

8. Course objectives

At the end of the academic year, the student will be able to understand the functions of the various cells and systems the body in general and perform various techniques for analyzing blood and other body fluids.	Objectives of the study subject

9. Teaching and learning strategies

Theoretical and practical laboratory methods, hospitals, lectures, photo and video illustrations, three-dimensional models, and open discussion method.	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Operating System	Understand the lecture	2- Theoretical 2- Practical	1.
Actual theoretical tests - practical tests in laboratories	Lecture given and practical application in the laboratory	Hardware and software	Understand the lecture	2- Theoretical 2- Practical	2.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Files and folders	Understand the lecture	2- Theoretical 2- Practical	3.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Folders and files managing	Understand the lecture	2- Theoretical 2- Practical	4.
Actual	Lecture given	Computer Hardware	Understand the	2-	5.

theoretical tests - practical tests in laboratories	Practical application in the laboratory		lecture	Theoretic al 2- Practical	
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Tab settings	Understand the lecture	2- Theoretic al 2- Practical	6.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Page setup	Understand the lecture	2- Theoretic al 2- Practical	7.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Microsoft Excel	Understand the lecture	2- Theoretic al 2- Practical	8.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Manipulating the contents	Understand the lecture	2- Theoretic al 2- Practical	9.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Simple and complex formula	Understand the lecture	2- Theoretic al 2- Practical	10.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Working with charts	Understand the lecture	2- Theoretic al 2- Practical	11.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Understanding power point	Understand the lecture	2- Theoretic al 2- Practical	12.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Managing slide object	Understand the lecture	2- Theoretic al 2- Practical	13.
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Internet Introduction	Understand the lecture	2- Theoretic al 2-	14.

				Practical	
Actual theoretical tests - practical tests in laboratories	Lecture given Practical application in the laboratory	Working with Email	Understand the lecture	2- Theoretical 2- Practical	15

11. Course evaluation
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12. Learning and teaching resources	
Jr., DHLF, 2012. Introduction to Microsoft Office 2010. 2nd ed. sl:World scientific publishing. Mayne, R., 2915. Introduction to Windows. 2nd ed. sl:World scientific publishing Thomas Anderson, MD, 2014. Operating Systems: Principles and Practice. sl:University of Texas	Main references (sources)
E. book and websites	Recommended supporting books and references (scientific journals, reports....)
website	Electronic references, Internet sites

Second Stage

Course description form

1.	Course Name
	Basic of anesthesia1
2.	Course Code
	ATU13ANT211CE
3.	Semester/year
	the first /2025-2026
4.	Date this description was prepared
	5/10/2025
5.	Available attendance forms
	My presence
6.	Number of study hours (total)/number of units (total)
	90 hours – 4 credits
7.	Name of the course administrator (if more than one name is mentioned)
	Name: Dr. Sajad Muhammad

8. Course objectives

At the end of the year, the student should be able to: Form an overview of the history of anesthesia and its types Handling the patient before anesthesia. Knowledge of all types of narcotic substances. Knowing how to use some equipment for anesthesia and operations	Objectives of the study subject

9. Teaching and learning strategies

Theoretical and practical laboratory methods, hospitals, lectures, photo and video illustrations, three-dimensional models, and open discussion method.	The strategy

).Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	History of anesthesia and introduction + scope of anesthesiology.	Understand the lecture	2- Theoretical 4- Practical	1
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Choice of anesthetic technique	Understand the lecture	2- Theoretical 4- Practical	2
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Preanaesthetic visit and assessment	Understand the lecture	2- Theoretical 4- Practical	3
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Premedication aims and therapeutic management	Understand the lecture	2- Theoretical 4- Practical	4
Actual	Theoretical material	General	Understand the	2- Theoretical	5

theoretical tests - practical tests in laboratories	- practical laboratories within the anesthesia laboratory and the operating room	pharmacology	lecture	4- Practical	
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	General pharmacology	Understand the lecture	2- Theoretical 4- Practical	6
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Inhalational anaesthetic agents (in details)	Understand the lecture	2- Theoretical 4- Practical	7
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Inhalational anaesthetic agents (in details)	Understand the lecture	2- Theoretical 4- Practical	8
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Inhalational anaesthetic agents cont..	Understand the lecture	2- Theoretical 4- Practical	9
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Inhalational anaesthetic agents cont..	Understand the lecture	2- Theoretical 4- Practical	10
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Intravenous anaesthetic agents (in details)	Understand the lecture	2- Theoretical 4- Practical	11
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Intravenous anaesthetic agents (in details)	Understand the lecture	2- Theoretical 4- Practical	12
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Intravenous anaesthetic agents cont.	Understand the lecture	2- Theoretical 4- Practical	13
Actual theoretical tests - practical tests	Theoretical material - practical laboratories within		Understand the lecture	2- Theoretical 4- Practical	14

in laboratories	the anesthesia laboratory and the operating room			
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Muscle relaxants (in details) & reversal	Understand the lecture	2- Theoretical 15 4- Practical

11. Course evaluation
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12. Learning and teaching resources	
Pequipment anesthesia Essential Baha alshake anesthesia equipment Basic miller of anesthesi Morgan and Mikhails	Required textbooks (methodology, if any)
Other book of clinical anesthesiology	Main references (sources)
Anesthesia and analgesia journal british journal of anesthesia	Recommended supporting books and references (scientific journals, reports....)
Pubmed Google scholar Web of sciences Embase Other	Electronic references, Internet sites

Course description form

1.	Course Name
	Basics of anesthesia equipment 1
2.	Course Code
	ATU13ANT217CE
3.	Semester/year
	the first /2025-2026
4.	Date this description was prepared
	1/10/2025
5.	Available attendance forms
	My presence
6.	Number of study hours (total)/number of units (total)
	90 hours – 4 credits
7.	Name of the course administrator (if more than one name is mentioned)
	Name: Dr. Mohammed Abdulzahra Saasaa Kouta

8. Course objectives

At the end of the year, the student should be able to: Form an overview the history of anesthesia and its types Handling the patient before anesthesia. Knowledge of all types of narcotic substances. Knowing how to use some equipment for anesthesia and operations	Objectives of the study subject

9. Teaching and learning strategies

Theoretical and practical laboratory methods, hospitals, lectures, photo and video illustrations, three-dimensional models, and open discussion method.	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Operating room design and functioning	Understand the lecture	2- Theoretical 4- Practical	1
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Operating room design and functioning	Understand the lecture	2- Theoretical 4- Practical	2
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Canula and giving set and device for intravenous infusion	Understand the lecture	2- Theoretical 4- Practical	3
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Canula and giving set and device for intravenous infusion	Understand the lecture	2- Theoretical 4- Practical	4
Actual theoretical tests	Theoretical material - practical	Physical principles:	Understand the lecture	2- Theoretical 4- Practical	5

- practical tests in laboratories	laboratories within the anesthesia laboratory and the operating room	behavior of molecules of solid and liquid, heat and temperature			
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Physical principles: behavior of molecules of solid and liquid, heat and temperature	Understand the lecture	2- Theoretical 4- Practical	6
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Physical principles: properties of gases, temperature change in anaesthetic machine, and flow of fluid through tubes and orifice	Understand the lecture	2- Theoretical 4- Practical	7
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Physical principles: properties of gases, temperature change in anaesthetic machine, and flow of fluid through tubes and orifice	Understand the lecture	2- Theoretical 4- Practical	8
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Infusion equipment: patient control analgesia, filtration, autotransfusio n	Understand the lecture	2- Theoretical 4- Practical	9
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Intra Infusion equipment: patient control analgesia, filtration, autotransfusion	Understand the lecture	2- Theoretical 4- Practical	10
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	The supply of anaesthetic gases, cylinders, oxygen concentrator	Understand the lecture	2- Theoretical 4- Practical	11
Actual theoretical tests - practical tests	Theoretical material - practical laboratories within	The supply of anaesthetic gases,	Understand the lecture	2- Theoretical 4- Practical	12

in laboratories	the anesthesia laboratory and the operating room	cylinders, oxygen concentrator			
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Medical gas services, bulk storage, and supply of gases, piped medical vacuum, electrical supply	Understand the lecture	2- Theoretical 4- Practical	13
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Medical gas services, bulk storage, and supply of gases, piped medical vacuum, electrical supply	Understand the lecture	2- Theoretical 4- Practical	14
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Distribution of pipework, terminal outlet	Understand the lecture	2- Theoretical 4- Practical	15

11. Course evaluation

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12. Learning and teaching resources

Basic miller of anesthesia Morgan and mikhail Essential anesthesia equipment Baha alshake anesthesia equipment	Required textbooks (methodology, if any)
Other book of clinical anesthesiology	Main references (sources)
Anesthesia and analgesia journal british journal of anesthesia	Recommended supporting books and references (scientific journals, reports....)
Pubmed Google scholar Web of sciences Embase Other	Electronic references, Internet sites

Course description form

1. Course Name	
Applied physiology1	
2. Course Code	
ATU13ANT212CE	
3. Semester/year	
the first /2024	
4. Date this description was prepared	
15/10/2025	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
90 hours – 4 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Dr. Qasim Muhammad Hashem Muhammad	
8. Course objectives	
A definition and introduction to the importance of applied physiology – learning about the functions of the body's systems - understanding the effect of anesthesia on the functions of the body's systems - how to act during emergency situations and how to act with medical conditions associated with anesthesia	Objectives of study subject
9. Teaching and learning strategies	
Lectures, laboratories, hospitals, library, Internet	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	electrical components and activity of the heart	Understand the lecture	2- Theoretical 4- Practical	1
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	the cardiac action potential in ventricular muscle and pacemaker tissues	Understand the lecture	2- Theoretical 4- Practical	2
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Contractile cardiomyocytes and excitation-contraction coupling	Understand the lecture	2- Theoretical 4- Practical	3
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	ECG and arrhythmia	Understand the lecture	2- Theoretical 4- Practical	4
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	cardiac cycle	Understand the lecture	2- Theoretical 4- Practical	5
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Heart sound and waveforms generated during cardiac cycle	Understand the lecture	2- Theoretical 4- Practical	6
Actual	Theoretical and	the left ventricle	Understand	2- Theoretical	7

theoretical tests - practical tests in laboratories	practical laboratory material	pressure-volume loop	the lecture	4- Practical	
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Cardiac innervation and control of heart rate	Understand the lecture	2- Theoretical 4- Practical	8
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Cardiac reflexes	Understand the lecture	2- Theoretical 4- Practical	9
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	systemic circulation	Understand the lecture	2- Theoretical 4- Practical	10
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	blood pressure regulation	Understand the lecture	2- Theoretical 4- Practical	11
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	physiology of microcirculation(star ling law of capillary)	Understand the lecture	2- Theoretical 4- Practical	12
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	venous circulation and venous	Understand the lecture	2- Theoretical 4- Practical	13
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	coronary circulation	Understand the lecture	2- Theoretical 4- Practical	14
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Spirometery and lung volumes	Understand the lecture	2- Theoretical 4- Practical	15

11. Course evaluation

Exams, writing and presenting reports and research, scientific discussions, attendance and daily activities

12. Learning and teaching resources

1-Principles of Physiology for the Anaesthetist 2-Ganong's Review of Medical Physiology 24th edition 3-Arora, DR Textbook of Microbiology for dental students. 3rd ed. 2012.	Required textbooks (methodol if any)
1-Applied Physiology in Respiratory Mechanics2- Essential of Cell Biology. 3rd ed., Albert Bary et al., 2010.	Main references (sources)
Scientific journals	Recommended supporting books and references (scientific journals, reports....)
Internet sites and electronic library	Electronic references, Internet si

Course description form

1.Course Name	
Internal Medicine1	
2. Course Code	
ATU13ANT214CE	
3. Semester/year	
the first /2025-2026	
4. Date this description was prepared	
3/10/2025	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
90 hours – 4 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Professor Dr.Ali Hussein Al-Dujaili	
8. Course objectives	
At the end of the academic year, the student should be able to deal with the patient through a comprehensive examination and attempt to diagnose the diseases in detail before starting the process of administering general anesthes	Objectives of the study subject
9. Teaching and learning strategies	
Lectures, laboratories, hospitals, library, Internet	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Diseases due to infection/concepts of major infection manifestations /methods of diagnosis bacteremia/ septicemia / principles of | management.	Understand the lecture	2- Theoretical 4- Practical	1
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Diseases due to infection/concepts of major infection manifestations /methods of diagnosis bacteremia/ septicemia / principles of | management.	Understand the lecture	2- Theoretical 4- Practical	2
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Diseases of the respiratory system-Introduction.	Understand the lecture	2- Theoretical 4- Practical	3
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Diseases of the respiratory system-Introduction.	Understand the lecture	2- Theoretical 4- Practical	4
Actual theoretical	Theoretical and	| Major manifestations/invest	Understand the lecture	2- Theoretical 4- Practical	5

tests - practical tests in laboratories	practical laboratory material	igations/resp. function tests.			
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Diseases of the CVS / introduction/ major manifestation investigations.	Understand the lecture	2- Theoretical 4- Practical	6
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Diseases of the CVS / introduction/ major manifestation investigations.	Understand the lecture	2- Theoretical 4- Practical	7
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Principles of electrocardiography/normal ECG/S. Tachycardia/S. | Bradycardia/ S. arrhythmia.	Understand the lecture	2- Theoretical 4- Practical	8
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	AIDS	Understand the lecture	2- Theoretical 4- Practical	9
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Diseases of the GIT/Introduction/ major manifestation/ investigations.	Understand the lecture	2- Theoretical 4- Practical	10
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Diseases of the GIT/Introduction/ major manifestation/ investigations.	Understand the lecture	2- Theoretical 4- Practical	11
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Diseases of the liver/ introduction/ Bilirubin metabolism/major manifestations/ .investigations	Understand the lecture	2- Theoretical 4- Practical	12
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Diseases of the liver/ introduction/ Bilirubin metabolism/major manifestations/ .investigations	Understand the lecture	2- Theoretical 4- Practical	13
Actual theoretical tests - practical	Theoretical and practical laboratory	Diseases of the kidney/introduction major manifestations / | investigations.	Understand the lecture	2- Theoretical 4- Practical	14

tests in laboratories	material				
Actual theoretical tests - practical tests in laboratories	Theoretical and practical laboratory material	Diseases of the kidney/introduction major manifestations / | investigations.	Understand the lecture	2- Theoretical 4- Practical	15

1. Course evaluation
Exams Writing and presenting reports and research Scientific discussions Attendance and daily activities

2. Learning and teaching resources	
Davidson's Principles and Practice of Medicine-23 Edition	Required textbooks (methodology, if any)
Emergency Medicine.	Main references (sources)
Scientific journals	Recommended supporting books and references (scientific journals, reports....)
Internet sites and electronic library	Electronic references, Internet sites

Course description form

1. Course Name	
Basic of surgery1	
2. Course Code	
ATU13ANT213CE	
3. Semester/year	
the first /2025-2026	
4. Date this description was prepared	
20/10/2025	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
90 hours – 3 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Dr. Tamim Yaqoub Ibrahim Abbas	
8. Course objectives	
Identifying the anatomical and surgical foundations and their relationship to applied physiology of the human body, understanding the pharmacological effects of anesthetic drugs, the number of anesthetic drugs on the body, and how to deal with surgical complications that may occur during anesthesia and how to avoid them.	Objectives of the study subject
9. Teaching and learning strategies	
Conducting representative scenes and showing video clips in the laboratory to treat a patient through diagnosis and surgical treatment, evaluating the performance of students, and following up on the way they respond and the defect that may occur in the patient and the equipment.	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Principle of pediatric surgery	Understand the lecture	1- Theoretical 3- Practical	1
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Warfare injuries	Understand the lecture	1- Theoretical 3- Practical	2
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Day – case surgery	Understand the lecture	1- Theoretical 3- Practical	3
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Reaction of body to injury	Understand the lecture	1- Theoretical 3- Practical	4
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Infection of the pint & bone	Understand the lecture	1- Theoretical 3- Practical	5
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Ulcer, Sinuses, Fistula	Understand the lecture	1- Theoretical 3- Practical	6
+Quiz	Theoretical material -	Type of surgical	Understand	1- Theoretical	7

Attendance	practical laboratories within the anesthesia laboratory and the operating room	disease (hereditary, congenital, acquired)	the lecture	3- Practical	
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Sterile precaution & AIDS	Understand the lecture	1- Theoretical 3- Practical	8
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Calcium metabolism, calcification	Understand the lecture	1- Theoretical 3- Practical	9
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Goagulopathy & blood dyscrasia in surgery	Understand the lecture	1- Theoretical 3- Practical	10
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Specific infection	Understand the lecture	1- Theoretical 3- Practical	11
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Type of surgical bacteria (microbiology)	Understand the lecture	1- Theoretical 3- Practical	12
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Venous disease – thrombophlebitis & Venus thrombosis	Understand the lecture	1- Theoretical 3- Practical	13
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Oncology.	Understand the lecture	1- Theoretical 3- Practical	14
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Abortion, CS, Hysterectomy	Understand the lecture	1- Theoretical 3- Practical	15

11. Course evaluation

Attendance, participation, peer evaluation, weekly reports

12. Learning and teaching resources

Principles of surgery, short notes	Required textbooks (methodology, if any)
Baily and love, short practice in surgery 26th ED Swaartz clinical surgery 11thE.D	Main references (sources)
Scientific journals	Recommended supporting books and references (scientific journals, reports....)
Electronic reference for information	Electronic references, Internet sites

Course description form

1. Course Name	
Pharmacology 1	
2. Course Code	
ATU13ANT215CE	
3. Semester/year	
the first /2025-2026	
4. Date this description was prepared	
25/10/2025	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
60 hours – 3 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Dr. Ashraf Jameel Mohsen Abdulmahdi	
8. Course objectives	
Learn about pharmacology and its various sections Studying various types and forms of treatment Identify the therapeutic effect in treating diseases of various body systems Identify side effects and therapeutic interactions	Objectives of the study subject
9. Teaching and learning strategies	
By giving lectures in the form of files and video lectures, as well as sending video clips from the Internet, as well as application in hospitals	The strategy

).Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Theoretical subject And laboratory process	Principles of Drug Therapy. Pharmacokinetics; Absorption, distribution, metabolism and excretion of the drugs. Pharmacodynamics; Drug-receptors interaction. Efficacy, potency, agonists, antagonists.	Understand the lecture	2- Theoretical 2- Practical	1
Actual theoretical tests - practical tests in laboratories	Theoretical subject And laboratory process	Cholinergic agonists and antagonists	Understand the lecture	2- Theoretical 2- Practical	2
Actual theoretical tests - practical tests in laboratories	Theoretical subject And laboratory process	Adrenergic agonists and adrenergic antagonists	Understand the lecture	2- Theoretical 2- Practical	3
Actual theoretical tests - practical tests in laboratories	Theoretical subject And laboratory process	Drugs affecting cardiovascular system: -Antihypertensive drugs. -Heart Failure	Understand the lecture	2- Theoretical 2- Practical	4
Actual theoretical tests	Theoretical subject	Drugs affecting cardiovascular system:	Understand the lecture	2- Theoretical 2- Practical	5

- practical tests in laboratories	And laboratory process	Anti-arrhythmic. Antianginal drugs			
Actual theoretical tests - practical tests in laboratories	Theoretical subject And laboratory process	Diuretics	Understand the lecture	2- Theoretical 2- Practical	6
Actual theoretical tests - practical tests in laboratories	Theoretical subject And laboratory process	Antihistamines	Understand the lecture	2- Theoretical 2- Practical	7
Actual theoretical tests - practical tests in laboratories	Theoretical subject And laboratory process	Drugs for Disorders of the Respiratory System	Understand the lecture	2- Theoretical 2- Practical	8
Actual theoretical tests - practical tests in laboratories	Theoretical subject And laboratory process	Drugs for Disorders of the Respiratory System	Understand the lecture	2- Theoretical 2- Practical	9
Actual theoretical tests - practical tests in laboratories	Theoretical subject And laboratory process	Drugs for anemia	Understand the lecture	2- Theoretical 2- Practical	10
Actual theoretical tests - practical tests in laboratories	Theoretical subject And laboratory process	Anticoagulants and Antiplatelet Agents	Understand the lecture	2- Theoretical 2- Practical	11
Actual theoretical tests - practical tests in laboratories	Theoretical subject And laboratory process	Skeletal muscle relaxants.	Understand the lecture	2- Theoretical 2- Practical	12
Actual theoretical tests - practical tests in laboratories	Theoretical subject And laboratory process	Local anesthetics.	Understand the lecture	2- Theoretical 2- Practical	13
Actual theoretical tests - practical tests in laboratories	Theoretical subject And laboratory process	General anesthetics	Understand the lecture	2- Theoretical 2- Practical	14
Actual theoretical tests - practical tests in laboratories	Theoretical subject And laboratory process	General anesthetics	Understand the lecture	2- Theoretical 2- Practical	15
11. Course evaluation					
Exams					

Writing and presenting reports and research Weekly reports, research and presentation

12. Learning and teaching resources

Pharmacology- Lippincotte	Required textbooks (methodology, if any)
Clinical Pharmacology made incredibly easy 3rd ed. Bertram G. Katzung MD, PhD San Francisco December, 2011	Main references (sources)
Scientific journals	Recommended supporting books and references (scientific journals, reports....)
Internet sites	Electronic references, Internet sites

Course description form

1. Course Name
   Basics of Anesthesia2
2. Course Code
   ATU13ANT221CE
3. Semester/year
   the second /2025-2026
4. Date this description was prepared
   25/2/20256
5. Available attendance forms
   presence
6. Number of study hours (total)/number of units (total)
   90 hours – 4 credits
7. Name of the course administrator (if more than one name is mentioned)
   Name: Dr. Sajad Muhammad
8. Course objectives

Identify the medical devices used in anesthesia Knowledge of gas laws and their physical applications in anesthesia devices Knowledge of pressure laws and their applications	Objectives of the study subject

9. Teaching and learning strategies

Theoretical and practical laboratory methods, hospitals, lectures, photo and video illustrations, three-dimensional models, and open discussion method.	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Drugs used in premedication	Understand the lecture	2- Theoretical 4- Practical	1
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Drugs used in premedicatio n	Understand the lecture	2- Theoretical 4- Practical	2
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Drugs used in premedicatio n	Understand the lecture	2- Theoretical 4- Practical	3
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Positioning & problems..	Understand the lecture	2- Theoretical 4- Practical	4
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Positioning & problems.	Understand the lecture	2- Theoretical 4- Practical	5
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	CPR & respiratory failure	Understand the lecture	2- Theoretical 4- Practical	6
Actual theoretical tests - practical tests	Theoretical material - practical laboratories within the anesthesia laboratory	CPR & respirator	Understand the lecture	2- Theoretical 4- Practical	7

in laboratories	and the operating room	y failure			
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	IVF types & uses.	Understand the lecture	2- Theoretical 4- Practical	8
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	IVF types & uses.	Understand the lecture	2- Theoretical 4- Practical	9
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	IVF types & uses..	Understand the lecture	2- Theoretical 4- Practical	10
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	IVF types & uses.	Understand the lecture	2- Theoretical 4- Practical	11
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	IVF types & uses.	Understand the lecture	2- Theoretical 4- Practical	12
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Safety measures in theatre, smoking	Understand the lecture	2- Theoretical 4- Practical	13
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Safety measures in theatre, Drugs allergic reaction	Understand the lecture	2- Theoretical 4- Practical	14
Actual theoretical tests - practical tests in laboratories	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Safety measures in theatre, Drugs allergic reaction	Understand the lecture	2- Theoretical 4- Practical	15

11. Course evaluation

the audience
Share
Peer evaluation
Weekly reports

12. Learning and teaching resources

Pequipment anesthesia Essential Baha alshake anesthesia equipment Basic miller of anesthesi Morgan and Mikhails	Required textbooks (methodology, if any)
Other book of clinical anesthesiology	Main references (sources)
Anesthesia and analgesia journal british journal of anesthesia	Recommended supporting books and references (scientific journals, reports....)
Pubmed Google scholar Web of sciences Embase Other	Electronic references, Internet sites

Course description form

1. **Course Name**
   Basics of Anesthesia Equipment 2
2. **Course Code**
   ATU13ANT227CE
3. **Semester/year**
   the second /2025-2026
4. **Date this description was prepared**
   23/2/2026
5. **Available attendance forms**
   presence
6. **Number of study hours (total)/number of units (total)**
   90 hours – 4 credits
7. **Name of the course administrator (if more than one name is mentioned)**
   Name: Dr. Mohammed Abdulzahra Saasaa Kouta
8. **Course objectives**

At the end of the year, the student should be able to: Form an overview of the history of anesthesia and its types Handling the patient before anesthesia. Knowledge of all types of narcotic substances. 1. Knowing how to use some equipment for anesthesia and operations	Objectives of the study subject

9. **Teaching and learning strategies**

Theoretical and practical laboratory methods, hospitals, lectures, photo and video illustrations, three-dimensional models, and open discussion method.	The strategy

10. **Course structure**

Evaluation method	Learning method	Required learning outcomes	hours	the week	
Actual theoretical tests - practical tests in laboratories	Atmospheric pollution, measurement and control of pollution, scavenging system	Understand the lecture	2- Theoretical 4- Practical	1	
Actual theoretical tests - practical tests in laboratories	Infusion equipment: patient control analgesia, filtration, autotransfusion	Understand the lecture	2- Theoretical 4- Practical	2	
Actual theoretical tests - practical tests in laboratories	The supply of anaesthetic gases, cylinders, oxygen concentrator	Understand the lecture	2- Theoretical 4- Practical	3	
Actual theoretical tests - practical tests in laboratories	Medical gas services, bulk storage, and supply of gases, piped medical vaccum,electrical supply	Understand the lecture	2- Theoretical 4- Practical	4	
Actual theoretical tests - practical tests in laboratories	Disribution of pipework, terminal outlet	Understand the lecture	2- Theoretical 4- Practical	5	
Actual theoretical tests - practical tests in laboratories	Flexible pipeline, test and check for medical gas pipeline	Understand the lecture	2- Theoretical 4- Practical	6	
Actual theoretical tests - practical tests	Vaporizer: law of vaporization, vaporizing system, type of vaporizer	Understand the lecture	2- Theoretical 4- Practical	7	

in laboratories				
Actual theoretical tests - practical tests in laboratories	Factor affecting vaporizer performance, calibration of vaporizer, filling of vaporizer	Understand the lecture	2- Theoretical 4- Practical	8
Actual theoretical tests - practical tests in laboratories	Flowmeter and flow control (needle) valves	Understand the lecture	2- Theoretical 4- Practical	9
Actual theoretical tests - practical tests in laboratories	Pressure gauge and Reducing valve	Understand the lecture	2- Theoretical 4- Practical	10
Actual theoretical tests - practical tests in laboratories	Cleaning and sterilization: decontamination, disinfection and sterilization	Understand the lecture	2- Theoretical 4- Practical	11

11. Course evaluation

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

12. Learning and teaching resources

Required textbooks	Anesthesia equipment, principle and application, Jan Ehrenwerth, MD, 2nd edition The MGH Textbook of Anesthetic Equipment, Warren S. .2 Sandberg, MD, PhD 2nd edition Essentials of Equipment in Anaesthesia, Critical Care and Peri Operative Medicine Baha Al-Shaikh and Simon G. Stacey
Other book of clinical anesthesiology	Main references (sources)
Anesthesia and analgesia journal british journal of anesthesia	Recommended books and
Pubmed Google scholar Web of sciences Embase Other	references (scientific journals,

Course description form

1.	Course Name
	Applied physiology2
2.	Course Code
	ATU13ANT222CE
3.	Semester/year
	the second /2025-2026
4.	Date this description was prepared
	10/2/2026
5.	Available attendance forms
	My presence
6.	Number of study hours (total)/number of units (total)
	90 hours – 4 credits
7.	Name of the course administrator (if more than one name is mentioned)
	Name: Dr. Qasim Muhammad Email:
8.	Course objectives

A definition and introduction to the importance of applied physiology - learning about the functions of the body's systems - understanding the effect of anesthesia on the functions of the body's systems - how to act during emergency situations and how to act with medical conditions associated with anesthesia	Objectives of the study subject
9. Teaching and learning strategies	
Lectures, laboratories, hospitals, library, Internet	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Autonomic control on CVS	Understand the lecture	2- Theoretical 4- Practical	1
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Starlings law of the heart.	Understand the lecture	2- Theoretical 4- Practical	2
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Starlings law of the heart.	Understand the lecture	2- Theoretical 4- Practical	3
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Pressure change in Lt. Ventricle & aorta during the cardiac cycle.	Understand the lecture	2- Theoretical 4- Practical	4
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Pressure change in Rt. Ventricle & pulmonary artery during the cardiac cycle.	Understand the lecture	2- Theoretical 4- Practical	5
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Starlings law of the capillaries.	Understand the lecture	2- Theoretical 4- Practical	6
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Excitation – contraction coupling.	Understand the lecture	2- Theoretical 4- Practical	7
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Effect of tachycardia, tachycardia + hypotension, tachycardia +	Understand the lecture	2- Theoretical 4- Practical	8

		hypotension- blood loss on the CVS			
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Critical pressure closing phenomenon.	Understand the lecture	2- Theoretical 4- Practical	9
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Blood distribution in to vital organ	Understand the lecture	2- Theoretical 4- Practical	10
Actual theoretical tests - practical tests in laboratories	Theoretical subject	General knowledge- struction, type of IV fluid- clinical application.	Understand the lecture	2- Theoretical 4- Practical	11
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Hb. Dissociation – Association curves.	Understand the lecture	2- Theoretical 4- Practical	12
Actual theoretical tests - practical tests in laboratories	Theoretical subject	O2 flux+pre-oxygenation in anesthesia, why increase FIO2	Understand the lecture	2- Theoretical 4- Practical	13
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Cyanosis, pallor sign.	Understand the lecture	2- Theoretical 4- Practical	14
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Meaning of cyanosis, pallor for the anaesthetist.	Understand the lecture	2- Theoretical 4- Practical	15

11. Course evaluation	
Exams, writing and presenting reports and research, scientific discussions, attendance and daily activities	
12. Learning and teaching resources	
1-Principles of Physiology for the Anaesthetist 2-Ganong's Review of Medical Physiology 24th edition 3-Arora, DR Textbook of Microbiology for dental students. 3rd ed. 2012.	Required textbooks (methodology, if any)
1-Applied Physiology in Respiratory Mechanics2- Essential of Cell Biology. 3rd ed., Albert Bary et al., 2010.	Main references (sources)
Scientific journals	Recommended supporting books and references (scientific journals, reports....)
Internet sites and electronic library	Electronic references, Internet sites

Course description form

1. Course Name
   Basic Medicine-2
2. Course Code
   ATU13ANT223CE
3. Semester/year
   the second /2025-2026
4. Date this description was prepared
   17/2/2026
5. Available attendance forms
   My presence
6. Number of study hours (total)/number of units (total)
   130 hours – 4 credits
7. Name of the course administrator (if more than one name is mentioned)
   Name: Professor Dr.Ali Hussein Al-Dujaili
8. Course objectives

At the end of the academic year, the student should be able to deal with the patient through a comprehensive examination and attempt to diagnose the diseases in detail before starting the process of administering general anesthesia.	Objectives of the study subject

9. Teaching and learning strategies

Lectures, laboratories, hospitals, library, Internet	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Diseases of the kidney / introduction major manifestations /.investigations	Understand the lecture	2- Theoretical 4- Practical	1
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Hematology/ introduction / major manifestations/ .investigations	Understand the lecture	2- Theoretical 4- Practical	2
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Hematology/ introduction / major manifestations/ .investigations	Understand the lecture	2- Theoretical 4- Practical	3
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Anemia/ Introduction/ major monofestation classification .investigations	Understand the lecture	2- Theoretical 4- Practical	4
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Anemia/ Introduction/ major monifestation classification.investigation	Understand the lecture	2- Theoretical 4- Practical	5
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Diseases of the endocrine .gland/ introduction	Understand the lecture	2- Theoretical 4- Practical	6
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Diseases of the endocrine .gland/ introduction	Understand the lecture	2- Theoretical 4- Practical	7
Actual theoretical tests	Theoretical subject	Diseases of connective tissues and Rheumatology/	Understand the lecture	2- Theoretical 4- Practical	8

- practical tests in laboratories		introduction/major manifestations/			
Actual theoretical tests - practical tests in laboratories	Theoretical subject	.investigations	Understand the lecture	2- Theoretical 4- Practical	9
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Diseases of connective tissues and Rheumatology/ introduction/major manifestations/	Understand the lecture	2- Theoretical 4- Practical	10
Actual theoretical tests - practical tests in laboratories	Theoretical subject	.investigations	Understand the lecture	2- Theoretical 4- Practical	11
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Major manifestations/ .investigations	Understand the lecture	2- Theoretical 4- Practical	12
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Principles of critical care medicine major manifestations of critical .illness/ shock/ sepsis	Understand the lecture	2- Theoretical 4- Practical	13
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Principles of critical care medicine major manifestations of critical .illness/ shock/ sepsis	Understand the lecture	2- Theoretical 4- Practical	14
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Specific forms of organ failure(Multiple organ failure/ ARDS/DIC/ARF/ .)hepatic failure	Understand the lecture	2- Theoretical 4- Practical	15

11. Course evaluation

Exams
Writing and presenting reports and research
Scientific discussions
Attendance and daily activities

12. Learning and teaching resources

Davidson's Principles and Practice of Medicine-23 Edition	Required textbooks (methodology, if any)
Emergency medicine.	Main references (sources)
Scientific journals	Recommended supporting books and references (scientific journals, reports....)
Internet sites and electronic library	Electronic references, Internet sites

Course description form

1.	Course Name
	Basics of surgery-2
2.	Course Code
	ATU13ANT225CE
3.	Semester/year
	the second /2025-2026
4	Date this description was prepared
	2/2/2026
5.	Available attendance forms
	My presence
6.	Number of study hours (total)/number of units (total)
	120 hours – 3 credits
7.	Name of the course administrator (if more than one name is mentioned)
	Name: Dr. Tamim Yaqoub Ibrahim Abbas
8.	Course objectives

Identifying the anatomical and surgical foundations and their relationship to applied physiology of the human body, understanding the pharmacological effects of anesthetic drugs, the number of anesthetic drugs on the body, and how to deal with surgical complications that may occur during anesthesia and how to avoid them.	Objectives of the study subject
9. Teaching and learning strategies	
Conducting representative scenes and showing video clips in the laboratory to treat a patient through diagnosis and surgical treatment, evaluating the performance of students, and following up on the way they respond and the defect that may occur in the patient and the equipment.	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Hours	the week
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Shock (types, pathophysiology)	Understand the lecture	2- Theoretical 4- Practical	1
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Emergency surgery, reaction of body to injury	Understand the lecture	2- Theoretical 4- Practical	2
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Nutritional support in surgery	Understand the lecture	2- Theoretical 4- Practical	3
+Quiz Attendance	Theoretical material - practical laboratories within	Types of Surgical Diseases Hereditary, Congenital,	Understand the lecture	2- Theoretical 4- Practical	4

	the anesthesia laboratory and the operating room	Acquired			
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Angiology: Acute & Chronic Ischemia, Venous Disease, Lymphadenopathy, surgical lymphoedema	Understand the lecture	2- Theoretical 4- Practical	5
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Angiology: Venous Dis. – Thrombophlebitis & Phlebothrombosis	Understand the lecture	2- Theoretical 4- Practical	6
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Lymphadenopathy, surgicalLymphoedema.	Understand the lecture	2- Theoretical 4- Practical	7
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Cellular Growth - its reactions to Stress & Injury	Understand the lecture	2- Theoretical 4- Practical	8
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Oncology,Chemotherapy, radiation & biological effects of them	Understand the lecture	2- Theoretical 4- Practical	9
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Oncology.	Understand the lecture	2- Theoretical 4- Practical	10
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Chemotherapy,radiation & biological effects of them	Understand the lecture	2- Theoretical 4- Practical	11
+Quiz Attendance	Theoretical material - practical laboratories within	Common skin lesions, tumors	Understand the lecture	2- Theoretical 4- Practical	12

	the anesthesia laboratory and the operating room				
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Pre-operative preparation	Understand the lecture	2- Theoretical 4- Practical	13
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Post-operative complications & care	Understand the lecture	2- Theoretical 4- Practical	14
+Quiz Attendance	Theoretical material - practical laboratories within the anesthesia laboratory and the operating room	Sutures & Anastomosis	Understand the lecture	2- Theoretical 4- Practical	15

11. Course evaluation

Attendance, participation, peer evaluation, weekly reports

12. Learning and teaching resources

Principles of surgery, short notes	Required textbooks (methodology, if any)
Baily and love, short practice in surgery 26th ED Swaartz clinical surgery 11thE.D	Main references (sources)
Scientific journals	Recommended supporting books and references (scientific journals, reports....)
Electronic reference for information	Electronic references, Internet sites

Course description form

1. Course Name
   Pharmacology2
2. Course Code
   ATU13ANT224CE
3. Semester/year
   the second /2025-2026
4. Date this description was prepared
   12/2/2026
5. Available attendance forms
   My presence
6. Number of study hours (total)/number of units (total)
   60 hours – 3 credits
7. Name of the course administrator (if more than one name is mentioned)
   Name: Dr. Ashraf Jameel Mohsen Abdulmahdi
8. Course objectives

Learn about pharmacology and its various sections Studying various types and forms of treatment Identify the therapeutic effect in treating diseases of various body systems Identify side effects and therapeutic interactions	Objectives of the study subject

9. Teaching and learning strategies

By giving lectures in the form of files and video lectures, as well as sending video clips from the Internet, as well as application in hospitals	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Drugs action of nervous system	Understand the lecture	2- Theoretical 4- Practical	1
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Skeletal muscle relaxants	Understand the lecture	2- Theoretical 4- Practical	2
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Local anesthetics	Understand the lecture	2- Theoretical 4- Practical	3
Actual theoretical tests - practical tests in laboratories	Theoretical subject	General anesthetics	Understand the lecture	2- Theoretical 4- Practical	4
Actual theoretical tests - practical tests in laboratories	Theoretical subject	General anesthetics	Understand the lecture	2- Theoretical 4- Practical	5
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Hypotonic and sedative drugs	Understand the lecture	2- Theoretical 4- Practical	6
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Hypotonic and sedative drugs	Understand the lecture	2- Theoretical 4- Practical	7

Actual theoretical tests - practical tests in laboratories	Theoretical subject	Antipsychotic and anti anxiety drugs.	Understand the lecture	2- Theoretical 4- Practical	8
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Antiparkinson drugs	Understand the lecture	2- Theoretical 4- Practical	9
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Antiepileptic drug	Understand the lecture	2- Theoretical 4- Practical	10
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Narcotic, (opioid) analgesic.	Understand the lecture	2- Theoretical 4- Practical	11
Actual theoretical tests - practical tests in laboratories	Theoretical subject	IVF types & uses.	Understand the lecture	2- Theoretical 4- Practical	12
Actual theoretical tests - practical tests in laboratories	Theoretical subject	CNS stimulants	Understand the lecture	2- Theoretical 4- Practical	13
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Drug interaction	Understand the lecture	2- Theoretical 4- Practical	14
Actual theoretical tests - practical tests in laboratories	Theoretical subject	Antiseptics disinfectants.	Understand the lecture	2- Theoretical 4- Practical	15

11. Course evaluation

Exams
Writing and presenting reports and research
Weekly reports, research and presentation

12. Learning and teaching resources

Pharmacology- Lippincotte	Required textbooks (methodology, if any)
Clinical Pharmacology made incredibly easy 3rd ed. Bertram G. Katzung MD, PhD San Francisco December, 2011	Main references (sources)
Scientific journals	Recommended supporting books and references (scientific journals, reports....)
Internet sites	Electronic references, Internet sites

Course description form

1. Course Name	
Statistics	
2. Course Code	
ATU13ANT226CE	
3. Semester/year	
the second /2025-2026	
4. Date this description was prepared	
21/2/2026	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
45 hours – 3 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: A.L. Abdulhadi Ajeel Abdulredha Hamoud	
8. Course objectives	
The student must be able to understand the basics of statistics, as well as the abilit to analyze data and know the effect rates of the study in question	Objectives of the study subj
9. Teaching and learning strategies	
Various explanations of the phenomenon and experiments to analyze data, as well the use of statistical programs to demonstrate this	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
+Quiz Attendance	Understand the lecture	Introduction. Measurement scale of variables. Statistical tables.	Understand the lecture	2- Theoretical 4- Practical	1
+Quiz Attendance	Understand the lecture	Graphical presentation.	Understand the lecture	2- Theoretical 4- Practical	2
+Quiz Attendance	Understand the lecture	Arithmetical presentation.	Understand the lecture	2- Theoretical 4- Practical	3
+Quiz Attendance	Understand the lecture	a-Central trend measurements. (Mean-Artithmetic mean).	Understand the lecture	2- Theoretical 4- Practical	4
+Quiz Attendance	Understand the lecture	b- Dispersion Measurements. Quartiles. Deciles. Percentiler. Mean Deviation. Standard Deviation. Variance.	Understand the lecture	2- Theoretical 4- Practical	5
+Quiz Attendance	Understand the lecture	Range. Root mean square. Interquartile range. Quartile Deviation. Coefficient of veriation. Coefficient of Quartile. Standardized veriable (Standard scores).	Understand the lecture	2- Theoretical 4- Practical	6
+Quiz Attendance	Understand the lecture	c-Coefficient of skewness. Coefficient of Momental skewness. Preson's first coefficient of skewness. Quartile coefficient of skewness.	Understand the lecture	2- Theoretical 4- Practical	7
+Quiz Attendance	Understand the lecture	d- Coefficient of kurtsis. Coefficient of momental kurtosis.	Understand the lecture	2- Theoretical 4- Practical	8

+Quiz Attendance	Understand the lecture	Probability. Introduction. Definitions- Definition of Probability. Probability theorems.	Understand the lecture	2- Theoretical 4- Practical	9
+Quiz Attendance	Understand the lecture	- Conditional Prob. Mutanlly exclusive. Independence. Ranges theorem.	Understand the lecture	2- Theoretical 4- Practical	10
+Quiz Attendance	Understand the lecture	Sampling Distribution.	Understand the lecture	2- Theoretical 4- Practical	11
+Quiz Attendance	Understand the lecture	Estimation. Summary of confidence interval.	Understand the lecture	2- Theoretical 4- Practical	12
+Quiz Attendance	Understand the lecture	Summary of significant tests.	Understand the lecture	2- Theoretical 4- Practical	13
+Quiz Attendance	Understand the lecture	Testing for the value of a specified parameter(s).	Understand the lecture	2- Theoretical 4- Practical	14
+Quiz Attendance	Understand the lecture	Analysis of variance One way classification Two-way classification with one observation per cell. Two – way classification with (r). observation per cell. Multiple comparisons (A-ANOVA).	Understand the lecture	2- Theoretical 4- Practical	15

11. Course evaluation	
Attendance, participation, peer evaluation, weekly reports	
12. Learning and teaching resources	
Dr.. Khashi Mahmoud Al-Rawi, Introduction to Statistics, Mosul University Press1989 Dr. Mahmoud Hassan Al-Mashhadani, Amir Hanna Hormuz, Statistics, Dar Al-Kutub Directorate for Printing and Publishing, Baghdad Printing1989	Required textbooks (methodology, if any)
Dr.. Khashi Mahmoud Al-Rawi, Introduction to Statistics, Mosul University Press1989	Main references (sources)
Scientific journals	Recommended supporting books and references (scientific journals, reports....)
Electronic reference for information	Electronic references, Internet sites

Course description form

1. Course Name	
computer applications	
2. Course Code	
ATU13ANT324CE	
3. Semester/year	
the first /2025-2026	
4. Date this description was prepared	
4/2/2026	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
45 hours 2 Credit	
7. Name of the course administrator (if more than one name is mentioned)	
Name: A.L. Ahmed Younis Abdul Kadhim	
8. Course objectives	
Knowledge of the components of the calculator, how to enter data, distinguish its types, save and retrieve it, benefit from statistical and educational programs and graphs, conduct applications, and deal with commands on the computer.	Objectives of the study subject
9. Teaching and learning strategies	
Practical methods, theoretical methods, as well as clarification methods, educational videos, and open discussion methods, with tests placed at the end of the lecture.	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Short exam, surprise exam and daily activity	Lecture given Practical application in the laboratory	Introduction of spss	Understand the lecture	1-Theoretical 1-Practical	1
Short exam, surprise exam and daily activity	Lecture given and practical application in the laboratory	Variable view and Data view	Understand the lecture	1-Theoretical 1-Practical	2
Short exam, surprise exam and daily activity	Lecture given Practical application in the laboratory	Transformatio n and analysis	Understand the lecture	1-Theoretical 1-Practical	3
Short exam, surprise exam and daily activity	Lecture given Practical application in the laboratory	descriptive statistic Frequencies	Understand the lecture	1-Theoretical 1-Practical	4
Short exam, surprise exam and daily activity	Lecture given Practical application in the laboratory	Mean and median	Understand the lecture	1-Theoretical 1-Practical	5
Short exam, surprise exam and daily activity	Lecture given Practical application in the laboratory	summary	Understand the lecture	1-Theoretical 1-Practical	6
Short exam, surprise exam and daily activity	Lecture given Practical application in the	compare means correlated	Understand the lecture	1-Theoretical 1-Practical	7

	laboratory	regression			
Short exam, surprise exam and daily activity	Lecture given Practical application in the laboratory	Variance and standard deviation	Understand the lecture	1-Theoretical 1-Practical	8
Short exam, surprise exam and daily activity	Lecture given Practical application in the laboratory	Non-parametric test	Understand the lecture	1-Theoretical 1-Practical	9
Short exam, surprise exam and daily activity	Lecture given Practical application in the laboratory	Summarize (cross tabs) Custom tables (basic table)	Understand the lecture	1-Theoretical 1-Practical	10
Short exam, surprise exam and daily activity	Lecture given Practical application in the laboratory	Summarize (cross tabs), custom tables (Basic tables), Anova Models (one - way), non parametic methods (one sample, two sample, independent, two samples related, several samples independent, several sample related).	Understand the lecture	1-Theoretical 1-Practical	11
Short exam, surprise exam and daily activity	Lecture given Practical application in the laboratory	Summarize (cross tabs), custom tables (Basic tables), Anova Models (one - way), non parametic methods (one sample, two sample, independent, two samples related, several samples independent, several sample related).	Understand the lecture	1-Theoretical 1-Practical	12
Short exam, surprise exam and daily activity	Lecture given Practical application in the laboratory	Summarize (cross tabs), custom tables (Basic tables),	Understand the lecture	1-Theoretical 1-Practical	13

		Anova Models (one - way), non parametic methods (one sample, two sample, independent, two samples related, several samples independent, several sample related).			
Short exam, surprise exam and daily activity	**Lecture given Practical application in the laboratory**	Summarize (cross tabs), custom tables (Basic tables), Anova Models (one - way), non parametic methods (one sample, two sample, independent, two samples related, several samples independent, several sample related).	**Understand the lecture**	**1-Theoretical 1-Practical**	**14**
Short exam, surprise exam and daily activity	**Lecture given Practical application in the laboratory**	Summarize (cross tabs), custom tables (Basic tables), Anova Models (one - way), non parametic methods (one sample, two sample, independent, two samples related, several samples independent, several sample related).	**Understand the lecture**	**1-Theoretical 1-Practical**	**15**

11. Course evaluation
the audience **Share** **Peer evaluation**

Weekly reports	
12. Learning and teaching resources	
Norusis, M. (2008). SPSS 16.0 advanced statistical procedures companion. Prentice Hall Press. Morgan, GA, Barrett, KC, Leech, NL, & Gloeckner, G. W. (2019). IBM SPSS for introductory statistics: Use and interpretation. Routledge	**Main references (sources)**
Scientific journals	**Recommended supporting books and references (scientific journals, reports....)**
Electronic library	**Electronic references, Internet sites**

Third Stage

Course Description Form

1. Course Name:

Anesthesia2

2. Course Code:

ATU13ANT311CE

3. Semester / Year:

2025-2026

4. Description Preparation Date:

24/ 9 /2025

5. Available Attendance Forms:

Immanence

6. Number of Credit Hours (Total) / Number of Units (Total)

90hr/ 3 units

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

Name: Dr. Bassem Mohammed Jabbar

8. Course Objectives

Course Objectives	•At the end of the academic year, the student will be able to •Use all different anesthesia devices. •Maintenance and maintenance of all anesthesia equipment • Identify all parts of medical equipment used in anesthesia and their techniques.

9. Teaching and Learning Strategies

Strategy	B - Theoretical methods, laboratory practical methods, hospitals, as well as illustrations and educational videos And also the method of open discussion With tests at the end of the lecture Also the view of case scenarios

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1st	7	Theory- practic	a Regional anaesthesia	lecture	Immanence+ quiz
2nd	7	Theory- practical	Regional anaesthesia	lecture	Immanence+ quiz
3rd	7	Theory- practical	Post anaesthesia recover	lecture	Immanence+ quiz
4th	7	Theory- practical	Post anaesthesia recover	lecture	Immanence+ quiz
5th	7	Theory- practical	Perioprera Common complication	lecture	Immanence+ quiz
6th	7	Theory- practical	Perioprera Common complication	lecture	Immanence+ quiz
7th	7	Theory- practical	diseases Renal anaesthesia	Lecture	Immanence+ quiz
8th	7	Theory- practical	diseases Renal anaesthesia	Lecture	Immanence+ quiz
9th	7	Theory- practical	diseases Liver anaesthesia	lecture	Immanence+ quiz
10th	7	Theory- practical	diseases Liver anaesthesia	lecture	Immanence+ quiz
11th	7	Theory- practical	Hematological diseases anaesthesia	lecture	Immanence+ quiz

12th	7	Theory- practical	Hematological diseases anaesthesia	lecture	Immanence+ quiz
13th	7	Theory- practical	Anaesthesia for Laparosc surgery	lecture	Immanence+ quiz
14th	7	Theory- practical	for Anaesthesia day surgery	lecture	Immanence+ quiz
15th	7	Theory- practical	OUT OF OPERAT ROOM ANAESTHESIA	lecture	Immanence+ quiz

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

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Essential anesthesia equipment Baha alshake anesthesia equipment Basic miller of anesthesia Morgan and mikhails
Main references (sources)	Other book of clinical anesthesiology
Recommended books and references (scientific journals, reports...)	Medical journals and magazines
Electronic References, Websites	Electronic library

Course Description Form

1. Course Name:
Anesthesia Equipment 2
2. Course Code:
ATU13ANT326CE
3. Semester / Year: Course (2) 2025/2026
4. Description Preparation Date:
In presence
5. Available Attendance Forms:
8/8/2025
6. Number of Credit Hours (Total) / Number of Units (Total)
90 hours / 4 units
7. Course administrator's name (mention all, if more than one name)
Dr. Mohammed Abdulzahra Saasaa

8. Course Objectives	
Course Objectives	**General objective:** To introduce all medical devices used in anesthesia. **Special goals: -** At the end of the academic year, the student will be able to: - Using all the different anesthesia devices and connecting them to the patient. Maintenance and maintenance of all anesthesia equipment.

9. Teaching and Learning Strategies	
	Theoretical methods, practical laboratory and hospital methods, as well as illustrations and educational videos And also the method of open discussion **Strategy** With tests at the end of the lecture Also, the way the cysts are displayed (case report and scenario)

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-5	10	Theory	Airway management device: supra glottis device, laryngeal mask of all types, igel, cobra airway, combe-tube ...etc	Subject theory	Actual theoretical tests
6-8	6	Theory	Endotracheal tubes for special purpose, double-lumen tube	Subject theory	Actual theoretical tests
9-11	6	Theory	Laryngoscope modification, aids to intubation, emergency airway	Subject theory	Actual theoretical tests
12-14	6	Theory	Humidifier and nebulizer: definition, the importance of humidification. Classification and examples of humidifiers and nebulizers	Subject theory	Actual theoretical tests
15	2	Theory	Medical suction apparatus, component, choice, standard, and testing	Subject theory	Actual theoretical tests

23. Course Evaluation

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

24. Learning and Teaching Resources

Required textbooks (curricular books, if an	Essential anesthesia equipment Baha alshake anesthesia equipment Basic miller of anesthesia Morgan and mikhails
Main references (sources)	Other books of clinical anesthesiology
Recommended books and references (scientific journals, reports...)	Anesthesia and Analgesia Journal British journal of anesthesia Others
Electronic References, Websites	Pubmed Google scholar Web of sciences Embase Other

Course Description Form

1. Course Name:	
Basics of Intensive Care (1)	
2. Course Code:	
ATU13ANT312CE	
3. Semester / Year:	
First 2025-2026	
8. Description Preparation Date:	
2025-10-12	
9. Available Attendance Forms:	
Immanence	
10. Number of Credit Hours (Total) / Number of Units (Total)	
90 --- 4	
11. Course administrator's name (mention all, if more than one name)	
Name: Dr.Ahmed Makki Radeef Naseef	
12. Course Objectives	
Course Objectives	**General Objective:** The course aims to provide students with fundamental knowledge regarding the use and maintenance of intensive care unit (ICU) equipment within critical care settings. **Specific Objectives:** By the end of the academic year, the student will be able to: 1. Perform routine maintenance of ICU equipment effectively. 2. Operate intensive care devices safely and efficiently. 3. Disassemble and reassemble ICU equipment according to proper technical standards.
13. Teaching and Learning Strategies	
Strategy	Theoretical and practical laboratory methods, lectures, photographic and video illustrations, three-dimensional models, and open discussion method

14. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
2-1	6	Theory- practical	ICU organization, design, addmision and discharge criterias + clinical monitoring in ICU(respiratory monitoring,cardiovascular monitoring,hemodynamic and cranial monitoring)	Presence	Immanence+ quiz
4-3	6	Theory- practical	Asthma and COPD in ICU	Presence	Immanence+ quiz
6-5	6	Theory- practical	ARDS and TRIALI	Presence	Immanence+ quiz
9-7	6	Theory- practical	cardiac arrest (CPR,BLS,ACLS,post resuscitation care)	Presence	Immanence+ quiz
-10 11	6	Theory- practical	IV Fluids and blood transfusion	Presence	Immanence+ quiz
12	6	Theory- practical	status epilepticus	Presence	Immanence+ quiz
13	6	Theory- practical	head injury and management of increased ICP	Presence	Immanence+ quiz
-14 15	6	Theory- practical	acid-base balance and disorders	Presence	Immanence+ quiz

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

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

Course description form

1. Course Name	
Anesthesia equipment Technology-1	
2. Course Code	
ATU13ANT415CE	
3. Semester/year	
2025-2026	
4. Date this description was prepared	
2/10/2025	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
90 hours – 4 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Mohammed Abdulzahra Saasaa Kouta	
8. Course objectives	
At the end of the academic year, the student will be able to: - Use all the different anesthesia devices. Maintenance and maintenance of all anesthesia equipment. Identify all parts of medical devices used in anesthesia and their techniques	Objectives of the study subject
9. Teaching and learning strategies	
Theoretical and practical laboratory methods, lectures, photographic and video illustrations, three-dimensional models, and open discussion method	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Physiological monitoring: principles monitoring, classification of monitoring equipment invasive (Doppler) Monitoring of blood pressure, invasive (CVP) and non-invasive (arterial blood pressure) pulse oximeter E.T CO2 ECG and temperature monitoring equipment	Suction units	Understand the lecture	2- Theoretical 4- Practical	7-1
Actual theoretical tests - practical tests in laboratories	Monitoring for gases, inspired O2 concentration, nitrous oxide and volatile anaesthetic agent concentration analyzer	Suction units	Understand the lecture	2- Theoretical 4- Practical	9-8
Actual theoretical tests - practical tests	measurement of gases in blood (blood gas analyzer)	Suction units	Understand the lecture	2- Theoretical 4- Practical	10

in laboratories					
Actual theoretical tests - practical tests in laboratories	Measurement of respiratory volume(wright respirometer) , Measurements of volume, flow and pressure, force and pressure	Suction units	Understand the lecture	2- Theoretical 4- Practical	12-11
Actual theoretical tests - practical tests in laboratories	Electrical hazard and their prevention, and accident associated with main electrical supply Risk management :principles of risk management, risk reduction related to equipment ,Surgical diathermy, accident due to use of diathermy	Suction units	Understand the lecture	2- Theoretical 4- Practical	14-13
Actual theoretical tests - practical tests in laboratories	Haemofiltration	Ventilators	Understand the lecture	2- Theoretical 4- Practical	15

11. Course evaluation
the audience Share Peer evaluation Weekly reports

12. Learning and teaching resources	
Essential anesthesia equipment Baha alshake anesthesia equipment Basic mill of anesthesia Morgan and Michaels	Main references (sources)
Pubmed Google scholar Web of sciences Embase Other	Recommended supporting books and references (scientific journals, reports....)
Medical website	Electronic references, Internet sites

Course Description Form

1. Course Name:	
Medicine 1	
2. Course Code:	
ATU13ANT313CE	
3. Semester / Year:	
First 2025-2026	
8. Description Preparation Date:	
25-10-2025	
9. Available Attendance Forms:	
Immanence	
10. Number of Credit Hours (Total) / Number of Units (Total)	
90 --- 4	
11. Course administrator's name (mention all, if more than one name)	
Name: Dr. Muthanna Hassan Abdulhussein Hassan	
12. Course Objectives	
Course Objectives	**General Objective:** **To familiarize students with the various chronic diseases affecting body organs and blood.** **Specific Objectives: :By the end of the academic year, the student will be able to recognize and differentiate the signs and symptoms associated with chronic diseases affecting:** **1. The respiratory system.** **2. The gastrointestinal system.** **3. The renal and urinary systems, including kidney diseases.** **4. Liver diseases.** **5. Endocrine disorders.**
13. Teaching and Learning Strategies	
Strategy	Students should be eligible to practice in the peripheral health centers hospitals and private clinics .

14. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	4	Theory- practical	Jaundice: classification, causes, clinical features, diagnosis.	Presence	Immanence+ quiz
3	4	Theory- practical	Peptic ulcer disease : Duodenal ulcer, Gastric ulcer	Presence	Immanence+ quiz
4	4	Theory- practical	Cerbrovascular accident	Presence	Immanence+ quiz
5-6	4	Theory- practical	Renal failure: acute renal failure, chronic renal failure: clinical features, investigations and treatment.	Presence	Immanence+ quiz
7	4	Theory- practical	Ischemic heart diseases: clinical features, diagnosis, treatment.	Presence	Immanence+ quiz
8-9	4	Theory- practical	Arrhythmias: cardiac arrest.	Presence	Immanence+ quiz
10-11	4	Theory- practical	Heart failure: definition, classification, causes, precipitating factors, investigations, treatment.	Presence	Immanence+ quiz
12-13	4	Theory- practical	Hypertension: definition, types: primary and secondary hypertension. complications, investigations/ treatment.	Presence	Immanence+ quiz
14-15	4	Theory- practical	Infections of the respiratory tract: upper respiratory tract infections. Lower respiratory tract infections: pneumonia.	Presence	Immanence+ quiz

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

Course Description Form

1. Course Name:	
Surgery 1	
2. Course Code:	
ATU13ANT314CE	
3. Semester / Year:	
First 2025-2026	
8. Description Preparation Date:	
15-11-2025	
9. Available Attendance Forms:	
Immanence	
10. Number of Credit Hours (Total) / Number of Units (Total)	
60 --- 4	
11. Course administrator's name (mention all, if more than one name)	
Name: Dr.Adel Abdulzahra Atiyah	
12. Course Objectives	
Course Objectives	**Have Well educated student in the field of surgery ▯ Student familiar with different functions and anatomy of the ▯ different part of the body.....**
13. Teaching and Learning Strategies	
Strategy	Students should be eligible to practice in the peripheral health centers hospitals and private clinics.

14. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1.	4	Theory- practical	Digestive Tract (GIT) General Review & Surgical Approaches	Presence	Immanence+ quiz
2.	4	Theory- practical	Salivary glands	Presence	Immanence+ quiz
3.	4	Theory- practical	Investigation & Diagnosis (Diagnosis Image) endoscopy & tissue Diagnosis	Presence	Immanence+ quiz
4.	4	Theory- practical	Oesophagus	Presence	Immanence+ quiz
5.	4	Theory- practical	Stomach & duodenum	Presence	Immanence+ quiz
6.	4	Theory- practical	Liver	Presence	Immanence+ quiz
7.	4	Theory- practical	Gall bladder & bile ducts	Presence	Immanence+ quiz
8.	4	Theory- practical	Spleen & pancreas	Presence	Immanence+ quiz
9.	4	Theory- practical	Small & large intestine	Presence	Immanence+ quiz
10.	4	Theory- practical	Intestinal obstruction & fistula	Presence	Immanence+ quiz
11.	4	Theory- practical	Vermiform appendix , peritoneum	Presence	Immanence+ quiz
12.	4	Theory- practical	Rectum & anus	Presence	Immanence+ quiz
13.	4	Theory- practical	Abdominal wall & Hernia	Presence	Immanence+ quiz
14.	4	Theory- practical	Breast	Presence	Immanence+ quiz
15.	4	Theory- practical	Burn, plastic surgery	Presence	Immanence+ quiz

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

Course Description Form

1. Course Name:

Anesthesia2

2. Course Code:

ATU13ANT321CE

3. Semester / Year:

2025-2026

4. Description Preparation Date:

8 / 2 /2026

5. Available Attendance Forms:

Immanence

6. Number of Credit Hours (Total) / Number of Units (Total)

90hr/ 4 units

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

Name: Dr. Bassem Mohammed Jabbar

8. Course Objectives

Course Objectives	•At the end of the academic year, the student will be able to •Use all different anesthesia devices. •Maintenance and maintenance of all anesthesia equipment • Identify all parts of medical equipment used in anesthesia and their techniques.

9. Teaching and Learning Strategies

Strategy	B - Theoretical methods, laboratory practical methods, hospitals, as well as illustrations and educational videos And also the method of open discussion With tests at the end of the lecture Also the view of case scenarios

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	14	Theory- practic	Regional anaesthesia	lecture	Immanence+ quiz
4-3	14	Theory- practical	Post anaesthesia recover	lecture	Immanence+ quiz
6-5	14	Theory- practical	Common Perioprera complication	lecture	Immanence+ quiz
8-7	14	Theory- practical	Renal diseases anaesthesia	Lecture	Immanence+ quiz
10-9	7	Theory- practical	Liver diseases anaesthesia	lecture	Immanence+ quiz
12-11	7	Theory- practical	Hematological diseases anaesthesia	lecture	Immanence+ quiz
13	7	Theory- practical	Anaesthesia for Laparosc surgery	lecture	Immanence+ quiz
14	7	Theory- practical	Anesthesia for Day Case surgery	lecture	Immanence+ quiz
15	7	Theory- practical	OUT OF OPERAT ROOM ANAESTHESIA	lecture	Immanence+ quiz

11. Course Evaluation

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

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Essential anesthesia equipment Baha alshake anesthesia equipment Basic miller of anesthesia Morgan and mikhails
Main references (sources)	Other book of clinical anesthesiology
Recommended books and references (scientific journals, reports...)	Medical journals and magazines
Electronic References, Websites	Electronic library

1. Course Name:
Basics of Intensive Care (2)
2. Course Code:
ATU13ANT322CE
3. Semester / Year:
2025-2026
8. Description Preparation Date:
2026-2-4
9. Available Attendance Forms:
Immanence
10. Number of Credit Hours (Total) / Number of Units (Total)
90 --- 4
11. Course administrator's name (mention all, if more than one name)
Name: .Ahmed Makki Radeef Naseef
12. Course Objectives

Course Objectives	**General Objective:** The course aims to provide students with fundamental knowledge regarding the use and maintenance of intensive care unit (ICU) equipment within critical care settings. **Specific Objectives:** By the end of the academic year, the student will be able to: 1. Perform routine maintenance of ICU equipment effectively. 2. Operate intensive care devices safely and efficiently. 3. Disassemble and reassemble ICU equipment according to proper technical standards.
13. Teaching and Learning Strategies	
Strategy	Theoretical and practical laboratory methods, lectures, photographic and video illustrations, three-dimensional models, and open discussion method

14. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
2-1	12	Theory- practical	**clinical monitoring in ICU(respiratory monitoring,cardiovascular monitoring,hemodynamic and cranial monitoring)**	**Presence**	Immanence+ quiz
4-3	12	Theory- practical	**Asthma and COPD in ICU**	**Presence**	Immanence+ quiz
6-5	12	Theory- practical	**ARDS and TRIALI**	**Presence**	Immanence+ quiz
9-7	18	Theory- practical	**cardiac arrest (CPR,BLS,ACLS,post resuscitation care)**	**Presence**	Immanence+ quiz
-10 11	12	Theory- practical	**IV Fluids and blood transfusion**	**Presence**	Immanence+ quiz
12	6	Theory- practical	**status epilepticus**	**Presence**	Immanence+ quiz
13	6	Theory- practical	**head injury and management of increased ICP**	**Presence**	Immanence+ quiz
-14 15	12	Theory- practical	**acid-base balance and disorders**	**Presence**	Immanence+ quiz

15. Course Evaluation

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

16. Learning and Teaching Resources

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

Course Description Form

1. Course Name:
Anesthesia Equipment 2
2. Course Code:
ATU13ANT325CE
3. Semester / Year:
Course (2) 2025/2026
4. Description Preparation Date:
In presence
5. Available Attendance Forms:
2/2/2026
6. Number of Credit Hours (Total) / Number of Units (Total)
90 hours / 4 units
7. Course administrator's name (mention all, if more than one name)
Dr. Mohammed Abdulzahra Saasaa

8. Course Objectives **Course Objectives**	**General objective:** To introduce all medical devices used in anesthesia. **Special goals: -** At the end of the academic year, the student will be able to: - Using all the different anesthesia devices and connecting them to the patient. Maintenance and maintenance of all anesthesia equipment.
9. Teaching and Learning Strategies	Theoretical methods, practical laboratory and hospital methods, as well as illustrations and educational videos And also the method of open discussion **Strategy** With tests at the end of the lecture Also, the way the cysts are displayed (case report and scenario)

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-5	27	Theory	**Modification of breathing system(lack , bain and Humphrey) circle breathing and soda lime, procedure for checking breathing system**	Subject theory	Actual theoretical tests
6	7	Theory	**Manual resuscitator, components and other use for manual resuscitator**	Subject theory	Actual theoretical tests
7-10	21	Theory	**Anesthesia ventilator, principle of working and type of ventilator (manley MP3, penlon ventilator and high-frequency jet ventilator**	Subject theory	Actual theoretical tests
11-12	14	Theory	**Equipment for local analgesia: spinal, epidural, and major nerve block**	Subject theory	Actual theoretical tests
13	7	Theory	**peripheral nerve stimulator and nerve block stimulator**	Subject theory	Actual theoretical tests
14	7	Theory	**Defibrillator and pacemaker**	Subject theory	Actual theoretical tests
15	7	Theory	**Blood warmer**	Subject theory	Actual theoretical tests

23. Course Evaluation

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

24. Learning and Teaching Resources

Required textbooks (curricular books, if an	Essential anesthesia equipment Baha alshake anesthesia equipment Basic miller of anesthesia Morgan and mikhails
Main references (sources)	Other books of clinical anesthesiology
Recommended books and references (scientific journals, reports...)	Anesthesia and Analgesia Journal British journal of anesthesia Others
Electronic References, Websites	Pubmed Google scholar Web of sciences Embase Other

Course Description Form

1. Course Name:
Medicine 1
2. Course Code:
ATU13ANT323CE
3. Semester / Year:
2025-2026
8. Description Preparation Date:
3-2-2026
9. Available Attendance Forms:
Immanence
10. Number of Credit Hours (Total) / Number of Units (Total)
90 --- 4
11. Course administrator's name (mention all, if more than one name)
Name: Dr. Muthanna Hassan Abdulhussein Hassan
12. Course Objectives

Course Objectives	**General Objective:** **To familiarize students with the various chronic diseases affecting body organs and blood.** **Specific Objectives: :By the end of the academic year, the student will be able to recognize and differentiate the signs and symptoms associated with chronic diseases affecting:** **1. The respiratory system.** **2. The gastrointestinal system.** **3. The renal and urinary systems, including kidney diseases.** **4. Liver diseases.** **5. Endocrine disorders.**
13. Teaching and Learning Strategies	
Strategy	Students should be eligible to practice in the peripheral health centers hospitals and private clinics .

14. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-2	12	Theory- practical	**Pulmonary T.B.**	Presence	Immanence+ quiz
3-4	12	Theory- practical	**Chronic obstructive pulmonary diseases: chronic bronchitis, emphysema, asthma.**	Presence	Immanence+ quiz
5-6	12	Theory- practical	**Tumors of the lung**	Presence	Immanence+ quiz
7-8	12	Theory- practical	**Vascular lung disease: pulmonary thrombo-embolism.**	Presence	Immanence+ quiz
9-10	12	Theory- practical	**Respiratory failure : definition, types, management.**	Presence	Immanence+ quiz
11	6	Theory- practical	**Diseases of the pleura: pleural effusion: types, causes, investigation, treatment**	Presence	Immanence+ quiz
12-13	12	Theory- practical	**Diabetes mellitus: definition/clinical features/ complications/ treatment.**	Presence	Immanence+ quiz
14	6	Theory- practical	**Cushing syndrome: diagnosis, clinical features, Investigations and treatment**	Presence	Immanence+ quiz
15	6	Theory- practical	**Disturbances of water and electrolytes.**	Presence	Immanence+ quiz

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

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

1. Course Name:
Surgery 2
2. Course Code:
ATU13ANT324CE
3. Semester / Year:
2025-2026
8. Description Preparation Date:
6-2-2026
9. Available Attendance Forms:
Immanence
10. Number of Credit Hours (Total) / Number of Units (Total)
60 --- 4
11. Course administrator's name (mention all, if more than one name)
Name: Dr.Adel Abdulzahra Atiyah
12. Course Objectives

Course Objectives	**Have Well educated student in the field of surgery ▯ Student familiar with different functions and anatomy of the ▯ different part of the body.....**
13. Teaching and Learning Strategies	
Strategy	Students should be eligible to practice in the peripheral health centers hospitals and private clinics .

14. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1.	4	Theory- practical	**Trauma to the : K kidneys , Ureter , Bladder , Urethra**	Presence	Immanence+ quiz
2.	4	Theory- practical	**Hydronephrosis , Urinary stone , UTI**	Presence	Immanence+ quiz
3.	4	Theory- practical	**DVT & pulmonary embolism**	Presence	Immanence+ quiz
4.	4	Theory- practical	**Bariatric surgery**	Presence	Immanence+ quiz
5.	4	Theory- practical	**Gynecology (hysterectomy , caesarean section)**	Presence	Immanence+ quiz
6.	4	Theory- practical	**Urogenital Tract in Males : Prostate , Testis , Penis**	Presence	Immanence+ quiz
7.	4	Theory- practical	**Thorax surgery : Respiratory path physiology & General review**	Presence	Immanence+ quiz
8.	4	Theory- practical	**Trauma to thorax : Rib Fractures, Flail Chest**	Presence	Immanence+ quiz
9.	4	Theory- practical	**Pneumothorax , Haemothorax**	Presence	Immanence+ quiz
10.	4	Theory- practical	**Pleural Effusion , Empyema**	Presence	Immanence+ quiz
11.	4	Theory- practical	**Chest tube : Application & Management**	Presence	Immanence+ quiz
12.	4	Theory- practical	**Pediatric surgery**	Presence	Immanence+ quiz
13.	4	Theory- practical	**Types of Thoracic operations**	Presence	Immanence+ quiz
14.	4	Theory- practical	**Osteomyelitis**	Presence	Immanence+ quiz
15.	4	Theory- practical	**Orthopedic surgery, fracture and dislocation**	Presence	Immanence+ quiz

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

Fourth Stage

Course description form

1. Course Name	
Advance Anesthesia (1)	
2. Course Code	
ATU13ANT411CE	
3. Semester/year	
2025-2026	
4. Date this description was prepared	
21/10/2025	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
105hour -4 academic credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Sajjad Mohammed Maher Hussein	
8. Course objectives	
At the end of the academic year, the student will be able to: - Use all the different anesthesia devices. How to give anesthetics. How to resuscitate a patient. Recognize patient care wisely when an emergency occurs	Objectives of the study subject
9. Teaching and learning strategies	
Theoretical and practical laboratory methods, lectures, photographic and video illustrations, three-dimensional models, and open discussion method	The strategy

10. Course structure

Evaluation method	Learning method	Required learning outcomes	hours	the week	
Actual theoretical tests - practical tests in laboratories	anesthesia for emergency operations	Understand the lecture	2- Theoretical 5- Practical	2-1	
Actual theoretical tests - practical tests in laboratories	Endotracheal intubation- difficult intubation + difficult intubation management guidelines	Understand the lecture	2- Theoretical 5- Practical	4-3	
Actual theoretical tests - practical tests in laboratories	Emergency Airway Management of trauma patient / failed intubation drill	Understand the lecture	2- Theoretical 5- Practical	5	
Actual theoretical tests - practical tests in laboratories	Anesthetic Management of patient with ischemic heart disease undergoing non-cardiac surgery.	Understand the lecture	2- Theoretical 5- Practical	6	
Actual theoretical tests - practical tests in laboratories	Anesthetic Management of patient with valvular heart disease	Understand the lecture	2- Theoretical 5- Practical	7	
Actual theoretical tests - practical tests in laboratories	Anesthetic Management of patient with heart failure/ Anesthetic Management of patient with cardiomyopathy	Understand the lecture	2- Theoretical 5- Practical	8	

Actual theoretical tests - practical tests in laboratories	Anesthetic Management of patient with Asthma, COPD and Restrictive Pulmonary Disease	Understand the lecture	2- Theoretical 5- Practical	9	
Actual theoretical tests - practical tests in laboratories	Perioperative Management of patient with Aspiration Pneumonia/ Pulmonary Embolism	Understand the lecture	2- Theoretical 5- Practical	10	
Actual theoretical tests - practical tests in laboratories	Hematological Disease and Anesthesia	Understand the lecture	2- Theoretical 5- Practical	12-11	
Actual theoretical tests - practical tests in laboratories	Electro-compulsive therapy (ECT) and anaesthesia	Understand the lecture	2- Theoretical 5- Practical	13	
Actual theoretical tests - practical tests in laboratories	Anesthetic Management for Thyroidectomy/ Explorative Laparotomy	Understand the lecture	2- Theoretical 5- Practical	14	
Actual theoretical tests - practical tests in laboratories	Anesthetic & Diabetes mellitus	Understand the lecture	2- Theoretical 5- Practical	15	

11. Course evaluation
the audience Share Peer evaluation Weekly reports

12. Learning and teaching resources	
Clinical anesthesiology, Fundamental, Oxford Google ASA, scopas	Main references (sources)
	Recommended supporting books and references (scientific journals, reports....)
YouTube channel, ASA, slide share, pint re	Electronic references, Internet sites

Course description form

1. Course Name	
Intensive Care Technology (1)	
2. Course Code	
ATU13ANT412CE	
3. Semester/year	
2025-2026	
4. Date this description was prepared	
5/10/2025	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
90 hour -4 academic credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Ahmed Makki Radeef Naseef	
8. Course objectives	
Objectives of the study subject	Course objectives: - To develop an idea about all the devices used in intensive care units Operating equipment in intensive care units Maintaining and repairing devices
9. Teaching and learning strategies	
The strategy	Theoretical and practical laboratory methods, lectures, photographic and video illustrations, three-dimensional models, and open discussion method

10. Course structure

the week	hours	Required learning outcomes	Name of the unit or topic	Learning method	Evaluation method
2-1	2- Theoretical 3- Practical	Understand the lecture	pulmonary embolisms and pulmonary edema	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
4-3	2- Theoretical 3- Practical	Understand the lecture	acute renal failure and CRRT	Lecture given and practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
5	2- Theoretical 3- Practical	Understand the lecture	sepsis and septic shock	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
7-6	2- Theoretical 3- Practical	Understand the lecture	multiple trauma (sever multiple trauma, chest injury, spinal cord injury)	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
9-8	2- Theoretical 3- Practical	Understand the lecture	environment injuries (submersion, burns, thermal injury and envenom enation)	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
10	2- Theoretical 3- Practical	Understand the lecture	infection and antimicrobial therapy	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories

12-11	2- Theoretical 3- Practical	Understand the lecture	ICU care after cardiac surgery	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
13	2- Theoretical 3- Practical	Understand the lecture	transport of critically ill patients	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
15-14	2- Theoretical 3- Practical	Understand the lecture	Nutrition in ICU	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories

11. Course evaluation
the audience Share Peer evaluation Weekly reports

12. Learning and teaching resources	
Main references (sources)	OH'S INTENSIVE CARE MANUAL SEVENTH EDITION
Recommended supporting books and references (scientific journals, reports....)	
Electronic references, Inter sites	YouTube channel, ASA, slide share, pint rest

Course description form

1. Course Name	
Advance Medicine (1)	
2. Course Code	
ATU13ANT413CE	
3. Semester/year	
2025-2026	
4. Date this description was prepared	
2/11/2025	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
75hour -3 academic credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Professor Dr.Ali Hussein Al-Dujailib	
8. Course objectives	
Objectives of study subject	Introducing the student to the various organs of the body and the impact of injuries and diseases on them from an anatomical and physiological perspective, and the complications resulting from them, as well as teaching the student the symptoms and signs of these conditions and the basic frameworks for how to deal with them. Introducing the student to the cases that require intervention and clarifying the nature of this intervention, with a focus on emergency cases.
9. Teaching and learning strategies	
The strategy	Theoretical and practical laboratory methods, lectures, photographic and video illustrations, thr dimensional models, and open discussion method

10. Course structure

the week	hours	Required learning outcomes	Name of the unit or topic	Learning method	Evaluation method
1	2- Theoretical 3- Practical	Understand the lecture	Shock (types, patho physiology, management)	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
2	2- Theoretical 3- Practical	Understand the lecture	Organization and function and immune system	Lecture given and practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
3	2- Theoretical 3- Practical	Understand the lecture	Genetics and disease	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
4	2- Theoretical 3- Practical	Understand the lecture	Type &genetics disease	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
5	2- Theoretical 3- Practical	Understand the lecture	Principle & critical care medicine	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories

6	2- Theoretical 3- Practical	Understand the lecture	Autoimmune disease	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
7	2- Theoretical 3- Practical	Understand the lecture	Ophalimic disease	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
8	2- Theoretical 3- Practical	Understand the lecture	Principle of general medicine	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
9	2- Theoretical 3- Practical	Understand the lecture	Disease of the nerve and muscle	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
10	2- Theoretical 3- Practical	Understand the lecture	Disorder of spin and spinal cord	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
11	2- Theoretical 3- Practical	Understand the lecture	Heavy metal poisoning	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
12	2- Theoretical 3- Practical	Understand the lecture	Disease of blood	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
13	2- Theoretical 3- Practical	Understand the lecture	Infection of nervous system	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
14	2- Theoretical 3- Practical	Understand the lecture	Endocrinology: Pituitary gland	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
15	2- Theoretical 3- Practical	Understand the lecture	Thyroid gland	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories

11. Course evaluation
the audience Share Peer evaluation Weekly reports

12. Learning and teaching resources	
Main references (sources)	Principles of medicine and surgery, short notes
Recommended supporting books and references (scientific journals, reports....)	Davidson, Macloeid Baily and love, short practice in surgery 26th ED Swaartz clinical surgery 11th ED
Electronic references, Inter sites	YouTube channel, ASA, slide share, pint rest

Course description form

1. Course Name	
Pain management	
2. Course Code	
ATU13ANT414CE	
3. Semester/year	
2025-2026	
4. Date this description was prepared	
15/10/2025	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
75 hour -3 academic credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Ali Rahim Wahab Jasim	
8. Course objectives	
Objectives of the study subject	• To recognize different types of pain as a disease entity rather than merely a symptom, and to alleviate patient suffering through all available and appropriate medical approaches. • To develop competency in various pain management techniques, including pharmacological treatments and non-pharmacological modalities such as physical therapy, behavioral therapy, and acupuncture. • To utilize advanced interventional techniques in the management of chronic pain conditions, including spinal cord stimulation, brain stimulation, and intrathecal pump implantation for pain control.
9. Teaching and learning strategies	
The strategy	Theoretical and practical laboratory methods, lectures, photographic and video illustrations, three-dimensional models, and open discussion method

10. Course structure

the week	hours	Required learning outcomes	Name of the unit or topic	Learning method	Evaluation method
1	2- Theoretical 3- Practical	Understand the lecture	Anatomy of the pain processing system. Pathophysiology of pain	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
2	2- Theoretical 3- Practical	Understand the lecture	History and physical examination of pain patient Diagnosis of pain.	Lecture given and practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
3	2- Theoretical 3- Practical	Understand the lecture	Pain clinic instruments .Anesthesia for pain management procedures.	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
4	2- Theoretical 3- Practical	Understand the lecture	Acute pain managements survive. Radiation	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories

			safety in pain procedures.		
5	2- Theoretical 3- Practical	Understand the lecture	Radio-frequency in pain management physiotherapy for pain management.	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
6	2- Theoretical 3- Practical	Understand the lecture	prolotherapy for pain management. Acupuncture therapy for pain management.	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
7	2- Theoretical 3- Practical	Understand the lecture	Psychotherapy for pain management. Head ache.	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
8	2- Theoretical 3- Practical	Understand the lecture	Neck pain. Pain managements procedures for neck pain.	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
9	2- Theoretical 3- Practical	Understand the lecture	Pain managements procedures for neck pain. Chest pain.	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
10	2- Theoretical 3- Practical	Understand the lecture	Pain managements procedures for chest pain, CA pain.	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
11	2- Theoretical 3- Practical	Understand the lecture	Back pain .pain management techniques for back pain	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
12	2- Theoretical 3- Practical	Understand the lecture	pelvic pain and sacrum pain management techniques for pelvic and sacral pain	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
13	2- Theoretical 3- Practical	Understand the lecture	complications of pain managements procedures pharmacology for pain managements	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
14	2- Theoretical 3- Practical	Understand the lecture	phantom pain, occupational back pain	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
15	2- Theoretical 3- Practical	Understand the lecture	Advanced pain management techniques spinal cord stimulater techniques in a pain managements, intrathecal pumps	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories

			techniques in pain .managements		

11. Course evaluation
the audience Share Peer evaluation Weekly reports

12. Learning and teaching resources	
Main references (sources)	OH'S INTENSIVE CARE MANUAL SEVENTH EDITION
Recommended supporting books and references (scientific journals, reports....)	
Electronic references, Inter sites	YouTube channel, ASA, slide share, pint rest

Course description form

1. Course Name	
confessional Ethics	
2. Course Code	
ATU13ANT416CE	
3. Semester/year	
2025-2026	
4. Date this description was prepared	
17/10/2025	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
30 hour -2 academic credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Aqeel Muslim Adel Abbas	
8. Course objectives	
Objectives of the study subject	To enable students understanding • the basic principles of Professional ethics. • . Learn and acquire skills, Gain skill in designing simple experiments,
9. Teaching and learning strategies	
The strategy	Theoretical and practical laboratory methods, lectures, photographic and video illustrations, three-dimensional models, and open discussion method

10. Course structure

the week	hours	Required learning outcomes	Name of the unit or topic	Learning method	Evaluation method
2-1	2- Theoretical	Understand the lecture	• Concept of ethics and its origins • General principles of ethics • Sources of ethics • Moral values • The importance of ethics for the individual and society	Lecture given Practical	Actual theoretical tests - practical tests in laboratories
3	2- Theoretical	Understand the lecture	• Work and its importance • Workplace behaviors • Concept of profession • Definition of a profession • The difference between work, profession, and vocation/craft • Standards upon which a profession should be based	Lecture given and practical	Actual theoretical tests - practical tests in laboratories
4	2- Theoretical	Understand the lecture	The concept and nature of professional ethics Positive outcomes of adhering to professional ethics Characteristics of work ethics Traits of professional ethics	Lecture given Practical	Actual theoretical tests - practical tests in laboratories

			Steps toward achieving an acceptable level of professional ethics		
6-5	2- Theoretical	Understand the lecture	Honesty Truthfulness Sincerity and good counsel Justice Good conduct and interpersonal respect Work proficiency and excellence	Lecture given Practical	Actual theoretical tests - practical tests in laboratories
8-7	2- Theoretical	Understand the lecture	Unethical administrative behavior Definition of administrative corruption Types of administrative corruption Bribery Concept of bribery Types of bribery Difference between a gift and a bribe Causes and motives behind bribery Fraud Concept of fraud Nature of fraud in the workplace Manifestations of fraud in job performance	Lecture given Practical	Actual theoretical tests - practical tests in laboratories
10-9	2- Theoretical	Understand the lecture	Strategies for promoting professional ethics Levels of building and reinforcing professional ethics Means and methods of strengthening professional ethics Considerations in drafting a professional code of ethics Enhancing ethical behavior in the workplace according to Kreitner and Kinicki	Lecture given Practical	Actual theoretical tests - practical tests in laboratories
15-11	2- Theoretical	Understand the lecture	Duties of the medical technician toward the profession, patients, and society Patients' Rights Justice and equality Confidentiality of patient information Protection of patient privacy Informed consent Comprehensive care Placing the patient's interest above all considerations	Lecture given Practical	Actual theoretical tests - practical tests in laboratories

			Effective communication with patients Right of access to medical records Social Responsibility The medical technician's responsibility toward society, the environment, and public safety Commitment to professional standards to prevent the spread of epidemics and diseases Role in promoting health awareness and disease prevention Professional Relationships Relationship of the medical technician with colleagues in the healthcare institution Respect and cooperation Avoiding criticism in front of patients Accuracy and honesty in performance evaluation Ethics and Medical Research Ethics of conducting medical research in Iraqi health institutions Declaration of Helsinki Ethics of medical research writing Ethics of Teaching and Learning on Patien		

11. Course evaluation
the audience Share Peer evaluation Weekly reports

12. Learning and teaching resources	
Main references (sources)	
Recommended supporting books and references (scientific journals, reports....)	
Electronic references, Internet sites	

Course description form

1. Course Name	
Advance Anesthesia (2)	
2. Course Code	
ATU13ANT421CE	
3. Semester/year	
2025-2026	
4. Date this description was prepared	
3/2/2026	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
105hour -4 academic credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Sajjad Mohammed Maher Hussein	
8. Course objectives	
At the end of the academic year, the student will be able to: - Use all the different anesthesia devices. How to give anesthetics. How to resuscitate a patient. Recognize patient care wisely when an emergency occurs	Objectives of the study subject
9. Teaching and learning strategies	
Theoretical and practical laboratory methods, lectures, photographic and video illustrations, three-dimensional models, and open discussion method	The strategy

10. Course structure

Evaluation method	Learning method	Required learning outcomes	hours	the week	
Actual theoretical tests - practical tests in laboratories	Anesthetic Management for Craniotomy for acute head injury / Intracranial Tumor Debulking	Understand the lecture	2- Theoretical 5- Practical	2-1	
Actual theoretical tests - practical tests in laboratories	Anesthetic Management for bronchoscopy/ Pneumonectomy	Understand the lecture	2- Theoretical 5- Practical	3	
Actual theoretical tests - practical tests in laboratories	Anesthetic Management for Aortic Aneurysm/ Peripheral Vascular Procedures	Understand the lecture	2- Theoretical 5- Practical	4	
Actual theoretical tests - practical tests in laboratories	Hypertension and Anesthesia	Understand the lecture	2- Theoretical 5- Practical	5	
Actual theoretical tests - practical tests in laboratories	Pre-eclampsia/ eclampsia & anesthesia.	Understand the lecture	2- Theoretical 5- Practical	6	
Actual theoretical tests -	Anesthesia management for shocked patient.	Understand the lecture	2- Theoretical 5- Practical	7	

practical tests in laboratories					
Actual theoretical tests - practical tests in laboratories	Anesthetic Management for Abruptio placenta/ placenta Previa /dilatation & curettage	Understand the lecture	2- Theoretical 5- Practical	8	
Actual theoretical tests - practical tests in laboratories	Anesthesia for the Pregnant Patient Undergoing a Non-Obstetric Procedure/Anesthetic Management for cervical cerclage	Understand the lecture	2- Theoretical 5- Practical	10-9	
Actual theoretical tests - practical tests in laboratories	Anesthetic Management for posterior spinal reconstructive surgery / Arthroscopy	Understand the lecture	2- Theoretical 5- Practical	11	
Actual theoretical tests - practical tests in laboratories	Anesthetic Management for total hip replacement/ Total Knee Replacement	Understand the lecture	2- Theoretical 5- Practical	12	
Actual theoretical tests - practical tests in laboratories	Anesthetic Management for pediatric pyloric stenosis/ Circumcision	Understand the lecture	2- Theoretical 5- Practical	13	
Actual theoretical tests - practical tests in laboratories	Allergic reaction to anesthesia.	Understand the lecture	2- Theoretical 5- Practical	14	
Actual theoretical tests - practical tests in laboratories	Sleeve gastrectomy and anesthesia	Understand the lecture	2- Theoretical 5- Practical	15	

11. Course evaluation
the audience Share Peer evaluation Weekly reports

12. Learning and teaching resources	
Clinical anesthesiology, Fundamental, Oxford Google ASA, scopas	Main references (sources)
	Recommended supporting books and references (scientific journals, reports....)
YouTube channel, ASA, slide share, pint re	Electronic references, Internet sites

Course description form

1. Course Name	
Advance Anesthetic Equipment's (2)	
2. Course Code	
ATU13ANT425CE	
3. Semester/year	
2025-2026	
4. Date this description was prepared	
2/2/2026	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
90 hours – 4 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Mohammed Abdulzahra Saasaa Kouta	
8. Course objectives	
At the end of the academic year, the student will be able to: - Use all the different anesthesia devices. Maintenance and maintenance of all anesthesia equipment. Identify all parts of medical devices used in anesthesia and their techniques	Objectives of the study subject
9. Teaching and learning strategies	
Theoretical and practical laboratory methods, lectures, photographic and video illustrations, three-dimensional models, and open discussion method	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Continuous flow anaesthetic machine: machine framework, the compressed gas attachment , back Bar	Suction units	Understand the lecture	2- Theoretical 4- Practical	4-1
Actual theoretical tests - practical tests in laboratories	Safety features of anaesthetic machine, common gas outlet, auxiliary gas sockets	Suction units	Understand the lecture	2- Theoretical 4- Practical	5-8
Actual theoretical tests - practical tests in laboratories	Electronics in anaesthetic machine, ergonomics and critical incident, electronic control of breathing system	Suction units	Understand the lecture	2- Theoretical 4- Practical	13-9
Actual theoretical tests - practical tests	Maintence of anaesthetic machine	Suction units	Understand the lecture	2- Theoretical 4- Practical	15-14

in laboratories					

11. Course evaluation
the audience Share Peer evaluation Weekly reports

12. Learning and teaching resources	
Essential anesthesia equipment Baha alshake anesthesia equipment Basic mill of anesthesia Morgan and Michaels	Main references (sources)
Pubmed Google scholar Web of sciences Embase Other	Recommended supporting books and references (scientific journals, reports....)
Medical website	Electronic references, Internet sites

Course description form

1. Course Name	
Advance Intensive Care Technology (2)	
2. Course Code	
ATU13ANT422CE	
3. Semester/year	
2025-2026	
4. Date this description was prepared	
6/2/2026	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
90 hour -4 academic credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Ahmed Makki Radeef Naseef	
8. Course objectives	
Objectives of the study subject	Course objectives: - To develop an idea about all the devices used in intensive care units Operating equipment in intensive care units Maintaining and repairing devices
9. Teaching and learning strategies	
The strategy	Theoretical and practical laboratory methods, lectures, photographic and video illustrations, three-dimensional models, and open discussion method

10. Course structure

the week	hours	Required learning outcomes	Name of the unit or topic	Learning method	Evaluation method
2-1	2- Theoretical 3- Practical	Understand the lecture	ICU care after neurovascular surgery	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
3	2- Theoretical 3- Practical	Understand the lecture	upper airway obstructions in Children	Lecture given and practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
5-4	2- Theoretical 3- Practical	Understand the lecture	neuromascular disorders(Gullian bare syndrom, Myasthenia gravis)	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
7-6	2- Theoretical 3- Practical	Understand the lecture	CVA and brain death	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
8	2- Theoretical 3- Practical	Understand the lecture	Respiratory infections (H1N1,sever pneumonia)	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
10-9	2- Theoretical 3- Practical	Understand the lecture	endocrine emergencies(adren	Lecture given Practical application in the laboratory	Actual theoretical tests - practical

			al crisis and thyroid storm)		tests in laboratories
12-11	2- Theoretical 3- Practical	Understand the lecture	meningitis and encephalitis	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
15-13	2- Theoretical 3- Practical	Understand the lecture	toxocology emergencies(paracetamol,Aspirin,opiods,beta-blockers, organophosphorous, and CO poisining	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories

11. Course evaluation

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12. Learning and teaching resources

Main references (sources)	OH'S INTENSIVE CARE MANUAL SEVENTH EDITION
Recommended supporting books and references (scientific journals, reports....)	
Electronic references, Inter sites	YouTube channel, ASA, slide share, pint rest

Course description form

1. **Course Name**

Advance Medicine (2)

2. **Course Code**

ATU13ANT423CE

3. **Semester/year**

2025-2026

4. **Date this description was prepared**

5/2/2026

5. **Available attendance forms**

My presence

6. **Number of study hours (total)/number of units (total)**

75hour -3 academic credits

7. **Name of the course administrator (if more than one name is mentioned)**

Name: Professor Dr.Ali Hussein Al-Dujailib

8. **Course objectives**

Objectives of study subject	Introducing the student to the various organs of the body and the impact of injuries and diseases on them from an anatomical and physiological perspective, and the complications resulting from them, as well as teaching the student the symptoms and signs of these conditions and the basic frameworks for how to deal with them. Introducing the student to the cases that require intervention and clarifying the nature of this intervention, with a focus on emergency cases.

9. **Teaching and learning strategies**

The strategy	Theoretical and practical laboratory methods, lectures, photographic and video illustrations, th dimensional models, and open discussion method

10. **Course structure**

the week	hours	Required learning outcomes	Name of the unit or topic	Learning method	Evaluation method
1	2- Theoretical 3- Practical	Understand the lecture	Parathyroid gland & calcium balance.	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
2	2- Theoretical 3- Practical	Understand the lecture	Adrenal gland	Lecture given and practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
3	2- Theoretical 3- Practical	Understand the lecture	D.M : complications, management, preparation for operation .	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
4	2- Theoretical 3- Practical	Understand the lecture	Preparation of patient with obstructive jaundice	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories

5	2- Theoretical 3- Practical	Understand the lecture	Preparation of patient with portal hypertension due to cirrhosis	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
6	2- Theoretical 3- Practical	Understand the lecture	Management of haematemesis, melaena	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
7	2- Theoretical 3- Practical	Understand the lecture	Management of haemopneumothorax,flail chest	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
8	2- Theoretical 3- Practical	Understand the lecture	Management of respiratory failure,	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
9	2- Theoretical 3- Practical	Understand the lecture	Management of coagulopathy,	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
10	2- Theoretical 3- Practical	Understand the lecture	Management of septicaemia, MOFS	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
11	2- Theoretical 3- Practical	Understand the lecture	Electrical injury	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
12	2- Theoretical 3- Practical	Understand the lecture	Coma and other disturbance of consciousness	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
13	2- Theoretical 3- Practical	Understand the lecture	Venoms, bites and stings	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
14	2- Theoretical 3- Practical	Understand the lecture	Anaphylaxis and transfusion reaction	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
15	2- Theoretical 3- Practical	Understand the lecture	Principle of drugs	Lecture given	Actual theoretical

			therapy and management of poisoning	Practical application in the laboratory	tests practical tests in laboratories

11. Course evaluation
the audience Share Peer evaluation Weekly reports

12. Learning and teaching resources	
Main references (sources)	Principles of medicine and surgery, short notes
Recommended supporting books and references (scientific journals, reports....)	Davidson, Macloeid Baily and love, short practice in surgery 26th ED Swaartz clinical surgery 11th ED
Electronic references, Inter sites	YouTube channel, ASA, slide share, pint rest

Course description form

1. Course Name
Emergency Medicine
2. Course Code
ATU13ANT425CE
3. Semester/year
2025-2026
4. Date this description was prepared
8/2/2026
5. Available attendance forms
My presence
6. Number of study hours (total)/number of units (total)
90 hour -4 academic credits
7. Name of the course administrator (if more than one name is mentioned)
Name: Asaad Museeb Museeb Saleh
8. Course objectives

Objectives of the study subject	Course objectives: - By the end of the academic year, the student will be able to: Perform initial clinical assessments and implement early intervention and resuscitation protocols effectively. Identify and manage common medical emergencies and clinical presentations encountered in emergency medicine. Demonstrate proficiency in operating advanced medical equipment and utilizing modern technologies and pharmacological agents widely used in emergency practice.

9. Teaching and learning strategies	
The strategy	Theoretical and practical laboratory methods, lectures, photographic and video illustrations, three-dimensional models, and open discussion method

10. Course structure

the week	hours	Required learning outcomes	Name of the unit or topic	Learning method	Evaluation method
1	2- Theoretical 3- Practical	Understand the lecture	Principles of Emergency Medicine	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
2	2- Theoretical 3- Practical	Understand the lecture	Airway management	Lecture given and practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
3	2- Theoretical 3- Practical	Understand the lecture	Cardiopulmonary and cerebral resuscitation	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
4	2- Theoretical 3- Practical	Understand the lecture	4 Cardiac dysrhythmias	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
5	2- Theoretical 3- Practical	Understand the lecture	Severe sepsis and septic shock	Lecture given Practical application in the laboratory	Actual theoretical tests - practical

					tests in laboratories
6	2- Theoretical 3- Practical	Understand the lecture	Shock	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
7	2- Theoretical 3- Practical	Understand the lecture	Traumatic injuries	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
8	2- Theoretical 3- Practical	Understand the lecture	Emergency medical services	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
9	2- Theoretical 3- Practical	Understand the lecture	Hypertensive urgencies and emergencies	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
10	2- Theoretical 3- Practical	Understand the lecture	Seizures	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
11	2- Theoretical 3- Practical	Understand the lecture	Shortness of breath in adults	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
12	2- Theoretical 3- Practical	Understand the lecture	Shortness of breath in children	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
13	2- Theoretical 3- Practical	Understand the lecture	Toxicologic emergencies	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
14	2- Theoretical 3- Practical	Understand the lecture	Environmental emergencies	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories
15	2- Theoretical 3- Practical	Understand the lecture	Principles of Emergency Medicine	Lecture given Practical application in the laboratory	Actual theoretical tests - practical tests in laboratories

11. Course evaluation
the audience Share Peer evaluation Weekly reports
12. Learning and teaching resources

Main references (sources)	

Recommended supporting books and references (scientific journals, reports....)	
Electronic references, Inter sites	**YouTube channel, ASA, slide share, pint rest**

Course description form

1. Course Name	
Anesthesia equipment Technology-1	
2. Course Code	
ATU13ANT415CE	
3. Semester/year	
2025-2026	
4. Date this description was prepared	
2/10/2025	
5. Available attendance forms	
My presence	
6. Number of study hours (total)/number of units (total)	
90 hours – 4 credits	
7. Name of the course administrator (if more than one name is mentioned)	
Name: Mohammed Abdulzahra Saasaa Kouta	
8. Course objectives	
At the end of the academic year, the student will be able to: - Use all the different anesthesia devices. Maintenance and maintenance of all anesthesia equipment. Identify all parts of medical devices used in anesthesia and their techniques	Objectives of the study subject
9. Teaching and learning strategies	
Theoretical and practical laboratory methods, lectures, photographic and video illustrations, three-dimensional models, and open discussion method	The strategy

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Actual theoretical tests - practical tests in laboratories	Physiological monitoring: principles monitoring, classification of monitoring equipment invasive (Doppler) Monitoring of blood pressure, invasive (CVP) and non-invasive (arterial blood pressure) pulse oximeter E.T CO2 ECG and temperature monitoring equipment	Suction units	Understand the lecture	2- Theoretical 4- Practical	7-1
Actual theoretical tests - practical tests in laboratories	Monitoring for gases, inspired O2 concentration, nitrous oxide and volatile anaesthetic agent concentration analyzer	Suction units	Understand the lecture	2- Theoretical 4- Practical	9-8
Actual theoretical tests - practical tests	measurement of gases in blood (blood gas analyzer)	Suction units	Understand the lecture	2- Theoretical 4- Practical	10

in laboratories					
Actual theoretical tests - practical tests in laboratories	Measurement of respiratory volume(wright respirometer) , Measurements of volume, flow and pressure, force and pressure	Suction units	Understand the lecture	2- Theoretical 4- Practical	12-11
Actual theoretical tests - practical tests in laboratories	Electrical hazard and their prevention, and accident associated with main electrical supply Risk management :principles of risk management, risk reduction related to equipment ,Surgical diathermy, accident due to use of diathermy	Suction units	Understand the lecture	2- Theoretical 4- Practical	14-13
Actual theoretical tests - practical tests in laboratories	Haemofiltration	Ventilators	Understand the lecture	2- Theoretical 4- Practical	15

11. Course evaluation	
the audience Share Peer evaluation Weekly reports	
12. Learning and teaching resources	
Essential anesthesia equipment Baha alshake anesthesia equipment Basic mill of anesthesia Morgan and Michaels	Main references (sources)
Pubmed Google scholar Web of sciences Embase Other	Recommended supporting books and references (scientific journals, reports....)
Medical website	Electronic references, Internet sites