

**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

Al Manara College of Medical Sciences

2024

Introduction:

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

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

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

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

Concepts and terminology:

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

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

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

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

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

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

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

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

Academic Program Description Form

University Name:

Faculty/Institute: Al Manara College of Medical Sciences

Scientific Department: Anesthesia Techniques Department

Academic or Professional Program Name: Bachelor of Anesthesia

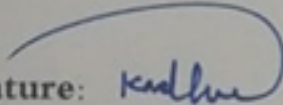
Techniques

Final Certificate Name: Bachelor of Anesthesia Techniques

Academic System: ^{Yearly} Course system

Description Preparation Date: 29/2/2024


File Completion Date: 29/2/2024

Signature: 

Head of Department Name:
Kadhim Qasim Ali

Date: 29-2-2024



Signature: 

Scientific Associate Name:

Mohammed Rawaj

Date: 29/2/2024


The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance

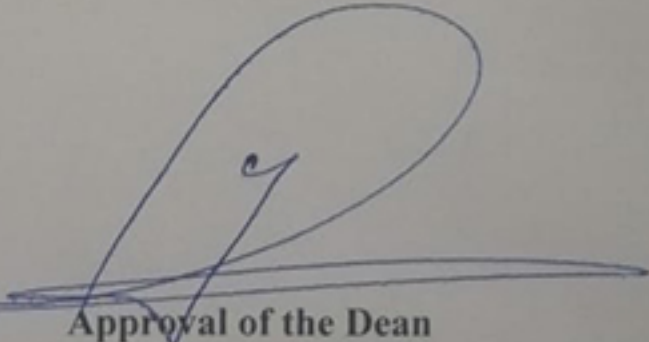
Department:

Date: 2024-2-29

Signature: 

Rasha Abed Hussein



Approval of the Dean 

1. Program Vision

The department should be the starting point for advancing the health situation of the individual, family and society through developing a health services at its three levels - preventive, curative and rehabilitative - inside and outside health institutions, built on the basis of scientific research and keeping pace with scientific developments in the field of the Anesthesia Techniques profession.

2. Program Mission

Preparing specialized cadres in the field of Anesthesia Techniques who possess advanced cognitive, skill and behavioral qualifications that enable them to provide comprehensive preventive, curative and rehabilitative care for the individual, the family and the community and to conduct scientific research on health problems by providing academic educational programs based on insightful thinking, assuming responsibility and working in a team spirit.

3. Program Objectives

- 1- Developing the professional behavioral aspect based on humanity and compassion.
- 2- Developing the cognitive aspect in the field of Anesthesia Techniques.
- 3- Developing students' skills.
- 4- Developing students' abilities to think insightfully.
- 5- Adopting the theory of the Anesthesia Techniques process in solving problems.
- 6- Developing the leadership and administrative personality of students.
- 7- Developing students' abilities to conduct scientific research to solve health and administrative problems.
- 8- Guiding students and making them aware of the importance of working as a team in providing health services.
- 9- Adopting the principle of preserving the reputation of the profession and integrity in anesthesia work.
- 10- Cooperating with health institutions in training and developing the staff.

4. Program Accreditation

In the process of being prepared for program accreditation

5. Other external influences

Is there a sponsor for the program?

Training courses

Developing students' professional skills

Summer training

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	5	20	11%	
College Requirements	6	32	19%	
Department Requirements	33	119	%70	
Summer Training	2	--	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	Clinical
First	ANS111	Medical Physics (1)	2	2	0
	ANS112	Anatomy (1)	2	2	0
	ANS113	General physiology (1)	2	2	0
	ANS114	General chemistry	2	2	0
	ANS115	Biology	2	2	0
	ANS116	Computer principles 1	1	2	0
	ANS117	Human Rights & Democracy	2	0	0
	ANS118	English Language	2	0	0
	ANS121	Medical Physics (2)	2	2	0
	ANS122	Anatomy (2)	2	2	0
	ANS123	General physiology (2)	2	2	0
	ANS124	Biochemistry	2	4	0
	ANS125	microbiology	2	4	0
	ANS126	Computer principles 2	1	2	0
	ANS127	Arabic language	2	0	0
Second	ANS211	Basics of anesthesia (1)	2	2	0
	ANS212	Basics of anesthetic equipment (1)	2	2	0
	ANS213	Applied Physiology (1)	2	2	0
	ANS214	Basics of Surgery (1)	2	1	0
	ANS215	Basics of Medicine (1)	2	2	0
	ANS216	Pharmacology (1)	2	2	0
	ANS217	Medical terminology	2	0	0
	ANS218	Crimes of the defunct Ba'ath Party	2	0	0
	ANS221	Basics of anesthesia (2)	2	2	0
	ANS222	Basics of anesthetic equipment (2)	2	2	0
	ANS223	Applied Physiology (2)	2	2	0
	ANS224	Basics of Surgery (2)	1	2	0
	ANS225	Basics of Medicine (2)	2	2	0
	ANS226	Pharmacology (2)	2	2	0
	ANS227	Statistics	1	2	
ANS228	Preceptorship (Sumer Training)	0	0	180	

Third	ANS311	Anesthesia (2)	3	5	0
	ANS312	Basics of Intensive Care (1)	2	5	0
	ANS313	Anesthetic Equipment Technology (2)	2	5	0
	ANS314	Medicine (2)	2	3	0
	ANS315	Surgery (2)	1	0	0
	ANS316	Computer Applications 2	1	3	0
	ANS317	English Language	1	2	0
	ANS318	Preceptorship (summer Training)	0	0	180
Fourth	ANS411	Anesthesia (3)	2	4	0
	ANS412	Basics of Intensive Care (2)	2	4	0
	ANS413	Anesthetic Equipment Technology (3)	2	4	0
	ANS414	Medical Surgical	1	4	0
	ANS415	Nursing	1	4	0
	ANS416	English Language	1	0	0
	ANS417	Research Project	-	-	-

8. Expected learning outcomes of the program	
Knowledge	
Learning Outcomes 1	<p>A1- Identifying the most important basic sciences supporting Anesthesia Techniques, such as Medical Physics; anatomy, physiology, Biology; microbiology, and other sciences.</p> <p>A2- Identifying therapeutic and non-therapeutic communication techniques with the patient.</p> <p>A3- Identifying theories of developmental methods in Anesthesia Techniques.</p> <p>A4- Identify ways to solve patient problems.</p> <p>A5- Identify the types of treatments used in anesthesia (Pre – Intra – and Post-Operative).</p>
Skills	
Learning Outcomes 2	<p>B1- Evaluating the patient’s status and diagnosing his needs through a therapeutic interview.</p> <p>B2- Develop an integrated plan to implement health care</p>

	<p>according to the diagnosed needs.</p> <p>B3- Applying therapeutic communication skills with the patient.</p> <p>B4- Applying health care skills for the patient.</p> <p>B5- The ability to conduct scientific research in the field of Anesthesia Techniques.</p>
Ethics	
Learning Outcomes 3	<p>C1- Consolidating human values in patient care.</p> <p>C2- Establishing and focusing on religious values in dealing with the caring for the patients.</p> <p>C3- Consolidating moral values in dealing with patients of different races and religions</p> <p>C4- Consolidating national values in providing health care to patients.</p>

9. Teaching and Learning Strategies

- Giving lectures.
- Providing the college with lectures on the college website.
- Educational films.
- Projectors and digital cameras.
- Using educational models.
- Training courses and workshops.
- Applied clinical education.
- Student groups

10. Evaluation methods

- Oral exams.
- Theoretical tests.
- Laboratory practical tests.
- Practical tests on patients.
- Reports and studies.

11.Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
م.د. محمد ماجد والي	chemistry	Biochemistry			30	9
ا.د. فحطان عبد عسكر	chemistry	Inorganic chemistry				
أ. د. امين عبد الجبار عبدالله	Biology	Microbiology				
م. د. محمد فوزي يونس	Medicine	Anesthesia				
م. د. قيس يحيى حاتم	Industrial Engineering	Quality Control				
م.د. حمد عبد الامير محمد	Medicine	Anesthesia				
م. د. محمد راضي حيدر	Medicine	Anesthesia				
م. د. ليلى صباح سلمان	Medicine	Anesthesia				
م. د. بيدق فؤاد عبد العزيز	Medicine	Anesthesia				
م. د. سوسن مؤيد محمود	Medicine	Anesthesia				
م. د. ليلى طه ياسين	Biology	Microbiology				
م. د. يحيى منيب احمد	Chemistry Science	chemistry				
ا. د. صباح لطيف علوان	Plant diseases	Bio resistance				
ا. د. عبد الرضا موسى	Medicine	Medicine				
م.د. خزل راضي زاير	Medicine	General Medicine				
ا.م.د. ليث قاصد محمد	Medicine	Neurosurgery				
م. م. احمد غضيب عبيد	Biology	Microbiology				
م. د. رابعة مزهر شاکر	History	History				
ا.م.د. محمد جاسم قاسم	Veterinary medicine	Microbiology				
م.د. حيدر علي حسين	Nursing	Adult nursing				
م.م. مصطفى عبد الواحد	Veterinary medicine	Microbiology				
م.م. سليم محمد علي	Chemistry Science	chemistry				
م.م. مروة جابر عبد الرزاق	Genetic Engineering	Genetic Engineering				
م.د. هشام احمد رشيد	Medicine	Anesthesia				
م. م. علاء ماصخ زباله	Biology	Microbiology				
م. م. ايمان سمير محمد	Chemistry Science	chemistry				
م.م. حميد حسن خلف	Computer Engineering	IT				
م.م. محمد جواد عطوان	English	English				
م.م. مرتضى سلطان حسين	Psychology	Psychology				
م.د. صفاء ابراهيم	Medicine	Medicine				

م.د. مهند علي الزبيدي	Physics	Medical physics				
م.د. حسام رحيم محمد	Physiology	Physiology				
م.د. محمد عباس كاظم	Medicine	Anesthesia				
م.م. امجد قاسم محمد	Anesthesia techniques	Anesthesia techniques				
م.م. محمد ليلو	Nursing	Adult Nursing				
م.م. علي اعنيد عبد الحسين	Nursing	Nursing				
م.م. سرمد سلمان زبالة	Nursing	Nursing				
م.م. حيدر شايع هندي	Nursing	Adult Nursing				

Professional Development

Mentoring new faculty members

Guiding new teachers to how to deal with students in terms of enhancing professional ethics, dealing with patients inside the hospital among graduates, and providing students with anesthesia skills.

Professional development of faculty members

Developing faculty members through holding seminars and workshops related to anesthesia and ICU, in addition to periodic meetings to guide them from the department leadership.

12. Acceptance Criterion

The admission criteria includes students who have a certain cumulative average according to the central admission system, and students are also selected those who have the physical, mental and social ability to manage any medical condition or practice required by the study through personal interviews with candidates assessing qualities such as the desire to help people, self-confidence and the ability to face challenges and ability to work with people and the ability to work independently.

13. The most important sources of information about the program

- Methodical books
- Iraqi, Arab and international scientific journals

- Internet sites

14. Program Development Plan

- Working to give the student confidence that he is able to contribute effectively to the development of his community.
- Enables students to develop teamwork skills.
- Enables students for continuous self-development beyond graduation.
- Using advanced educational methods.
- Follow up on the latest developments in the field of Anesthesia Techniques training.

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	
First	ANS111	Medical Physics (1)	Basic	√	√	√	√	√	√	√	√					
	ANS112	Anatomy (1)	Basic	√	√	√	√	√	√	√	√					
	ANS113	General physiology (1)	Basic	√	√	√	√	√	√	√	√					
	ANS114	General chemistry	Basic	√	√	√	√	√	√	√	√					
	ANS115	Biology	Basic	√	√	√	√	√	√	√	√					
	ANS116	Computer principles 1	Basic	√	√	√	√	√	√	√	√	√	√	√	√	√
	ANS117	Human Rights & Democracy	Basic	√	√	√	√					√	√	√	√	
	ANS118	English Language	Basic	√	√	√	√									
	ANS121	Medical Physics (2)	Basic	√	√	√	√	√	√	√	√	√				
	ANS122	Anatomy (2)	Basic	√	√	√	√	√	√	√	√	√				
	ANS123	General physiology (2)	Basic	√	√	√	√	√	√	√	√	√				

	ANS124	Biochemistry	Basic	√	√	√	√	√	√	√	√					
	ANS125	microbiology	Basic	√	√	√	√	√	√	√	√					
	ANS126	Computer principles 2	Basic	√	√	√	√	√	√	√	√					
	ANS127	Arabic language	Basic	√	√	√	√									
Second	ANS211	Basics of anesthesia (1)	Basic	√	√	√	√	√	√	√	√					
	ANS212	Basics of anesthetic equipment (1)	Basic	√	√	√	√	√	√	√	√					
	ANS213	Applied Physiology (1)	Basic	√	√	√	√	√	√	√	√					
	ANS214	Basics of Surgery (1)	Basic	√	√	√	√	√	√	√	√					
	ANS215	Basics of Medicine (1)	Basic	√	√	√	√	√	√	√	√					
	ANS216	Pharmacology (1)	Basic	√	√	√	√	√	√	√	√					
	ANS217	Medical terminology	Basic	√	√	√	√									
	ANS218	Crimes of the defunct Ba'ath Party	Basic	√	√	√	√						√	√	√	√
	ANS221	Basics of anesthesia (2)	Basic	√	√	√	√	√	√	√	√					
	ANS222	Basics of anesthetic equipment (2)	Basic	√	√	√	√	√	√	√	√					
	ANS223	Applied Physiology (2)	Basic	√	√	√	√	√	√	√	√					
	ANS224	Basics of Surgery (2)	Basic	√	√	√	√	√	√	√	√					

	ANS225	Basics of Medicine (2)	Basic	√	√	√	√	√	√	√	√				
	ANS226	Pharmacology (2)	Basic	√	√	√	√	√	√	√	√				
	ANS227	Statistics	Basic	√	√	√	√	√	√	√	√				
	ANS228	Preceptorship (Sumer Training)	Basic					√	√	√	√				
Third	ANS311	Anesthesia (2)	Basic	√	√	√	√	√	√	√	√				
	ANS312	Basics of Intensive Care (1)	Basic	√	√	√	√	√	√	√	√				
	ANS313	Anesthetic Equipment Technology (2)	Basic	√	√	√	√	√	√	√	√				
	ANS314	Medicine (2)	Basic	√	√	√	√	√	√	√	√				
	ANS315	Surgery (2)	Basic	√	√	√	√	√	√	√	√				
	ANS316	Computer Applications 2	Basic	√	√	√	√	√	√	√	√				
	ANS317	English Language	Basic	√	√	√	√								
	ANS318	Preceptorship (summer Training)	Basic					√	√	√	√				
Fourth	ANS411	Anesthesia (3)	Basic	√	√	√	√	√	√	√	√				
	ANS412	Basics of Intensive Care (2)	Basic	√	√	√	√	√	√	√	√				
	ANS413	Anesthetic Equipment Technology (3)	Basic	√	√	√	√	√	√	√	√				

	ANS414	Medical Surgical	Basic	√	√	√	√	√	√	√	√				
	ANS415	Nursing	Basic	√	√	√	√	√	√	√	√				
	ANS416	English Language	Basic	√	√	√	√								
	ANS417	Research Project	Basic	√	√	√	√								

- Please tick the boxes corresponding to the individual program learning outcomes under evaluation.

Course Description Guide

First Grade

Medical Physics 1

2024

1. Course Name:
Medical Physics 1
2. Course Code:
ANS111
3. Semester / Year:
Second Semester/first year
4. Description Preparation Date:
21/4/2024
5. Available Attendance Forms:
Attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
6 Hours /4 units
7. Course administrator's name (mention all, if more than one name)
Name: Mohannad Ali AL-Zaidi Email: m84.Zaidi@gmail.com
8. Course Objectives
<ol style="list-style-type: none"> 1.Understanding Physics Basics: Learn basic physics concepts like forces, electricity, and light. 2.Radiation Basics: Understand the properties of radiation and how it interacts with matter. 3.Medical Imaging: Explore how X-rays, MRI, and ultrasound work for medical diagnosis. 4.Radiation Therapy: Learn how radiation is used to treat diseases like cancer. 5.Safety Practices: Understand safety measures to protect patients and workers from radiation. 6.Equipment Knowledge: Familiarize with medical devices used for diagnosis and treatment. 7.Quality Assurance: Learn methods to ensure accuracy and safety in medical procedures. 8.Research Skills: Develop skills to analyze data and communicate findings effectively. 9.Ethical Conduct: Understand ethical responsibilities in patient care and research. 10.Application in Healthcare: See how physics principles are applied in real healthcare settings.
9. Teaching and Learning Strategies
<ul style="list-style-type: none"> • Group discussions and assignments • Creating a competitive atmosphere among students and addressing individual differences using appropriate educational methods

- Research projects
- Interdisciplinary discussion circles
- Incorporating teaching methods that utilize educational technology
- Encouraging students for self-directed learning.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-3	2	Physics of cardiovascular system	<ul style="list-style-type: none"> • Introduction to Biosafety and Security Key components of Biorisk • Management Components of safety in all laboratory Universal safety precautions 	Diction – Discussion	Written tests
4	2	Laser in medicine.	<ul style="list-style-type: none"> • Biosafety barriers in laboratories • Personal protective equipment (PPE) Facility Design 	Diction – Discussion	Written tests
5	2	Electricity within the body	<ul style="list-style-type: none"> • Biosafety level • Risk Assessment Strategy • Hazard groups, biosafety levels, practices and equipment • Standard practices required in biology laboratories 	Diction – Discussion	Written tests
6	2	Application of electricity and magnetism in medicine.	<ul style="list-style-type: none"> • Biological Agents • Routs of infection • Basis for control Measures • Hazard group classification system • A Biosafety cabinet (BSC) 	Diction – Discussion	Written tests
7	2	Light in medicine, sound in medicine.	<ul style="list-style-type: none"> • Biorisk and biohazards • Control of substances 	Diction – Discussion	Written tests

			<p>hazardous to health</p> <ul style="list-style-type: none"> Assessing risk for work with human blood and tissues hazards Control measures for work with human blood and tissue Containment level 		
8	2	Physics of nuclear medicine, radiotherapy, radiation protection.	<ul style="list-style-type: none"> 	Diction – Discussion	Written tests
9	2	Physics of nuclear medicine, radiotherapy, radiation protection.	<ul style="list-style-type: none"> Solar energy technology Availability of solar radiation Photovoltaic devices Dye sensitized solar cells Photoelectrochemical cells for hydrogen production 	Diction – Discussion	Written tests
10	2	Nanotechnology in renewable energy systems	<ul style="list-style-type: none"> Nanotechnology enabled renewable energy technologies Energy transport, conversion and storage Nano, micro and meso scale phenomena and devices. 	Diction – Discussion	Written tests
11	2	Energy sector products using nanomaterials	<ul style="list-style-type: none"> Light emitting diodes Batteries Catalytic reactors Capacitors, Super capacitors 	Diction – Discussion	Written tests
12-13	2	Nanotechnology to Hydrogen Production	<ul style="list-style-type: none"> Photocatalytic Water Splitting Reaction Nano Semiconductor Materials for Photocatalytic Water Splitting Photolytic H₂ Evolution Based 	Diction – Discussion	Written tests

			on Nonenhanced Materials		
14	2	Nanomaterials for the Conversion of Carbon Dioxide into Renewable Fuels and Value-Added Products	<ul style="list-style-type: none"> Theoretical Potentials for Electrochemical Reduction of CO₂ Effect of Particle Size on Electrode Performance in Electrochemical CO₂ Reduction Reaction 	Diction – Discussion	Written tests
15	2	Nanomaterials and Direct Air Capture of CO ₂ ,	<ul style="list-style-type: none"> Capture or Separation Technologies New Roads into CO₂ Capture: Direct Air Capture and Nanomaterials 	Diction – Discussion	Written tests

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

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	"Introduction to Radiological Physics and Radiation Dosimetry" by Frank Herbert Attix
Main references (sources)	"Medical Imaging Physics" by William R. Hendee and E. Russell Ritenou
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Anatomy (1)

13. Course Name:

Anatomy (1)

14. Course Code:

ANS112

15. Semester / Year:

(First semester , First Year)

16. Description Preparation Date:

21/ 4/ 2024

17. Available Attendance Forms:

Weekly attendance

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

(4 units) (6 Hr. / Weekly)

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

Name: dr. Safaa Ibrahim Kadhim

Email: aassdd21202e9@gmail.com

20. Course Objectives:

Objectives of the article:

General objective: To introduce the student to the body's organs and tissues.

Special objectives:–

1– Identify the parts that make up each organ.

2– Identify the tissues that make up each organ.

3– Identify the specialized functions of organs and tissues.

21. Teaching and Learning Strategies

–

22. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6		Introduction, Anatomical terms.		Oral and written Examination
2	6		Body cavities and its organs.		Oral and written Examination
3	6		Superficial anatomy of human body.		Oral and written Examination
4	6		Human body tissues; types and characteristic .		Oral and written Examination
5	6		Skin anatomy and its functions skin color .		Oral and written Examination
6	6		General skeletal structure (Skull, and neck).		Oral and written Examination
7	6		Vertebral column structure, numbers and its function.		Oral and written Examination
8	6		Diaphragm and abdominal wall muscles.		Oral and written Examination
9			Anatomy of heart, wall, valve and its function		Oral and written Examination

10			Structure of blood vessels wall arteries, veins and capillaries.		Oral and written Examination
11			Lymphatic system – lymph glands.		Oral and written Examination
12			Respiratory system – upper respiratory tract.		Oral and written Examination
13			Respiratory system- lower respiratory tract.		Oral and written Examination
14			Alveoli- lungs- pleural activity.		Oral and written Examination
15			Upper and lower limb		Oral and written Examination

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

Learning and Teaching Resources

Required textbooks (curricular books, if any)	Medical textbook
Main references (sources)	
Recommended books and references (scientific journals, reports...)	Medical textbook
Electronic References, Websites	Browse the Google network using the desired subject key.

Physiology 1

24. Course Name:
Physiology 1
25. Course Code:
ANS113
26. Semester / Year:
First semester / first year
27. Description Preparation Date:
21/4/2024
28. Available Attendance Forms:
Classes attendance
29. Number of Credit Hours (Total) / Number of Units (Total)
(4 units) (6 Hr. / Weekly)
30. Course administrator's name (mention all, if more than one name)
Name: Husam Raheem Al-hraishawi Email: hra10@scarletmail.rutgers.edu
31. Course Objectives
1- Normal human physiology. 2- Compare normal and abnormal physiological conditions. 3- Study some lab parameters which important in student's clinic. 4- Practical on ECG, Vital signs, EMG, spirometer.

32. Teaching and Learning Strategies

- Group discussions and assignments
- Creating a competitive atmosphere among students and addressing individual differences using appropriate educational methods
- Research projects
- Interdisciplinary discussion circles
- Incorporating teaching methods that utilize educational technology
- Encouraging students for self-directed learning.

33. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6		Definition of physiology; cell physiology; cell membrane components and structure.	Diction – Discussion	Written tests
2	6		Movement of fluid, solutes and gases across the cell membrane.	Diction – Discussion	Written tests
3	6		Muscular system : types & characteristics.	Diction – Discussion	Written tests
4	6		Contraction mechanism, fatigue, muscular pain	Diction – Discussion	Written tests
5	6		Types of nerve cells, functions of nerve impulse, synapses and reflexes	Diction – Discussion	Written tests
6	6		Action potential of nerve and muscle fiber.	Diction – Discussion	Written tests
7	6		Blood; functions, component, plasma and serum	Diction – Discussion	Written tests
8	6		Red blood cells, shape, origin, Hb structure and Anemia	Diction – Discussion	Written tests

9	6		W.B.Cs, platelets ; functions, origin, structure	Diction – Discussion	Written tests
10	6		Blood clotting mechanism	Diction – Discussion	Written tests
11	6		Cardiovascular system ,heart valve cycle, HR conductive system.	Diction – Discussion	Written tests
12	6		Heart sounds and murmurs, ECG	Diction – Discussion	Written tests
13	6		Blood pressure	Diction – Discussion	Written tests
14	6		Respiratory system, Pleura , Types of mechanism of respiration.	Diction – Discussion	Written tests
15	6		Oxygen Transporting and exchange Carbon dioxide transporting and exchange ,Lung Vol. and capacity, types of Hypoxia	Diction – Discussion	Written tests

34. 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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

35. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Ganong's Review of Medical Physiology Guyton and Hall Textbook of Medical Physiology
Main references (sources)	Recommended books and references (scientific journals, reports...)
Electronic References, Websites	

General chemistry

36. Course Name:

General chemistry

37. Course Code:

ANS114

38. Semester / Year:

first semester of the first stage / 2023–2024

39. Description Preparation Date:

16/2/2024

40. Available Attendance Forms:

Weekly attendance

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

(4 units) (6 Hr. / Weekly)

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

Name: Prof. Dr. Hamid Ghaffoori Hasan
Email: hamid.gafari@uomanara.edu.iq

43. Course Objectives:

**Providing the student with knowledge in managing and using clinic laboratory .
specific analysis used in diseases diagnosis which support clinical decisions**

- **Providing the student with the skills of dealing with basic office applications and creating office files and documents.**
- **The use of the operating system as well as the basics of working within the digital environment.**

44. Teaching and Learning Strategies

- Lectures –
- Reports –
- quizzes

45. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6 hours		Scope of biochemistry in health and disease, cell and cell constituents.	PowerPoint and discussion	Daily and Monthly Exam
2	6 hours		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.	PowerPoint and discussion	Daily and Monthly Exam
3	6 hours		Radio activity and radioactive isotopes	PowerPoint and discussion	Daily and Monthly Exam
4	6 hours		Solutions and methods of expressing concentrations colloidal solution.	PowerPoint and discussion	Daily and Monthly Exam
5	6 hours		The PH concept, Acid-base balance, chemical equilibrium, common ion effect.	PowerPoint and discussion	Daily and Monthly Exam
6	6 hours		Buffer and buffer systems of physiological importance in living systems.	PowerPoint and discussion	Daily and Monthly Exam
7	6 hours		Blood, blood constituents, body fluids, regulation of blood Ph and body fluids.	PowerPoint and discussion	Daily and Monthly Exam
8	6 hours		Water and electrolyte balance – osmotic pressure of body fluids, control of total electrolytes and body fluids.	PowerPoint and discussion	Daily and Monthly Exam
9	6 hours		Carbohydrates classification reactions, main carbohydrates in human body.	PowerPoint and discussion	Daily and Monthly Exam
10	6		Metabolism of carbohydrates, blood glucose factors controlling glucose	PowerPoint	Daily and

	hours		level in blood.	and discussion	Monthly Exam
11	6 hours		Glucose abnormalities, diabetes mellitus, ketosis, glycosuria, glucose tolerance curve.	PowerPoint and discussion	Daily and Monthly Exam
12	6 hours		Lipids, classification, derived lipids, compound, lipids.	PowerPoint and discussion	Daily and Monthly Exam
13	6 hours		Lipid metabolism, lipid abnormalities.	PowerPoint and discussion	Daily and Monthly Exam
14	6 hours		Proteins, classification, functions, peptide bonds, amino acids, chemical reactions.	PowerPoint and discussion	Daily and Monthly Exam
15	6 hours		Nucleic acids and their Expression, DNA Replication, Nutation, RNA Topology.	PowerPoint and discussion	Daily and Monthly Exam

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

Learning and Teaching Resources

Required textbooks (curricular books, if any)	Genera chemistry textbook
Main references (sources)	Browse the Google network using the desired subject key.
Recommended books and references (scientific journals, reports...)	Biochemistry textbook
Electronic References, Websites	

Biology

47.	Course Name:
Biology	
48.	Course Code:
ANS115	
49.	Semester / Year:
Semester one\ first year	
50.	Description Preparation Date:
2024\ 2\12	
51.	Available Attendance Forms:
Weekly	
52.	Number of Credit Hours (Total) / Number of Units (Total)
6 hours in week \ 4 units	
53.	Course administrator's name (mention all, if more than one name)
Name: Marwa Gaber Abdelrazaq Email: memesmsm77@gmail.com	
54.	Course Objectives:
General objectives: - At the end of the academic year, the student will be able to: - Identifying the cell, its structure, describing bacteria and parasites, and explaining the immune mechanism of the cell against Pathological organisms. Special objectives: - The student will be able to: - -1 Distinguish the parts of the cell and its components. -2 Identify the type of bacteria, parasites and fungi. 3- Understands the cell's immune mechanisms against pathogenic organisms	

55. Teaching and Learning Strategies

1. Lectures using Power point, data show

2. A practical explanation in detail about the microscope and the tools and equipment used in the experiment before the students perform the experiment.

3. A scientific explanation in detail about the optical microscope device, how it works, and the benefit of using it in weekly experiments.

4. Using weekly exams (quiz) to evaluate students.

5. Request reports of the experiments that students perform in the laboratory every week and evaluate them on the report.

6. The students' attendance is necessary to understand the experiment and its work the week after it is explained to them, with grades given for attendance as part of the endeavor grade.

7. Developing students' learning about the skill of using a microscope and how to know some types of cells and devices used in experiments

56. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6	The microscope, components	Biology	Theoretical lecture Using a program Power point With a practical explanation	quiz, reports ,attendance
2	6	The Structure of cell	Biology	Theoretical lecture Using a program Power point With a practical explanation	quiz, reports ,attendance
3	6	Types of cells , shape and size	Biology	Theoretical lecture Using a program Power point With a practical explanation	quiz, reports ,attendance
4	6	Movement in and out of cells: diffusion	Biology	Theoretical lecture Using a program Power point With a practical explanation	quiz, reports ,attendance
5	6	Movement in and out of Cells :Osmosis	Biology	Theoretical lecture Using a program Power point With a practical explanation	quiz, reports ,attendance
6	6	Cell division: Mitosis	Biology	Theoretical lecture Using a program Power point With a	quiz, reports ,attendance

				practical explanation	
7	6	Cell division: Meiosis	Biology	Theoretical lecture Using a program Power point With a practical explanation	quiz, reports ,attendance
8	6	Nucleic acid: DNA and RNA	Biology	Theoretical lecture Using a program Power point With a practical explanation	quiz, reports ,attendance
9	6	DNA Replication	Biology	Theoretical lecture Using a program Power point With a practical explanation	quiz, reports ,attendance
10	6	Human body tissues: Epithelial tissues	Biology	Theoretical lecture Using a program Power point With a practical explanation	quiz, reports ,attendance
11	6	Connective tissues: Bone and cartilage	Biology	Theoretical lecture Using a program Power point With a practical explanation	quiz, reports ,attendance
12-15	24	Blood (R.B.C and WBC) and Lymph	Biology	Theoretical lecture Using a program Power point With a practical explanation	quiz, reports ,attendance

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

Learning and Teaching Resources

Required textbooks (curricular books, if any)	(Biology) (Human Biology)
Main references (sources)	The basic of biology(practical)
Recommended books and references (scientific journals, reports...)	Cell biology -introduction of biology-dr .Kalid Alkubasyi
Electronic References, Websites	Scopus, Clarvit, and Google Scholar website, which contains biological research and many websites Wikipedia, and many medical websites.

Computer principles 1

58.	Course Name:
Computer principles 1	
59.	Course Code:
ANS116	
60.	Semester / Year:
(First semester , First Year)	
61.	Description Preparation Date:
2024-2-14	
62.	Available Attendance Forms:
Weekly attendance	
63.	Number of Credit Hours (Total) / Number of Units (Total)
(2 units) (3 Hr. / Weekly)	
64.	Course administrator's name (mention all, if more than one name)
Name: Hassan Suhail Saleh Email: hassansuheilsalah@uomanara.edu.iq	
65.	Course Objectives:
Implementing many academic subjects using multiple computer programs to serve university curricula. <ul style="list-style-type: none">• Obtaining scientific knowledge and facts in the field of computers and information technology related to student life.• Training the student and developing his scientific abilities to benefit from the computer.• Providing the student with creative mental abilities, helping him to think logically, inductively and deductively, and developing his abilities to solve obstacles.• Strengthening the desire factor towards the computer and its applications and giving the student positive, purposeful inclinations towards information technology.<ul style="list-style-type: none">• Acquiring the habit of self-reliance in performing the tasks required of the	

student and developing the ability to research, explore and investigate.

66. Teaching and Learning Strategies

- **The development of information and communications technology, the expansion of the use of computers, and the diversity of their use in many fields, especially in the field of education, have led to the diversity and multiplicity of educational strategies, which are primarily based in their use of educational software, based on the learning goals that one wants to achieve. .**

67. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Understanding	Computer Basics		Oral and written Examination
2	3	Understanding	Computer Components And Properties		Oral and written Examination
3	3	Understanding	Introduction of Microsoft Word		Oral and written Examination
4	3	Understanding	Word Program Menus		Oral and written Examination
5	3	Understanding	Word Program Menus		Oral and written Examination
6	3	Understanding	Word Program Menus		Oral and written Examination
7	3	Understanding	Introduction of Microsoft Excel		Oral and written Examination
8	3	Understanding	Functions of Microsoft Excel		Oral and written Examination

9	3	Understanding	Functions of Microsoft Excel		Oral and written Examination
10	3	Understanding	Functions of Microsoft Excel		Oral and written Examination
11	3	Understanding	Functions of Microsoft Excel		Oral and written Examination
12	3	Understanding	Introduction of Microsoft Power Point		Oral and written Examination
13	3	Understanding	Introduction of Microsoft Power Point		Oral and written Examination
14	3	Understanding	Introduction of Microsoft Power Point		Oral and written Examination
15	3	Understanding	Introduction of Microsoft Power Point		Oral and written Examination

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

Learning and Teaching Resources

<https://www.agitraining.com/books/microsoft-office-books/word-2010-digital-classroom-book>

1. Encryption a text using affine cipher and hiding it in the colored image by using the Quantization stage, Nada Abdul Aziz Mustafa ,Iraq, Baghdad, University of Baghdad, College of Languages
2. The Effect of the Smoothing Filter on an Image Encrypted By the Blowfish Algorithm Then Hiding It in A BMP Image Nada Abdul Aziz Mustafa, Iraq, Baghdad, University of Baghdad, College of Languages
3. Computer literacy BASICS 2012, LeBlanc, Brandon."A closer look at the, windows 7. 2009
4. Computing Fundamentals, Innovative training works USA, Inc, 2006

Human Rights

69. Course Name:

Human Rights

70. Course Code:

ANS117

71. Semester / Year:

(First semester , first Year)

72. Description Preparation Date:

17 /4 /2024

73. Available Attendance Forms:

Weekly attendance

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

(1 units) (1 Hr. / Weekly)

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

Name: Muhammad Abdel Karim Saleml

Email: Alknani445@gmail.com

76. Course Objectives:

General goal //

The importance of human rights revolves around guaranteeing their rights in society, preserving their dignity and ensuring their living at a high standard away from injustice and greed from those of high status.

Special (Behavioral) goals //

- 1- Every person in life deserves to live in safety and peace.
- 2- The abolition of slavery to any person who exists in society, whether that person is of high status or an ordinary person.
- 3- Human rights have made all persons subject to the principle of equality before the law.
- 4- This equality has brought all persons to the law because of the justice provided by human rights that exist throughout the world.
- 5- Justice can be used if a person is subjected to any kind of injustice in society.

77. Teaching and Learning Strategies

- **Brainstorming strategy**
- **Modeling learning strategy**
- **Group work or cooperative learning strategy**
- **Discussion strategy**
- **Project strategy**
- **A strategy for problem solving or problem-based learning**
- **Story strategy.**
- **Combining different strategies**

78. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-	2	Knowledge of the law	Definition of the law	Interactive Lecture	Oral and written Examination
2-	2	Know what the right to protection is	The concept of right	Interactive Lecture	Oral and written Examination

3-	2	Knowing the sacred right of man that cannot be violated	The concept of human right	Interactive Lecture	Oral and written Examination
4-	2	Stages of human rights development	The historical development of the idea of human rights	Interactive Lecture	Oral and written Examination
5-	2	Knowledge of human rights in the Renaissance and modern times	The idea of human rights in the Renaissance and the modern era	Interactive Lecture	Oral and written Examination
6-	2	Replay of the month's lectures	Review	Interactive Lecture	Oral and written Examination
7-	2	Knowing the protection provided by Islamic laws	The idea of human rights in Islamic laws	Interactive Lecture	Oral and written Examination
8-	2	The development of thought and its impact on the development of human rights	Intellectual contribution to the development of human rights	Interactive Lecture	Oral and written Examination
9-	2	Knowing the role of philosophical thought in the development of human rights	Intellectual and philosophical contribution to the Renaissance and the early modern era	Interactive Lecture	Oral and written Examination
10-	2	Quick replay of the month's lectures	Review	Interactive Lecture	Oral and written Examination
11-	2	Knowing the position of the international world on freedoms	Types of public rights and freedoms and the position of some international conventions	Interactive Lecture	Oral and written Examination

12-	2	Find out how constitutions dealt with rights and freedoms	Some comparative and Arabic constitutions	Interactive Lecture	Oral and written Examination
13-	2	Knowledge of economic and social rights and freedoms	Economic freedoms and social rights	Interactive Lecture	Oral and written Examination
14-	2	A quick review of the entire curriculum	Comprehensive review	Interactive Lecture	Oral and written Examination
15-	2	A test to know the student's level of understanding of the curriculum	Oral selection	Interactive Lecture	Oral and written Examination

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

Learning and Teaching Resources

Required textbooks (curricular books, if any)

1- Human Rights book by Dr. Hamid Hanoun
2- The Book of Sectarianism in Islam - Sayyid Muhammad Sadiq Al-Sadr
3- College Library

Main references (sources)

Recommended books and references (scientific journals, reports...)

Virtual court

Electronic References, Websites

Browse the Google network using the desired subject key.

Medical Physics 2

80.	Course Name:
	Medical Physics 2
81.	Course Code:
	ANS121
82.	Semester / Year:
	Second Semester/first year
83.	Description Preparation Date:
	21/4/2024
84.	Available Attendance Forms:
	Weekly Attendance
85.	Number of Credit Hours (Total) / Number of Units (Total)
	6 Hours /4 units
86.	Course administrator's name (mention all, if more than one name)
	Name: Mohannad Ali AL-Zaidi Email: m84.Zaidi@gmail.com
87.	Course Objectives
	<ol style="list-style-type: none">1.Understanding Physics Basics: Learn basic physics concepts like forces, electricity, and light.2.Radiation Basics: Understand the properties of radiation and how it interacts with matter.3.Medical Imaging: Explore how X-rays, MRI, and ultrasound work for medical diagnosis.4.Radiation Therapy: Learn how radiation is used to treat diseases like cancer.5.Safety Practices: Understand safety measures to protect patients and workers from radiation.6.Equipment Knowledge: Familiarize with medical devices used for diagnosis and treatment.7.Quality Assurance: Learn methods to ensure accuracy and safety in medical procedures.8.Research Skills: Develop skills to analyze data and communicate findings effectively.9.Ethical Conduct: Understand ethical responsibilities in patient care and research.10.Application in Healthcare: See how physics principles are applied in real healthcare settings.

88. Teaching and Learning Strategies

- Group discussions and assignments
- Creating a competitive atmosphere among students and addressing individual differences using appropriate educational methods
- Research projects
- Interdisciplinary discussion circles
- Incorporating teaching methods that utilize educational technology
- Encouraging students for self-directed learning.

89. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-3	18	Physics of cardiovascular system	<ul style="list-style-type: none"> • Introduction to Biosafety and Security Key components of Biorisk • Management Components of safety in all laboratory Universal safety precautions 	Diction – Discussion	Written tests
4	6	Laser in medicine.	<ul style="list-style-type: none"> • Biosafety barriers in laboratories • Personal protective equipment (PPE) Facility Design 	Diction – Discussion	Written tests
5	6	Electricity within the body	<ul style="list-style-type: none"> • Biosafety level • Risk Assessment Strategy • Hazard groups, biosafety levels, practices and equipment • Standard practices required in biology 	Diction – Discussion	Written tests

			laboratories		
6	6	Application of electricity and magnetism in medicine.	<ul style="list-style-type: none"> • Biological Agents • Routs of infection • Basis for control Measures • Hazard group classification system • A Biosafety cabinet (BSC) 	Diction – Discussion	Written tests
7	6	Light in medicine, sound in medicine.	<ul style="list-style-type: none"> • Biorisk and biohazards • Control of substances hazardous to health • Assessing risk for work with human blood and tissues hazards • Control measures for work with human blood and tissue • Containment level 	Diction – Discussion	Written tests
8	6	Physics of nuclear medicine, radiotherapy, radiation protection.	<ul style="list-style-type: none"> • 	Diction – Discussion	Written tests
9	6	Physics of nuclear medicine, radiotherapy, radiation protection.	<ul style="list-style-type: none"> • Solar energy technology • Availability of solar radiation • Photovoltaic devices • Dye sensitized solar cells • Photoelectrochemical cells for hydrogen production 	Diction – Discussion	Written tests
10	6	Nanotechnology in renewable	<ul style="list-style-type: none"> • Nanotechnology enabled renewable 	Diction – Discussion	Written tests

		energy systems	<p>energy technologies</p> <ul style="list-style-type: none"> • Energy transport, conversion and storage Nano, micro and meso scale phenomena and devices. 		
11	6	Energy sector products using nanomaterials	<ul style="list-style-type: none"> • Light emitting diodes • Batteries • Catalytic reactors • Capacitors, Super capacitors 	Diction – Discussion	Written tests
12-13	12	Nanotechnology to Hydrogen Production	<ul style="list-style-type: none"> • Photocatalytic Water Splitting Reaction • Nano Semiconductor Materials for Photocatalytic Water Splitting • Photolytic H₂ Evolution Based on Nonenhanced Materials 	Diction – Discussion	Written tests
14	6	Nanomaterials for the Conversion of Carbon Dioxide into Renewable Fuels and Value-Added Products	<ul style="list-style-type: none"> • Theoretical Potentials for Electrochemical Reduction of CO₂ • Effect of Particle Size on Electrode Performance in Electrochemical CO₂ Reduction Reaction 	Diction – Discussion	Written tests
15	6	Nanomaterials and Direct Air Capture of CO ₂ ,	<ul style="list-style-type: none"> • Capture or Separation Technologies • New Roads into CO₂ Capture: Direct Air Capture and Nanomaterials 	Diction – Discussion	Written tests

90. Course Evaluation

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

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

91. Learning and Teaching Resources

Required textbooks (curricular books, if any)	"Introduction to Radiological Physics and Radiation Dosimetry" by Frank Herbert Attix
Main references (sources)	"Medical Imaging Physics" by William R. Hendee and E. Russell Ritenou
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Anatomy (2)

92.	Course Name:
	Anatomy (2)
93.	Course Code:
	ANS122
94.	Semester / Year:
	(second semester , First Year)
95.	Description Preparation Date:
	21/ 4/ 2024
96.	Available Attendance Forms:
	Weekly attendance
97.	Number of Credit Hours (Total) / Number of Units (Total)
	(4 units) (6 Hr. / Weekly)
98.	Course administrator's name (mention all, if more than one name)
	Name: dr. Safaa Ibrahim Kadhim Email: aassdd21202e9@gmail.com
99.	Course Objectives:
	Objectives of the article: General objective: To introduce the student to the body's organs and tissues.

Special objectives:–

- 1– Identify the parts that make up each organ.**
- 2– Identify the tissues that make up each organ.**
- 3– Identify the specialized functions of organs and tissues.**

100. Teaching and Learning Strategies

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101. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6	Understanding	CNS structure and functions	POWERPOINT	Oral and written Examination
2	6	Understanding	PNS spinal nerves	POWERPOINT	Oral and written Examination
3	6	Understanding	Sensory and motor nerves systems	POWERPOINT	Oral and written Examination
4	6	Understanding	GIT system; parts and structure of wall and stomach.	POWERPOINT	Oral and written Examination
5	6	Understanding	Salivary gland structure , pancreases and Gall Bladder.	POWERPOINT	Oral and written Examination
6	6	Understanding	Liver anatomy structure and functions	POWERPOINT	Oral and written Examination
7	6	Understanding	Urinary system kidney, ureter, urinary bladder, urethra	POWERPOINT	Oral and written Examination
8	6	Understanding	Muscular system.	POWERPOINT	Oral and written Examination

9		Understanding	Reproductive system – male genitalia.	POWERPOINT	Oral and written Examination
10		Understanding	Female reproductive organs.	POWERPOINT	Oral and written Examination
11		Understanding	Endocrine glands- anatomy and function.	POWERPOINT	Oral and written Examination
12		Understanding	Endocrine glands- anatomy and function.	POWERPOINT	Oral and written Examination
13		Understanding	Special sense anatomy.	POWERPOINT	Oral and written Examination
14		Understanding	Skeletal system anatomy.	POWERPOINT	Oral and written Examination
15		Understanding	The development and inheritance.	POWERPOINT	Oral and written Examination

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

2. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Medical textbook
Main references (sources)	
Recommended books and references (scientific journals, reports...)	Medical textbook
Electronic References, Websites	Browse the Google network using the desired subject key.

Physiology 2

103.	Course Name:
	Physiology 2
104.	Course Code:
	ANS123
105.	Semester / Year:
	Second semester / first year
106.	Description Preparation Date:
	21/4/2024
107.	Available Attendance Forms:
	Classes attendance
108.	Number of Credit Hours (Total) / Number of Units (Total)
	(4 units) (6 Hr. / Weekly)
109.	Course administrator's name (mention all, if more than one name)
	Name: Husam Raheem Al-hraishawi Email: hra10@scarletmail.rutgers.edu
110.	Course Objectives
	5- Normal human physiology. 6- Compare normal and abnormal physiological conditions. 7- Study some lab parameters which important in student's clinic. 8- Practical on ECG, Vital signs, EMG, spirometer.

111. Teaching and Learning Strategies

- Group discussions and assignments
- Creating a competitive atmosphere among students and addressing individual differences using appropriate educational methods
- Research projects
- Interdisciplinary discussion circles
- Incorporating teaching methods that utilize educational technology
- Encouraging students for self-directed learning.

112. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6		Physiology of digestive system, organs of digestion, functions	Diction – Discussion	Written tests
2	6		Accessory organs of digestion and function	Diction – Discussion	Written tests
3	6		Steps of digestion (carbohydrate, protein, fat digestion and absorption)	Diction – Discussion	Written tests
4	6		Urinary system, renal functions, urine formation.	Diction – Discussion	Written tests
5	6		Organs of the urinary system and their function	Diction – Discussion	Written tests
6	6		Role of kidney to maintain body fluids to regulate B.Pr., acid base balance	Diction – Discussion	Written tests
7	6		Body temperature régulation and control	Diction – Discussion	Written tests
8	6		Nervous system, CNS brain function and	Diction – Discussion	Written tests

			centers		
9	6		Spinal cord, CSF, Spinal reflexes	Diction – Discussion	Written tests
10	6		PNS Autonomic and Sensory	Diction – Discussion	Written tests
11	6		Endocrine system control of hormone , types and secretion	Diction – Discussion	Written tests
12	6		Hormonal secretion form different glands	Diction – Discussion	Written tests
13	6		Reproductive system , male and female reproductive system	Diction – Discussion	Written tests
14	6		Skeletal system physiology.	Diction – Discussion	Written tests
15	6		Special sense physiology (vision , hearing, smell and taste).	Diction – Discussion	Written tests

113. 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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

114. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Ganong's Review of Medical Physiology Guyton and Hall Textbook of Medical Physiology
Main references (sources)	Recommended books and references (scientific journals, reports...)
Electronic References, Websites	

Biochemistry

115. Course Name:

Biochemistry

116. Course Code:

ANS124

117. Semester / Year:

second semester of the first stage / 2023-2024

118. Description Preparation Date:

16/2/2024

119. Available Attendance Forms:

Weekly attendance

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

(4 units) (6 Hr. / Weekly)

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

Name: Prof. Dr. Hamid Ghaffoori Hasan
Email: hamid.gafari@uomanara.edu.iq

122. Course Objectives:

**Providing the student with knowledge in managing and using clinic laboratory .
specific analysis used in diseases diagnosis which support clinical decisions**

- Providing the student with the skills of dealing with basic office**

applications and creating office files and documents.

- The use of the operating system as well as the basics of working within the digital environment.

123. Teaching and Learning Strategies

- Lectures –
- Reports –
- quizzes

124. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6 hours		Metabolism of protein abnormalities	Theoretical lecture	Oral Exams.
2	6 hours		Enzymes definition, Classification. General properties and functions	Theoretical lecture	Oral exams.
3	6 hours		Factors affecting enzyme activity	Theoretical lecture	quiz
4	6 hours		Enzymes in clinical diagnosis	Theoretical lecture	Oral exams
5	6 hours		. vitamins and coenzyme. Fat soluble vit. Water soluble vit.	Theoretical lecture	quiz
6	6 hours		Nutrition and energy requirement	Theoretical lecture	Mid exam

7	6 hours		Liver function test. bilirubin. con	Theoretical lecture	Daily exam
8	6 hours		Jugate and non conjugate. Bile pigment. Boron sulfone phthalien. BSP. Diagnosis of various types of jaundice	Theoretical lecture	report
9	6 hours		.liver diseases. Hepatitis. Cirrhosis. necrosis	Theoretical lecture	report
10	6 hours		.change in serum enzymes in liver	Theoretical lecture	Oral exams
11	6 hours		.biosynthesis and catabolism of fatty acids	actical lecture	Oral exams
12	6 hours		Steroids biosynthesis. Nitrogen metabolism	actical lecture	Oral exams
13	6 hours		Kidney function test, measuring glomerular filtration, tubular filtration, renal blood flow	actical lecture	Oral exams
14	6 hours		Formation and composition of urine, change in urin volume, specific gravity, constotuent, s,	actical lecture	Oral exams

			overview of biological safety and security equipment		
15	6 hours		Uria, uria clearance test, creatinine, creatinine test, insulin test phenol sulfonephalm PSP, concentration test, dilution test. Accident response, spill cleanup procedure, investigation of an accident inside the laboratory	actical lecture	Daily exam

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

5. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Genera chemistry textbook
Main references (sources)	Browse the Google network using the desired subject key.
Recommended books and references (scientific journals, reports...)	Biochemistry textbook
Electronic References, Websites	

Microbiology

1. Course Name:

Microbiology

2. Course Code:

ANS125

3. Semester / Year:

Second semester/First year

4. Description Preparation Date:

20\4\2024

5. Available Attendance Forms:

Weekly attendance

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

6 hours/ 4 units

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

Name: Thuraya Mehbas Dewan

Email: thurayadewan@gmail.com

8. Course Objectives

At the end of the academic year, the student will be able to:

Identifying the cell, its structure, describing bacteria and parasites, and explaining the immune mechanism of the cell against Pathological organisms.

9. Teaching and Learning Strategies

- Lectures
- Reports
- quizzes

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6		The microorganism	Theoretical lecture	Oral examination and quizzes
2	6		Bacteria: classification, structure and functions.	Theoretical lecture	Oral examination and quizzes
3	6		Media and culture	Theoretical lecture	Oral examination and quizzes
4	6		Antibiotics and Antibiotic resistance	Theoretical lecture	Oral examination and quizzes
5	6		Fungi: characteristics, reproductive and classification.	Theoretical lecture	Oral examination and quizzes
6-7	6		Virus: structure, classification and reproductive.	Theoretical lecture	Oral examination and quizzes
8	6		Parasite: introduction, parasite host relationship, diagnosis	Theoretical lecture	Oral examination and quizzes
9	6		Classes of parasite (protozoa, helminthes and ectoparasites)	Theoretical lecture	Oral examination and quizzes

10	6		Helminthes: structure and classification.	Theoretical lecture	Oral examination and quizzes
11-12	12		The immune system, mechanism of immune system (innate and adaptive immunity). Transportation of biological wastes International Transport Regulations The Basic Triple Packaging System	Theoretical lecture	Oral examination and quizzes
13	6		Antigen, antibody	Theoretical lecture	Oral examination and quizzes
14	6		Antigen -antibodies reaction Types of biological wastes Categories of biological wastes Decontamination of biological wastes	Theoretical lecture	Oral examination and quizzes
15	6		Sterilization and Disinfection Biorisk management system Assess the capability of the laboratory staff to control hazards	Theoretical lecture	Oral examination and quizzes

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	<p>1- Jawetz, R., J.L. Melnick, and E.A. Adelberg, Review of Medical Microbiology, 16th Edition, pp. 347, Figure 27-3. Reproduced with permission.</p> <p>2- Learning and Teaching Resources Themes, U. F. O. (2017-02-19). "6 Viruses–Basic Concepts". Basic medical Key. Retrieved 2020-05-29.</p> <p>3-Warren Levinson, Review of Medical Microbiology, 13th Edition.</p>
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Computer principles 2

126. Course Name:

Computer principles 2

127. Course Code:

ANS126

128. Semester / Year:

(Second semester , First Year)

129. Description Preparation Date:

2024-2-14

130. Available Attendance Forms:

Weekly attendance

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

(2 units) (3 Hr. / Weekly)

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

Name: Hassan Suhail Saleh

Email: hassansuheilsalah@uomanara.edu.iq

133. Course Objectives:

Implementing many academic subjects using multiple computer programs to serve university curricula.

- Obtaining scientific knowledge and facts in the field of computers and information technology related to student life.
- Training the student and developing his scientific abilities to benefit from the computer.
- Providing the student with creative mental abilities, helping him to think logically, inductively and deductively, and developing his abilities to solve obstacles.
- Strengthening the desire factor towards the computer and its applications and giving

the student positive, purposeful inclinations towards information technology.

- Acquiring the habit of self-reliance in performing the tasks required of the student and developing the ability to research, explore and investigate.

134. Teaching and Learning Strategies

- The development of information and communications technology, the expansion of the use of computers, and the diversity of their use in many fields, especially in the field of education, have led to the diversity and multiplicity of educational strategies, which are primarily **based in their use of educational software, based on the learning goals that one wants to achieve. .**

135. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3		Create of presentation by Microsoft power point		Oral and written Examination
2	3		Create of presentation by Microsoft power point		Oral and written Examination
3	3		Introduction of Microsoft Access		Oral and written Examination
4	3		Introduction of Microsoft Access		Oral and written Examination
5	3		Introduction of Microsoft Access		Oral and written Examination
6	3		Create database by Microsoft Access		Oral and written Examination
7	3		Create database by Microsoft Access		Oral and written Examination
8	3		Introduction of Microsoft outlook		Oral and written Examination
9	3		Introduction of Microsoft outlook		Oral and written Examination
10	3		Introduction of Microsoft outlook		Oral and written

					Examination
11	3		Introduction of SPSS		Oral and written Examination
12	3		Introduction of SPSS		Oral and written Examination
13	3		Analyze Menu		Oral and written Examination
14	3		Analyze Menu		Oral and written Examination
15	3		Analyze Menu		Oral and written Examination

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

6. Learning and Teaching Resources

<https://www.agitraining.com/books/microsoft-office-books/word-2010-digital-classroom-book>

1. Encryption a text using affine cipher and hiding it in the colored image by using the Quantization stage, Nada Abdul Aziz Mustafa ,Iraq, Baghdad, University of Baghdad, College of Languages
2. The Effect of the Smoothing Filter on an Image Encrypted By the Blowfish Algorithm Then Hiding It in A BMP Image Nada Abdul Aziz Mustafa, Iraq, Baghdad, University of Baghdad, College of Languages
3. Computer literacy BASICS 2012, LeBlanc, Brandon."A closer look at the, windows 7. 2009
4. Computing Fundamentals, Innovative training works USA, Inc, 2006

Arabic language

1. Course Name:
Arabic language
2. Course Code:
ANS127
3. Semester / Year:
First stage /second corse
4. Description Preparation Date:
2024/4/20
5. Available Attendance Forms:
Weekly attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hour/2 units
7. Course administrator's name (mention all, if more than one name)
Name:Ms.c Abrar abdulhameed Email: abrar0880abrar@gmail.com
8. Course Objectives
Empowering the student with the basics of the language. Enable the student to understand the rules. Enabling the student to address linguistic errors.

9. Teaching and Learning Strategies

.Knowledge and understanding of the methods of constructing nominal and verbal sentences.

.The student learns how to perform literary analysis.

.The ability to know the accuracy of a sentence.

.The ability to connect sentences together

10. Course Structure

Week	Hou rs	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	معرفة كتابة الهمزة	الهمزة في العربية	محاضرات	نشاط+امتحان
2	2	كيفية استخدام علامات الترقيم	علامات (الترقيم)(التنقيط)	محاضرات	نشاط+امتحان
3	2	التفريق بين الألف المقصورة والممدودة	كتابة (الألفين) (المقصورة والممدودة)	محاضرات	نشاط+امتحان
4	2	علم كتابة العدد والمعدود	قواعد العدد والنعث العددي	محاضرات	نشاط+امتحان
5	2	معرفة علامات الإعراب	علامات الإعراب الأصلية والفرعية	محاضرات	نشاط+امتحان
6	2	معرفة أنواع الجمل	الجملة العربية وأنواعها	محاضرات	نشاط+امتحان
7	2	تعلم بناء الجمل الاسمية	الجملة الأسمية	محاضرات	نشاط+امتحان
8	2	تعلم بناء الجمل الفعلية	الجملة الفعلية	محاضرات	نشاط+امتحان
9	2	معرفة الأفعال الناقصة	كان وأخواتها	محاضرات	نشاط+امتحان
10	2	رف على الحروف المشبهه	ان وأخواتها	محاضرات	نشاط+امتحان
11	2	معرفة ماهية الأدب	الأدب وتقسيماته	محاضرات	نشاط+امتحان
12	2	معرفة ماهية الأدب الجاهلي	الأدب الجاهل أو عصر ما قبل الاسلام	محاضرات	نشاط+امتحان
13	2	معرفة حياة الشاعر	الشاعر امرؤ القيس	محاضرات	نشاط+امتحان
14	2	معرفة قيمة الأدب	الأدب الاسلامي	محاضرات	نشاط+امتحان
15	2	معرفة شعراء العصر	الأدب الأموي	محاضرات	نشاط+امتحان

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	النحو الوافي للأستاذ عباس حسن - الميسر في اللغة العربية
Main references (sources)	التطبيق النحوي د. عبده الراجحي
Recommended books and references (scientific journals, reports...)	تاريخ الأدب العربي د. شوقي ضيف
Electronic References, Websites	

Second Grade

137. Course Name:

Basics of Anesthesia (1)

138. Course Code:

ANS211

139. Semester / Year:

(First semester , Second Year)

140. Description Preparation Date:

1/ 3/ 2024

141. Available Attendance Forms:

Weekly attendance

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

(4 units) (6 Hr. / Weekly)

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

Name: Amjed Qasim Mohammed

Email: Alatwanyamjad@gmail.com

144. Course Objectives:

• **General goals //**

At the end of the course, the student will be able to Identify all anesthesia devices

.....

Specific (Behavioral) goals //

1- At the end of the course, the student will be able to Giving anesthesia

2- At the end of the course, the student will be able to make Resuscitate to the patient.

3- At the end of the course, the student will be able to determine wisely on how to manage the patient when an emergency occurs.

145. Teaching and Learning Strategies

- **Brainstorming strategy**
- **Modeling learning strategy**
- **Group work or cooperative learning strategy**
- **Discussion strategy**
- **Listening to the students' various questions and answering them completely**

146. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6 hrs.	Understanding and assimilation	History of anesthesia & introduction to anesthesia.	By displaying the lecture to the students on the projector and explaining .	Oral and written Examination
2	6 hrs.	Understanding and assimilation	Respiratory physiology & anatomy.	Brainstorming strategy	Oral and written Examination
3	6 hrs.	Understanding and assimilation	Continue Resp. Phys. & Anatomy.	Teamwork strategy.	Oral and written Examination
4	6 hrs.	Understanding and assimilation	General pharmacology.	Project strategy	Oral and written Examination
5	6 hrs.	Understanding and	Inhalational anesthetics.	Discussion strategy	Oral and written

		assimilation			Examination
6	6 hrs.	Understanding and assimilation	Inhalational anesthetics.	Brainstorming strategy	Oral and written Examination
7	6 hrs.	Understanding and assimilation	Inhalational anesthetics.	Discussion strategy	Oral and written Examination
8	6 hrs.	Understanding and assimilation	Inhalational anesthetics.	Brainstorming strategy	Oral and written Examination
9	6 hrs.	Understanding and assimilation	Inhalational anesthetics.	Teamwork strategy.	Oral and written Examination
10	6 hrs.	Understanding and assimilation	Intra venous anesthetics.	Project strategy	Oral and written Examination
11	6 hrs.	Understanding and assimilation	Intravenous anesthetics.	Discussion strategy	Oral and written Examination
12	6 hrs.	Understanding and assimilation	Intravenous anesthetics.	Teamwork strategy.	Oral and written Examination
13	6 hrs.	Understanding and assimilation	Intravenous anesthetics.	Project strategy	Oral and written Examination
14	6 hrs.	Understanding and assimilation	Intravenous anesthetics.	Discussion strategy	Oral and written Examination
15	6 hrs.	Understanding and assimilation	Local relaxants.	Teamwork strategy	Oral and written Examination

7. Course Evaluation

Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
10	5	5	20	60	100

8. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Fundamental of anaesthesia, fourth edition, Ted Lin, Tim Smith, and Colin Pinnock
Main references (sources)	
Recommended books and references (scientific journals, reports...)	Clinical anesthesiology, fifth edition , Morgan & Mikhail's, 2013
Electronic References, Websites	Browse the Google network using the desired subject key.

149. Course Name:
Basics Anaesthetic equipment (1)
150. Course Code:
ANS212
151. Semester / Year:
(First semester , Second Year)
152. Description Preparation Date:
1/ 3/ 2024
153. Available Attendance Forms: yearly
Weekly attendance
154. Number of Credit Hours (Total) / Number of Units (Total) (8 units)
(4 units) (6 Hr. / Weekly)
155. Course administrator's name (mention all, if more than one name)
Name: amjed Qasim Mohammed Email: alatwanyamjad@gmail.com
156. Course Objectives
General goals //

At the end of the course, the student will be able to identify the anesthetic equipments in operating room.....

Specific (Behavioral) goals //

- 1- At the end of the course, the student will be able to identify the anesthetic equipment.
- 2- At the end of the course, the student will be able to distinguish the important structures anesthetic equipment.
- 3- At the end of the course, the student will be able to determine the functions of all parts of anesthetic equipment .
- 4- At the end of the course, the student will be able to describe the sustainability and maintenance of anesthetic equipment.

157. Teaching and Learning Strategies

- **Brainstorming strategy**
- **Modeling learning strategy**
- **Group work or cooperative learning strategy**
- **Discussion strategy**
- **explain the lecture in detail to the students and discuss the nature of the subject and the most important things**
- **Listening to the students’ various questions and inquiries and answering them completely.**

158. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6	Physiological monitoring: gases, inspired O2 concentration CO2 and volatile	Physiological monitoring: gases, inspired O2 concentration CO2 andvolatile anaesthetic	Brainstorming strategy	Oral and written Examination

		anaesthetic agent	agent		
2	6	Physiological monitoring: gases, inspired O2 concentration CO2 and volatile anaesthetic agent	Physiological monitoring: gases, inspired O2 concentration CO2 and volatile anaesthetic agent	Teamwork strategy.	Oral and written Examination
3	6	Measurement of respiratory volume, measurement of gases in blood	Measurement of respiratory volume, measurement of gases in blood	Project strategy	Oral and written Examination
4	6	Measurement of respiratory volume, measurement of gases in blood	Measurement of respiratory volume, measurement of gases in blood	Discussion strategy	Oral and written Examination
5	6	Automatic record keeping, advantage and equipments for automatic record	Automatic record keeping, advantage and equipments for automatic record	Brainstorming strategy	Oral and written Examination
6	6	Automatic record keeping, advantage and equipments for automatic record	Automatic record keeping, advantage and equipments for automatic record	Teamwork strategy.	Oral and written Examination
7	6	Atmospheric pollution, measurement and control of pollution, scavenging system	Atmospheric pollution, measurement and control of pollution, scavenging system	Project strategy	Oral and written Examination
8	6	Atmospheric pollution, measurement and control of pollution, scavenging system	Atmospheric pollution, measurement and control of pollution, scavenging system	Discussion strategy	Oral and written Examination
9	6	Medical suction apparatus, component, choice, standard and testing	Medical suction apparatus, component, choice, standard and testing	Brainstorming strategy	Oral and written Examination
10		Medical suction apparatus,	Medical suction apparatus, component,	Teamwork	Oral and

	6	component, choice, standard and testing	choice, standard and testing	strategy.	written Examination
11	6	Cleaning and sterilization: decontamination, disinfection and sterilization	Cleaning and sterilization: decontamination, disinfection and sterilization	Project strategy	Oral and written Examination
12	6	Cleaning and sterilization: decontamination, disinfection and sterilization	Cleaning and sterilization: decontamination, disinfection and sterilization	Discussion strategy	Oral and written Examination
13	6	Check list and treatment of anaesthetic machine	Check list and treatment of anaesthetic machine	Brainstorming strategy	Oral and written Examination
14	6	Check list and treatment of anaesthetic machine	Check list and treatment of anaesthetic machine	Teamwork strategy.	Oral and written Examination
15	6	Electrical hazard and their prevention, and accident associated with main electrical supply	Electrical hazard and their prevention, and accident associated with main electrical supply	Project strategy	Oral and written Examination

159. Course Evaluation

Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
10	5	5	20	60	100

160. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Morgan and Mikhail
Main references (sources)	Antiesthetic equipment Textbook

1. Teaching Institution	Al-Manara College for Medical Sciences
2. University Department/Centre	Anesthesia Techniques
3. Course title/ code	Bachelor's degree in Anesthesia Techniques ANS213
4. Programme(s) to which it contributes	Term
5. Modes of Attendance offered	An annual study consisting of two semesters
6. Semester/Year	2023/2024
7. Number of hours tuition (total)	sixty hours (60)
8. Date of production/revision of this specification	13/02/2024
9. Aims of the Course	
Enable students to understand the main body functions and emergency disorder in relation to anesthesia.	
Empowering students with the techniques of anesthesia and their effect on human body	
To make students able to handle laboratory tools and apply biosecurity safety standards within laboratories.	
Training students on handling anesthetic agents under normal and emergency cases	

10. Learning Outcomes, Teaching ,Learning and Assessment Methode

A- Knowledge and Understanding

- A 1- Determining the structure and function of human body..
- A2- Explanation of physiological implications of anesthesia.
- A3- Differentiate between the types of anesthetic agents in relation to physiological activities.
- A4- Studying the effect of anesthesia on functions of body systems.

B. Subject-specific skills

- B1 - Study the clinical handling of anesthetic agents.
- B2 – Handling emergency cases.
- B3 - Dealing with various laboratory equipment

Teaching and Learning Methods

Theoretical study: (theoretical lectures supported by modern means of presentation and reinforced with the latest scientific sources and holding seminars in which students participate).

Practical study: (teaching students to take samples of body fluids such as blood, urine or semen and their chemical and biological analysis techniques. Vital signs measurements (Blood pressure, Temperature, Heart rate, mechanical ventilation, Lung volumes & capacities were also included in such training)

Assessment methods

Through: Students' participation during the lecture, presentation of seminars, short-time quick exams. Quarterly examinations for the theoretical and practical.

C. Thinking Skills

C1- Urging students to solve intellectual questions.

C2- Conducting intellectual competitions related to the scientific subject.

C3- Putting students in a scientific and practical environment related to physiological impact of anesthetic agents.

C4 - Urging students to compete among themselves to achieve advanced positions within the scientific subject to obtain grades and moral prizes.

D. General and Transferable Skills (other skills relevant to employability and personal development)

D 1 - access to a greater number of scientific sources.

D2 - Presenting the newly raised topics globally through a presentation and the participation of everyone through it.

D3 - Have the students conduct discussion panels, as well as make presentations related to the scientific subject to develop and enhance their personalities.

11. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
First Term 1	2	Homeostasis & Body fluids, Related	Homeostasis, fluid-electrolytes imbalance &	Theoretical scientific lectures	(Oral questions

		to Anesthesia	acid-base disturbance “ Related to Anesthesia”	+ scientific / or interactive media presentations	during the lecture
2	2		Homeostasis, general scheme of metabolism, I.V fluid, used in clinical practice, Diabetes Mellitus.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture
3	2		Common disorders of fluid & electrolytes imbalance- general nots, vomiting, diarrhea, diabetic Keto- Acidosis, Metabolic, acidaemia, Metabolic Alkalaemia K ⁺ , changes and electromotive force- EME.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture + short exam)
4	2		Kidneys, liver , lung functions related anaesthesia to homeostasis.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture
5	2	Respiration related to anesthesia	Chemistry of control respiratory stimulation & application in anaesthesia.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture + short exam)
6	2		Normal curve of respiration during the respiratory cycle “ pleural pressure, transpulmonary pressure, flow VT”	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture
7			Q ₂ cascade , lung volumes of importance & application in anaesthesia.	Theoretical scientific lectures + scientific / or interactive media	(Oral questions during the lecture +

	2			presentations	short exam)
8	2		Obstructive lung disease, restrictive lung disease.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture
9	2		Dead space, shunt, physiological, pathological during anaesthesia.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture + short exam)
10	2		Factors that help in lung expansion in each cardiac cycle at the beginning of inspiration.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture
11	2	Mechanical Ventillation IPPV	Meankng of breathing during I.P.P.V + high “ FIO ₂ ”	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture + short exam)
12	2		Types of I.P.P.V wave – classification.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture
13	2		Importance of monitoring the airway pressure gauge during I.P.P.V.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture + short exam)
14	2	Hypoxia	Types of hypoxia – classification & examples.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture
15			Types of resp. failure - classification & examples.	Theoretical scientific lectures	(first semester

	2			+ scientific / or interactive media presentations	exam)
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12. Infrastructure

Required reading:

- CORE TEXTS
- COURSE MATERIALS
- OTHER

1- Ganong W.F. (Ed.); 2005. Review of Medical Physiology.

2- Guyton A.C. Text book of Medical Physiology . Latest Edition.

3- Scientific papers on anesthesiology

161.	Course Name:
Basics of Surgery (1)	
162.	Course Code:
ANS214	
163.	Semester / Year:
First Semester / 2 nd stage	
164.	Description Preparation Date:
26/2/2024	
165.	Available Attendance Forms:
Weekly attendance	
166.	Number of Credit Hours (Total) / Number of Units (Total)
(3 units) (5 Hr. / Weekly)	
167.	Course administrator's name (mention all, if more than one name)
Name: Aqeel Azeez Arrar	
Email: akeelazeez@uomisan.edu.iq	

168. Course Objectives

General goals //

At the end of the course, the student will be able to identify the principles of general surgery.....

Specific (Behavioral) goals //

- 1- At the end of the course, the student will be able to identify the Learn about the principles of general surgery.
- 2- At the end of the course, the student will be able to deal with preventing infection.
- 3- At the end of the course, the student will be able to determine the simple and complex surgical cases.
- 4- At the end of the course, the student will be able to describe the patient status before, during and after surgery.

169. Teaching and Learning Strategies

- **Brainstorming strategy**
- **Modeling learning strategy**
- **Group work or cooperative learning strategy**
- **Discussion strategy**
- **Presentation; seminar, and Case study**

170. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	5	Understanding and assimilation	metabolic response to injury	Data show & discussion	Quiz and weekly exam.
2	5	Understanding and assimilation	inflammation acute & chronic	Brainstorming strategy	Quiz and weekly exam.
3	5	Understanding and	shock & type path	Teamwork	Quiz and

		assimilation	physiology	strategy.	weekly exam.
4	5	Understanding and assimilation	wounds , tissue repair & scar	Data show & discussion	Quiz and weekly exam.
5	5	Understanding and assimilation	Surgical infection	Brainstorming strategy	Quiz and weekly exam.
6	5	Understanding and assimilation	Patient safety	Teamwork strategy.	Quiz and weekly exam.
7	5	Understanding and assimilation	Type of surgical disease (hereditary, congenital, acquired)	Brainstorming strategy	Quiz and weekly exam.
8	5	Understanding and assimilation	Head injury, management of unconscious patient	Teamwork strategy.	Quiz and weekly exam.
9	5	Understanding and assimilation	Abscess , cellulites , carbuncle & nonspecific infection	Brainstorming strategy	Quiz and weekly exam.
10	5	Understanding and assimilation	Gangrene , type & causes	Teamwork strategy.	Quiz and weekly exam.
11	5	Understanding and assimilation	Fluid therapy	Brainstorming strategy	Quiz and weekly exam.
12	5	Understanding and assimilation	Type of bacteria(surgical microbiology)	Teamwork strategy.	Quiz and weekly exam.
13	5	Understanding and assimilation	Acid – base balance	Brainstorming strategy	Quiz and weekly exam.
14	5	Understanding and assimilation	Spinal injury peripheral nerve injury	Data show & discussion	Quiz and weekly exam.
15	5	Understanding and assimilation	Principles of laparoscopic surgery	Brainstorming strategy	Quiz and weekly exam.

171. 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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

172. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Handbook of clinical anesthesia fourth edition 2020
Main references (sources)	1. Principles of physiology for the anesthetist fourth edition 2020 2. Basic of anesthesia sixth edition 2011
Recommended books and references (scientific journals, reports...)	The anesthetic manual crisis 5th. Edition 2020 Millers' anesthesia 9th. Edition 2020
Electronic References, Websites	Browse the Google network using the desired subject key.

173. Course Name:

Basics of Medicine (1)

174. Course Code:

ANS215

175. Semester / Year:

(First semester , Second Year)

176. Description Preparation Date:

11/ 3/ 2024

177. Available Attendance Forms:

Weekly attendance

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

(4 units) (6 Hr. / Weekly)

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

Name: Sami Khudeir Suhaim
Email: samkhs23@gmail.com

180. Course Objectives:

General goals //

At the end of the course, the student will be able to identify all diseases that infect the human body

Specific (Behavioral) goals //

- 1- At the end of the course, the student will be able to identify the human diseases.
- 2- At the end of the course, the student will be able to distinguish the investigations that specialized for body system.
- 3- At the end of the course, the student will be able to determine the specific criteria for medical diagnosis.
- 4- At the end of the course, the student will be able to describe the causative factors that effect on body disorders.

181. Teaching and Learning Strategies

- **Brainstorming strategy**
- **Modeling learning strategy**
- **Group work or cooperative learning strategy**
- **Discussion strategy**

182. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
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1 + 2	6	Understanding and assimilation	Diseases due to infection/ concepts of infection major manifestations /methods of diagnosis bacteremia/ septicemia / principles of management.	Brainstorming strategy	Oral and written Examination
3 + 4	6	Understanding and assimilation	Diseases of the respiratory system- Introduction.	Teamwork strategy.	Oral and written Examination
5	6	Understanding and assimilation	Major manifestations / investigations/ resp. function tests.	Project strategy	Oral and written Examination
6 + 7	6	Understanding and assimilation	Diseases of the C.V.S. / introduction/ major manifestation	Discussion strategy	Oral and written Examination
8 + 9	6	Understanding and assimilation	Principles of electrocardiography/ normal ECG/S.Tachycardia/ S.Bradycardia/ S.arrhythmia.	Brainstorming strategy	Oral and written Examination
10 + 11	6	Understanding and assimilation	Diseases of the GIT/ Introduction/ major manifestation/ investigations.	Teamwork strategy.	Oral and written Examination
12 +13	6	Understanding and assimilation	Diseases of the liver/ introduction/ Bilirubin metabolism/ major manifestations / investigations.	Project strategy	Oral and written Examination
14 + 15	6	Understanding and assimilation	Diseases of the kidney / introduction major manifestations / investigations.	Discussion strategy	Oral and written Examination

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

3. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Medical and surgical textbook
Main references (sources)	
Recommended books and references (scientific journals, reports...)	Medical and surgical textbook
Electronic References, Websites	Browse the Google network using the desired subject key.

184. Course Name:
Pharmacology (1)
185. Course Code:
ANS216
186. Semester / Year:
(First semester , Second Year)
187. Description Preparation Date:
11/ 3/ 2024
188. Available Attendance Forms:
Weekly attendance
189. Number of Credit Hours (Total) / Number of Units (Total)
(3 units) (4 Hr. / Weekly)
190. Course administrator's name (mention all, if more than one name)
Name: Roua Abdulrazzak M. Baker Email: roua2008@yahoo.com
191. Course Objectives:
General goals //
At the end of the course, the student will be able to identify all medications

specialized Anesthetic drugs.....

Specific (Behavioral) goals //

- 1- At the end of the course, the student will be able to identify the drug action.
- 2- At the end of the course, the student will be able to distinguish the General anesthesia drugs and local anesthesia drugs.
- 3- At the end of the course, the student will be able to determine the specific treatment for each body system.

192. Teaching and Learning Strategies

- **Brainstorming strategy**
- **Modeling learning strategy**
- **Group work or cooperative learning strategy**
- **Discussion strategy**

193. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Understanding and assimilation	Principles of Drug Therapy. Pharmacokinetics; Absorption, distribution, metabolism and excretion of the drugs.	Brainstorming strategy	Oral and written Examination
2	4	Understanding and assimilation	Cholinergic agonists and antagonists	Teamwork strategy.	Oral and written Examination
3	4	Understanding and assimilation	Adrenergic agonists and adrenergic antagonists	Project strategy	Oral and written Examination
4	4	Understanding and assimilation	Drugs affecting cardiovascular system	Discussion strategy	Oral and written Examination
5	4	Understanding and assimilation	Drugs affecting cardiovascular system: - Anti-arrhythmic. - Antiangin	Brainstorming strategy	Oral and written Examination

6	4	Understanding and assimilation	Diuretics	Teamwork strategy.	Oral and written Examination
7	4	Understanding and assimilation	Antihistamines	Project strategy	Oral and written Examination
8+9	4	Understanding and assimilation	Drugs for Disorders of the Respiratory System	Discussion strategy	Oral and written Examination
10	4	Understanding and assimilation	Drugs for anemia	Project strategy	Oral and written Examination
11	4	Understanding and assimilation	Anticoagulants and Antiplatelet Agents	Discussion strategy	Oral and written Examination
12	4	Understanding and assimilation	Skeletal muscle relaxants.	Project strategy	Oral and written Examination
13	4	Understanding and assimilation	Local anesthetics.	Project strategy	Oral and written Examination
14	4	Understanding and assimilation	General anesthetics.	Discussion strategy	Oral and written Examination
15	4	Understanding and assimilation	General anesthetics.	Project strategy	Oral and written Examination

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

4. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Essentials of Medical Pharmacology Seventh Edition
Main references (sources)	MEDICAL PHARMACOLOGY& THERAPEUTICS Fifth Edition,
Recommended books and references (scientific journals, reports...)	Pharmacology textbook
Electronic References, Websites	Browse the Google network using the desired subject key.

195. Course Name:
Medical terminology
196. Course Code:
ANS217
197. Semester / Year:
(First semester , Second Year)
198. Description Preparation Date:
10/ 3/ 2024
199. Available Attendance Forms:
Weekly attendance
200. Number of Credit Hours (Total) / Number of Units (Total)
(2 units) (2 Hr. / Weekly)
201. Course administrator's name (mention all, if more than one name)
Name: Prof. Dr. Hamid Ghaffoori Hasan Email: hamid.gafari@uomanara.edu.iq
202. Course Objectives:
<ul style="list-style-type: none"> • General goals // <p>At the end of the course, the student will be able to Identify medical terminologies related to anesthesia</p>

Specific (Behavioral) goals //

- 2- At the end of the course, the student will be able to identify medical terminologies
- 2- At the end of the course, the student will be able to understand medical terminologies
- 3- At the end of the course, the student will be able to determine how to distinguish between prefixes and suffixes.

203. Teaching and Learning Strategies

- **Brainstorming strategy**
- **Modeling learning strategy**
- **Group work or cooperative learning strategy**
- **Discussion strategy**
- **Listening to the students' various questions and answering them completely**

204. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 hrs.	Understanding and assimilation	Introduction– structural analysis- Basic rules of medical word building..	Teamwork strategy.	Oral and written Examination
2	2 hrs.	Understanding and assimilation	Major suffixes- suffixes denoting a state or condition.	Brainstorming strategy	Oral and written Examination
3	2 hrs.	Understanding and assimilation	Prefixes- prefixes of No.& measures.	Teamwork strategy.	Oral and written Examination
4		Understanding	Prefixes- prefixes of color.	Project strategy	Oral and written

	2 hrs.	and assimilation			Examination
5	2 hrs.	Understanding and assimilation	Prefixes- prefixes of direction & position.	Discussion strategy	Oral and written Examination
6	2 hrs.	Understanding and assimilation	Prefixes- prefixes of type.	Brainstorming strategy	Oral and written Examination
7	2 hrs.	Understanding and assimilation	Roots.	Discussion strategy	Oral and written Examination
8	2 hrs.	Understanding and assimilation	Word terminals.	Brainstorming strategy	Oral and written Examination
9	2 hrs.	Understanding and assimilation	The body as a whole.	Teamwork strategy.	Oral and written Examination
10	2 hrs.	Understanding and assimilation	Gastrointestinal Tract	Project strategy	Oral and written Examination
11	2 hrs.	Understanding and assimilation	Respiratory system.	Discussion strategy	Oral and written Examination
12	2 hrs.	Understanding and assimilation	Cardiovascular System.	Teamwork strategy.	Oral and written Examination
13	2 hrs.	Understanding and assimilation	Musculoskeletal system	Project strategy	Oral and written Examination
14	2 hrs.	Understanding and assimilation	Oncology	Discussion strategy	Oral and written Examination
15	2 hrs.	Understanding and assimilation	Urogenital system. Speciality related termes.	Teamwork strategy	Oral and written Examination

5. Course Evaluation

Daily Exam	Monthly Exam	Final Exam	Total
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10	20	70	100
6. Learning and Teaching Resources			
Required textbooks (curricular books, if any)		Medical Terminology Textbook	
Main references (sources)			
Recommended books and references (scientific journals, reports...)		Medical Terminology Textbook	
Electronic References, Websites		Browse the Google network using the desired subject key.	

Course Name	
(Crimes of the Baath regime in Iraq)	
Course Code	
ANS218	
Semester/year	
First Course/ second stage	
Date this description was prepared	
4/17/2024	
Available attendance forms	
(weekly attendance)	
Number of study hours (total)/number of units (total)	
30Hour/(one unit).	
Name of the course administrator (If more than one name is mentioned)	
Name. assist inst Muhammad Abdel Karim Salem Email: Alknani445@gmail.com	
Course objectives	
As shown below	Objectives of the study subject
General goal:	
Introducing the student to the vocabulary of the Baath regime's crimes committed in Iraq in the	

period from 1968 to 2003.

Behavioral goals:

- Shedding light on the crimes committed against Iraqis in an important era in Iraq’s history, extending from the late sixties of the last century until the fall of the defunct Baathist regime..

The student should be aware of the nature of the repressive policies during the period of Baathist regime rule.

Addressing the issues of mass graves and the crimes committed against Iraqis by the Baathist regime.

Teaching and learning strategies

- 1. Brainstorming strategy**
- 2. Group work or cooperative learning strategy**
- 3. Discussion strategy**
- 4. A strategy for problem solving or problem-based learning.**
- 5. Active learning strategy.**
- 6. Interactive education strategy.**

The strategy

Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Oral and written examination	Project strategy	Crimes of the Baathist regime according to the Iraqi Criminal Court Law		1	1
Oral and written examination	Discussion strategy	The concept of the crimes of the Baath regime		1	2
Oral and written examination	Project strategy	Definition of crimes in language and		1	3

		terminology				
Oral and written examination	Discussion strategy	Crime departments		1	4	
Oral and written examination	Project strategy	The crimes of the Baath regime according to the documents of the Criminal Court		1	5	
Oral and written examination	Discussion strategy	Types of international crimes		1	6	
Oral and written examination	Project strategy	Decision of the Supreme Criminal Court		1	7	
Oral and written examination	Discussion strategy	Violations of the Baathist regime in Iraq		1	8	
Oral and written examination	Project strategy	Psychological crimes		1	9	
Oral and written examination	Discussion strategy	Mechanisms of psychological crimes		1	10	
Oral and written examination	Project strategy	Psychological effects of crimes		1	11	
Oral and written examination	Discussion strategy	Social crimes		1	12	
Oral and written examination	Project strategy	Militarization of society		1	13	
Oral and written examination	Discussion strategy	The Baathist regime's position on religion		1	14	
Oral and written examination	Project strategy	Violations of Iraqi laws		1	15	
Course evaluation						
Degree distribution from 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc.						
Total	a report	Written exam	Monthly exam	oral test	Daily exam	Daily preparation
100	5	60	20	5	5	5
Learning and teaching resources						

Required textbooks (methodology, if any)	Nothing
Main references (sources)	Crimes of the Baath regime in Iraq (collection of authors)
Recommended supporting books and references (scientific journals, reports....)	Reports and statistics on mass graves in Iraq
Electronic references, Internet sites	Browse the Google network using the desired subject key.

207. Course Name:
Basics of Anesthesia (1)
208. Course Code:
ANS221
209. Semester / Year:
(Second semester , Second Year)
210. Description Preparation Date:
1/ 3/ 2024
211. Available Attendance Forms:
Weekly attendance
212. Number of Credit Hours (Total) / Number of Units (Total)
(4 units) (6 Hr. / Weekly)
213. Course administrator's name (mention all, if more than one name)
Name: Amjed Qasim Mohammed Email: Alatwanyamjad@gmail.com
214. Course Objectives:
<ul style="list-style-type: none"> • General goals // <p>At the end of the course, the student will be able to Identify all anesthesia devices</p> <p>.....</p>

Specific (Behavioral) goals //

- 3- At the end of the course, the student will be able to Giving anesthesia
- 2- At the end of the course, the student will be able to make Resuscitate to the patient.
- 3- At the end of the course, the student will be able to determine wisely on how to manage the patient when an emergency occurs.

215. Teaching and Learning Strategies

- **Brainstorming strategy**
- **Modeling learning strategy**
- **Group work or cooperative learning strategy**
- **Discussion strategy**
- **Listening to the students' various questions and answering them completely**

216. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6 hrs.	Understanding and assimilation	Drugs used in premedication.	By displaying the lecture to the students on the projector and explaining .	Oral and written Examination
2	6 hrs.	Understanding and assimilation	Drugs used in premedication.	Brainstorming strategy	Oral and written Examination
3	6 hrs.	Understanding and assimilation	Drugs used in premedication.	Teamwork strategy.	Oral and written Examination
4		Understanding and	Drugs used in premedication.	Project strategy	Oral and written

	6 hrs.	assimilation			Examination
5	6 hrs.	Understanding and assimilation	Positioning & problems.	Discussion strategy	Oral and written Examination
6	6 hrs.	Understanding and assimilation	Positioning & problems.	Brainstorming strategy	Oral and written Examination
7	6 hrs.	Understanding and assimilation	CPR & respiratory failure	Discussion strategy	Oral and written Examination
8	6 hrs.	Understanding and assimilation	CPR & respiratory failure	Brainstorming strategy	Oral and written Examination
9	6 hrs.	Understanding and assimilation	IVF types & uses	Teamwork strategy.	Oral and written Examination
10	6 hrs.	Understanding and assimilation	IVF types & uses	Project strategy	Oral and written Examination
11	6 hrs.	Understanding and assimilation	IVF types & uses	Discussion strategy	Oral and written Examination
12	6 hrs.	Understanding and assimilation	IVF types & uses	Teamwork strategy.	Oral and written Examination
13	6 hrs.	Understanding and assimilation	IVF types & uses	Project strategy	Oral and written Examination
14	6 hrs.	Understanding and assimilation	Safety measurements in theatre, smoking	Discussion strategy	Oral and written Examination
15	6 hrs.	Understanding and assimilation	Safety measurements in theatre, Drugs allergic reaction	Teamwork strategy	Oral and written Examination

7. Course Evaluation					
Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
10	5	5	20	60	100

8. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Fundamental of anaesthesia, fourth edition, Ted Lin, Tim Smith, and Colin Pinnock
Main references (sources)	
Recommended books and references (scientific journals, reports...)	Clinical anesthesiology, fifth edition , Morgan & Mikhail's, 2013
Electronic References, Websites	Browse the Google network using the desired subject key.

219. Course Name:
Basics Antiesthetic equipment (1)
220. Course Code:
ANS222
221. Semester / Year:
(Second semester , Second Year)
222. Description Preparation Date:
1/ 3/ 2024
223. Available Attendance Forms: yearly
Weekly attendance
224. Number of Credit Hours (Total) / Number of Units (Total) (8 units)
(4 units) (6 Hr. / Weekly)
225. Course administrator's name (mention all, if more than one name)
Name: amjed Qasim Mohammed Email: alatwanyamjad@gmail.com
226. Course Objectives
General goals // At the end of the course, the student will be able to identify the anesthetic equipments in operating room.....

Specific (Behavioral) goals //

- 1- At the end of the course, the student will be able to identify the anesthetic equipment.
- 2- At the end of the course, the student will be able to distinguish the important structures anesthetic equipment.
- 3- At the end of the course, the student will be able to determine the functions of all parts of anesthetic equipment .
- 4- At the end of the course, the student will be able to describe the sustainability and maintenance of anesthetic equipment.

227. Teaching and Learning Strategies

- **Brainstorming strategy**
- **Modeling learning strategy**
- **Group work or cooperative learning strategy**
- **Discussion strategy**
- **explain the lecture in detail to the students and discuss the nature of the subject and the most important things**
- **Listening to the students' various questions and inquiries and answering them completely.**

228. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6	Understanding and assimilation	Electrical hazard and their prevention, and accident associated with main electrical supply	Brainstorming strategy	Oral and written Examination
2	6	Understanding and	Surgical diathermy, accident due to use of diathermy	Teamwork	Oral and written

		assimilation		strategy.	Examination
3	6	Understanding and assimilation	Surgical diathermy, accident due to use of diathermy	Project strategy	Oral and written Examination
4	6	Understanding and assimilation	Defibrillator and pacemaker	Discussion strategy	Oral and written Examination
5	6	Understanding and assimilation	Defibrillator and pacemaker	Brainstorming strategy	Oral and written Examination
6	6	Understanding and assimilation	Laser: principle and clinical application of laser, and safety spectrum	Teamwork strategy.	Oral and written Examination
7	6	Understanding and assimilation	Laser: principle and clinical application of laser, and safety spectrum	Project strategy	Oral and written Examination
8	6	Understanding and assimilation	Equipment for MRI anesthesia, and miscellaneous equipment in anesthesia(urine output equipment, peripheral nerve stimulator)	Discussion strategy	Oral and written Examination
9	6	Understanding and assimilation	Equipment for MRI anesthesia, and miscellaneous equipment in anesthesia(urine output equipment, peripheral nerve stimulator)	Brainstorming strategy	Oral and written Examination
10	6	Understanding and assimilation	Electronics in anaesthetic machine, ergonomics and critical incident, electronic control of breathing system	Teamwork strategy.	Oral and written Examination

11	6	Understanding and assimilation	Electronics in anaesthetic machine, ergonomics and critical incident, electronic control of breathing system	Project strategy	Oral and written Examination
12	6	Understanding and assimilation	Risk management :principles of risk management, risk reduction related to equipment	Discussion strategy	Oral and written Examination
13	6	Understanding and assimilation	Risk management :principles of risk management, risk reduction related to equipment	Brainstorming strategy	Oral and written Examination
14	6	Understanding and assimilation	Maintenance of equipments	Teamwork strategy.	Oral and written Examination
15	6	Understanding and assimilation	Maintenance of equipments	Project strategy	Oral and written Examination

229. Course Evaluation

Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
10	5	5	20	60	100

230. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Morgan and Mikhail
Main references (sources)	Antiesthetic equipment Textbook

1. Teaching Institution	Al-Manara College for Medical Sciences
2. University Department/Centre	Anesthesia Techniques
3. Course title/ code	Bachelor's degree in Anesthesia Techniques ANS223
4. Programme(s) to which it contributes	Term
5. Modes of Attendance offered	An annual study consisting of two semesters
6. Semester/Year	2023/2024
7. Number of hours tuition (total)	sixty hours (60)
8. Date of production/revision of this specification	13/02/2024

9. Aims of the Course

Enable students to understand the main body functions and emergency disorder in relation to anesthesia.

Empowering students with the techniques of anesthesia and their effect on human body

To make students able to handle laboratory tools and apply biosecurity safety standards within laboratories.

Training students on handling anesthetic agents under normal and emergency cases

10. Learning Outcomes, Teaching ,Learning and Assessment Methode

A- Knowledge and Understanding

A 1- Determining the structure and function of human body..

A2- Explanation of physiological implications of anesthesia.

A3- Differentiate between the types of anesthetic agents in relation to physiological activities.

A4- Studying the efect of anesthesia on functions of body systems.

B. Subject-specific skills

B1 - Study the clinical handling of anesthetic agents.

B2 – Handling emergency cases.

B3 - Dealing with various laboratory equipment

Teaching and Learning Methods

Theoretical study: (theoretical lectures supported by modern means of presentation and reinforced with the latest scientific sources and holding seminars in which students participate).

Practical study: (teaching students to take samples of body fluids such as blood, urine or semen and their chemical and biological analysis techniques. Vital signs measurements (Blood pressure, Temperature, Heart rate, mechanical ventilation, Lung volumes & capacities were also included in such training)

Assessment methods

Through: Students' participation during the lecture, presentation of seminars, short-time quick exams. Quarterly examinations for the theoretical and practical.

C. Thinking Skills

C1- Urging students to solve intellectual questions.

C2- Conducting intellectual competitions related to the scientific subject.

C3- Putting students in a scientific and practical environment related to physiological impact of anesthetic agents.

C4 - Urging students to compete among themselves to achieve advanced positions within the scientific subject to obtain grades and moral prizes.

D. General and Transferable Skills (other skills relevant to employability and personal development)

D 1 - access to a greater number of scientific sources.

D2 - Presenting the newly raised topics globally through a presentation and the participation of everyone through it.

D3 - Have the students conduct discussion panels, as well as make presentations related to the scientific subject to develop and enhance their personalities.

11. Course Structure

Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Method	Assessment Method
First Term 1	2	Homeostasis & Body fluids, Related to Anesthesia	Autonomic control on C.V.S.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture
2	2		Starlings law of the heart.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture
3			Pressure drops from Lt. Side of the circulation to Rt.Side.	Theoretical scientific lectures	(Oral questions

	2			+ scientific / or interactive media presentations	during the lecture + short exam)
4	2		Pressure change in Lt. Ventricle & aorta during the cardiac cycle	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture
5	2	Respiration related to anesthesia	Pressure change in Rt. Ventricle & pulmonary artery during the cardiac cycle.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture + short exam)
6	2		Starlings law of the capillaries.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture
7	2		Effect of tachycardia, tachycardia + hypotension, tachycardia + hypotension-blood loss on the C.V.S.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture + short exam)
8	2		Critical closing pressure phenomenon	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture
9	2		Blood distribution in to vital organs	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture + short exam)

10	2		Excitation – contraction coupling.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture)
11	2	Mechanical Ventillation IPPV	General knowlege-struction, type of I.V. fluid- clinical application.	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture + short exam)
12	2		Hb. Dissociation – Association curves	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture)
13	2		O ₂ flux+pre-oxygenation in anaesthesia, why increase FIO ₂	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture + short exam)
14	2	Hypoxia	Cyanosis, pallor sign	Theoretical scientific lectures + scientific / or interactive media presentations	(Oral questions during the lecture)
15	2		Meaning of cyanosis, pallor for the anaesthetist.	Theoretical scientific lectures + scientific / or interactive media presentations	(first semester exam)

12. Infrastructure

Required reading:

- CORE TEXTS
- COURSE MATERIALS
- OTHER

1- Ganong W.F. (Ed.); 2005. Review of Medical Physiology.

2- Guyton A.C. Text book of Medical Physiology . Latest Edition.

3- Scientific papers on anesthesiology

231.	Course Name:
Basics of Surgery (1)	
232.	Course Code:
ANS224	
233.	Semester / Year:
Second Semester / 2 nd stage	
234.	Description Preparation Date:
26/2/2024	
235.	Available Attendance Forms:
Weekly attendance	
236.	Number of Credit Hours (Total) / Number of Units (Total)
(3 units) (5 Hr. / Weekly)	
237.	Course administrator's name (mention all, if more than one name)
Name: Aqeel Azeez Arrar Email: akeelazeez@uomisan.edu.iq	
238.	Course Objectives
<p>General goals //</p> <p>At the end of the course, the student will be able to identify the principles of general surgery.....</p> <p>Specific (Behavioral) goals //</p> <ol style="list-style-type: none"> 1- At the end of the course, the student will be able to identify the Learn about the principles of general surgery. 2- At the end of the course, the student will be able to deal with preventing infection. 3- At the end of the course, the student will be able to determine the simple and complex surgical cases. 4- At the end of the course, the student will be able to describe the patient status 	

before, during and after surgery.

239. Teaching and Learning Strategies

- **Brainstorming strategy**
- **Modeling learning strategy**
- **Group work or cooperative learning strategy**
- **Discussion strategy**
- **Presentation; seminar, and Case study**

240. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	5	Understanding and assimilation	Principle of pediatric surgery	Data show & discussion	Quiz and weekly exam.
2	5	Understanding and assimilation	Warfare Injuries	Brainstorming strategy	Quiz and weekly exam.
3	5	Understanding and assimilation	Day case surgery	Teamwork strategy.	Quiz and weekly exam.
4	5	Understanding and assimilation	Reaction of Body to Injury	Data show & discussion	Quiz and weekly exam.
5	5	Understanding and assimilation	Infection of The Joint and Bone	Brainstorming strategy	Quiz and weekly exam.
6	5	Understanding and assimilation	Peptic Ulcers	Teamwork strategy.	Quiz and weekly exam.
7	5	Understanding and assimilation	Type of surgical disease (hereditary, congenital, acquired)	Brainstorming strategy	Quiz and weekly exam.

8	5	Understanding and assimilation	Sterile Precaution and AIDs	Teamwork strategy.	Quiz and weekly exam.
9	5	Understanding and assimilation	Calcium metabolism, calcification	Brainstorming strategy	Quiz and weekly exam.
10	5	Understanding and assimilation	Coagulopathy and Blood Dyscrasia in surgery	Teamwork strategy.	Quiz and weekly exam.
11	5	Understanding and assimilation	Specific infection	Brainstorming strategy	Quiz and weekly exam.
12	5	Understanding and assimilation	Type of bacteria(surgical microbiology)	Teamwork strategy.	Quiz and weekly exam.
13	5	Understanding and assimilation	Venous Disease Thrombophlebitis And Venous Thrombosis	Brainstorming strategy	Quiz and weekly exam.
14	5	Understanding and assimilation	Oncology	Data show & discussion	Quiz and weekly exam.
15	5	Understanding and assimilation	Abortion, CS and Hysterectomy	Brainstorming strategy	Quiz and weekly exam.

241. 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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

242. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Handbook of clinical anesthesia fourth edition 2020
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Main references (sources)	1. Principles of physiology for the anesthetist fourth edition 2020 2. Basic of anesthesia sixth edition 2011
Recommended books and references (scientific journals, reports...)	The anesthetic manual crisis 5th. Edition 2020 Millers' anesthesia 9th. Edition 2020
Electronic References, Websites	Browse the Google network using the desired subject key.

1. Course Name:
Medicine
2. Course Code:
ANS225
3. Semester / Year:
(Second semester , Second Year)
4. Description Preparation Date:
11/ 3/ 2024
5. Available Attendance Forms:
Weekly attendance
6. Number of Credit Hours (Total) / Number of Units (Total) (4 units)
(6 Hr. / Weekly)
7. Course administrator's name (mention all, if more than one name)
Name: Sami Khudeir Suhaim Email: samkhs23@gmail.com
8. Course Objectives:
General goals // At the end of the course, the student will be able to identify all diseases that infect the human body
Specific (Behavioral) goals //

- 1- At the end of the course, the student will be able to identify the human diseases.
- 2- At the end of the course, the student will be able to distinguish the investigations that specialized for body system.
- 3- At the end of the course, the student will be able to determine the specific criteria for medical diagnosis.
- 4- At the end of the course, the student will be able to describe the causative factors that effect on body disorders.

9. Teaching and Learning Strategies

Brainstorming strategy

Modeling learning strategy

Group work or cooperative learning strategy

Discussion strategy

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1 + 2	6	Understanding and assimilation	Hematology/ introduction / major manifestations/ investigations.	Brainstorming strategy	Oral and written Examination
3 + 4	6	Understanding and assimilation	Anemia/ Introduction/ major manifestation classification investigations.	Teamwork strategy.	Oral and written Examination
5	6	Understanding and assimilation	Diseases of the endocrine gland/ introduction.	Project strategy	Oral and written Examination
6 + 7	6	Understanding and assimilation	Hypothalamus/ pituitary/ thyroid/ parathyroid/ adrenals/ gonads.	Discussion strategy	Oral and written Examination
8 + 9		Understanding and	Diseases of connective	Brainstorming	Oral and written

	6	assimilation	tissues and Rheumatology/ introduction/major manifestations/ investigations.	strategy	Examination
10 + 11	6	Understanding and assimilation	Diseases of the nervous system/ introduction	Teamwork strategy.	Oral and written Examination
12 +13	6	Understanding and assimilation	Major manifestations/ investigations.	Project strategy	Oral and written Examination
14 + 15	6	Understanding and assimilation	Specific forms of organ failure(Multiple organ failure/ ARDS/DIC/ARF/ hepatic failure).	Discussion strategy	Oral and written Examination

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Medical and surgical textbook
Main references (sources)	
Recommended books and references (scientific journals, reports...)	Medical and surgical textbook
Electronic References, Websites	Browse the Google network using the desired subject key.

243. Course Name:

Pharmacology (1)

244. Course Code:

ANS226

245. Semester / Year:

(First semester , Second Year)

246. Description Preparation Date:

11/ 3/ 2024

247. Available Attendance Forms:

Weekly attendance

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

(3 units) (4 Hr. / Weekly)

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

Name: Roua Abdulrazzak M. Baker

Email: roua2008@yahoo.com

250. Course Objectives:

General goals //

At the end of the course, the student will be able to identify all medications specialized Anesthetic drugs.....

Specific (Behavioral) goals //

- 1- At the end of the course, the student will be able to identify the drug action.
- 2- At the end of the course, the student will be able to distinguish the General anesthesia drugs and local anesthesia drugs.
- 3- At the end of the course, the student will be able to determine the specific treatment for each body system.

251. Teaching and Learning Strategies

- **Brainstorming strategy**
- **Modeling learning strategy**
- **Group work or cooperative learning strategy**
- **Discussion strategy**

252. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Understanding and assimilation	Hypnotic and sedative drugs.	Brainstorming strategy	Oral and written Examination
2	4	Understanding and assimilation	Hypnotic and sedative drugs.	Teamwork strategy.	Oral and written Examination
3	4	Understanding and assimilation	Narcotic (Opioid), analgesic.	Project strategy	Oral and written Examination
4	4	Understanding and assimilation	Analgesic, antipyretic and anti-inflammatory agents	Discussion strategy	Oral and written Examination
5	4	Understanding and assimilation	Analgesic, antipyretic and anti-inflammatory agents	Brainstorming strategy	Oral and written Examination
6	4	Understanding and assimilation	Gastrointestinal and Antiemetic Drugs	Teamwork strategy.	Oral and written Examination
7	4	Understanding and assimilation	Gastrointestinal and Antiemetic Drugs	Project strategy	Oral and written Examination
8+9	4	Understanding and assimilation	Drugs for Diabetes	Discussion strategy	Oral and written Examination
10	4	Understanding and	Adrenal hormones.	Project strategy	Oral and written

		assimilation			Examination
11	4	Understanding and assimilation	Antimicrobial agents	Discussion strategy	Oral and written Examination
12	4	Understanding and assimilation	Antifungal drugs.	Project strategy	Oral and written Examination
13	4	Understanding and assimilation	Anti-Epileptic drugs.	Project strategy	Oral and written Examination
14	4	Understanding and assimilation	Anti-Parkinson's drugs.	Discussion strategy	Oral and written Examination
15	4	Understanding and assimilation	Clinical toxicology	Project strategy	Oral and written Examination

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

3. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Essentials of Medical Pharmacology Seventh Edition
Main references (sources)	MEDICAL PHARMACOLOGY& THERAPEUTICS Fifth Edition,
Recommended books and references (scientific journals, reports...)	Pharmacology textbook
Electronic References, Websites	Browse the Google network using the desired subject key.

1. Course Name:					
statistics					
2. Course Code:					
ANS227					
3. Semester / Year:					
semester					
4. Description Preparation Date:					
2024/4/21					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
36 hours (total)/ 3 of units					
7. Course administrator's name (mention all, if more than one name)					
Name: sarah fawzi ghafel Email: sara4math@gmail.com					
8. Course Objectives					
9. Teaching and Learning Strategies					
10. Course Structure					
Week	Hou rs	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1		Identify the stag of the statistical Method in Medical and	Definition of Biostatistics, Some Basic Concepts (Data and Sources of data,	Cooperative Teaching And Discussion	Daily exams, Mid-term Exam, and Final exam

		Scientific applications	Variables, Population Samples and Methods of data collection)	learning	
2	3	Identify the stages of the statistical Method in Medical and Scientific applications	Definition of Biostatistics, Some Basic Concepts (Data and Sources of data, Variables, Population Samples and Methods of data collection)	Cooperative Teaching And Discussion learning	Daily exams, Mid-term Exam, and Final exam
3	3	Identify the stages of the statistical Method in Medical and Scientific applications	Descriptive Statistic: Measures of Central Tendency (Arithmetic Mean, Median, Mode) of Ungroup and group data	Cooperative Teaching And Discussion learning	Daily exams, Mid-term Exam, and Final exam
4	3	Identify the stages of the statistical Method in Medical and Scientific applications	Descriptive Statistic Measures of Dispersion(Range, Variance, Standard Deviation, Coefficient of Variation, Standard Errs)	Cooperative Teaching And Discussion learning	Daily exams, Mid-term Exam, and Final exam
5	3	Identify the stages of the statistical Method in Medical and Scientific applications	Percentiles, Quartiles and Interquartile Rang	Cooperative Teaching And Discussion learning	Daily exams, Mid-term Exam, and Final exam
6	3	Identify the stages of the statistical Method in Medical and Scientific applications	Normal distribution .Applications	Cooperative Teaching And Discussion learning	Daily exams, Mid-term Exam, and Final exam
7	3	Identify the stages of the statistical Method in Medical and	Moments, Skewness Kurtosis	Cooperative Teaching And Discussion	Daily exams, Mid-term Exam, and Final exam

		Scientific applications		learning	
8	3	Identify the stages of the statistical Method in Medical and Scientific applications	Elementary Probability Theory	Cooperative Teaching And Discussion learning	Daily exams, Mid-term Exam, and Final exam
9	3	Identify the stages of the statistical Method in Medical and Scientific applications	Statistical Estimation Theory (Estimation of Population parameters. by Point and by Interval)	Cooperative Teaching And Discussion learning	Daily exams, Mid-term Exam, and Final exam
10	3	Identify the stages of the statistical Method in Medical and Scientific applications	Test of Significant Degree of freedom, P-Value and level of Significant. Type I and Type II Errors	Cooperative Teaching And Discussion learning	Daily exams, Mid-term Exam, and Final exam
11	3	Identify the stages of the statistical Method in Medical and Scientific applications	Different type of t-test	Cooperative Teaching And Discussion learning	Daily exams, Mid-term Exam, and Final exam
12	3	Identify the stages of the statistical Method in Medical and Scientific applications	Chi-Square Significance tests	Cooperative Teaching And Discussion learning	Daily exams, Mid-term Exam, and Final exam
13	3	Identify the stages of the statistical Method in Medical and Scientific	.One way ANOVA test	Cooperative Teaching And Discussion learning	Daily exams, Mid-term Exam, and Final exam

		applications			
14		Identify the stages of the statistical Method in Medical and Scientific applications	Simple Correlation Coefficients	Cooperative Teaching And Discussion learning	Daily exams, Mid-term Exam, and Final exam
15	3	Identify the stages of the statistical Method in Medical and Scientific applications	Simple Linear Regression	Cooperative Teaching And Discussion learning	Daily exams, Mid-term Exam, and Final exam

11. Course Evaluation

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	<p>1-professor (Dr.) Amhad Daoud Niazi”</p> <p>Statistical Analysis In Medical Research</p> <p>2- Wayne W.Daniel: Biostatistics”Basic concepts and Methodology for the health</p>
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Guide

Third Grade

254.	Course Name:
Anesthesia	
255.	Course Code:
ANS311	
256.	Semester / Year:
1 st and 2 nd Semester / 3rd stage	
257.	Description Preparation Date:
26/2/2024	
258.	Available Attendance Forms:

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

6 hours weekly: 2 theory + 4 clinical

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

Name: Mohammed Abbas Kadhim
Email: mohammedabbas66@yahoo.com

261. Course Objectives

1. Identification of anesthesia Techniques
2. Define Anesthesia Stages
3. Teach students how to deal with the client during pre – Intra – Post anesthesia

262. Teaching and Learning Strategies

Using update strategies for teaching and learning such as discussion; Presentation; seminar, Case study

263. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6	Assessment of patients before anaesthesia .	Anesthesia	Data show and discussion	Quiz and weekly exam.
2	6	Permedication.	Anesthesia	Data show and discussion	Quiz and weekly exam.
3	6	Anaesthesia agents (Intra venous).	Anesthesia	Data show and discussion	Quiz and weekly exam.
4	6	Anaesthesia agents (Inhalational).	Anesthesia	Data show and discussion	Quiz and weekly exam.
5	6	Anaesthesia for obstetric & gynecology .	Anesthesia	Data show and discussion	Quiz and weekly exam.
6	6	Anaesthesia for paediatric surgery & ABGAR score	Anesthesia	Data show and discussion	Quiz and weekly exam.
7	6	Anaesthesia fro geriatric surgery.	Anesthesia	Data show and discussion	Quiz and weekly exam.

8	6	Anaesthesia for obese patients .	Anesthesia	Data show and discussion	Quiz and weekly exam.
9	6	Regional anaesthesia.	Anesthesia	Data show and discussion	Quiz and weekly exam.
10	6	Obeisity & Anaesthesia	Anesthesia	Data show and discussion	Quiz and weekly exam.
11	6	Alkohol & Anaesthesia	Anesthesia	Data show and discussion	Quiz and weekly exam.
12	6	Renal Disease & Anaesthesia	Anesthesia	Data show and discussion	Quiz and weekly exam.
13	6	Liver Disease & Anaesthesia	Anesthesia	Data show and discussion	Quiz and weekly exam.
14	6	Anaemia & Anaesthesia Sickle Cell Anaemia.	Anesthesia	Data show and discussion	Quiz and weekly exam.
15	6	Gastric Acid Aspiraiton syndrome, pre-eclampsia	Anesthesia	Data show and discussion	Quiz and weekly exam.
16	6	Coronoray artery diseases in non- cardiac surgery.	Anesthesia	Data show and discussion	Quiz and weekly exam.
17	6	Hypertension, Atherosclerosis, Heart failure, old.	Anesthesia	Data show and discussion	Quiz and weekly exam.
18	6	Valvular lesions & Anaesthesia, General note about open heart surgery.	Anesthesia	Data show and discussion	Quiz and weekly exam.
19	6	One lung anaesthesia, Bronchoscopy.	Anesthesia	Data show and discussion	Quiz and weekly exam.
20	6	Diabetes Mellitis & Anaesthesia.	Anesthesia	Data show and discussion	Quiz and weekly exam.
21	6	Anaesthesia for ophthalmic surgery& Endoscopic surgery	Anesthesia	Data show and discussion	Quiz and weekly exam.
22	6	Anaesthesia for orthopaedic surgery.	Anesthesia	Data show and discussion	Quiz and weekly exam.
23	6	Anaesthesia for urinary surgery.	Anesthesia	Data show and discussion	Quiz and weekly exam.
24	6	Anaesthesia for thoracic	Anesthesia	Data show and	Quiz and weekly exam.

		surgery.		discussion	
25	6	Day surgery	Anesthesia	Data show and discussion	Quiz and weekly exam.
26	6	Recovery & complication.	Anesthesia	Data show and discussion	Quiz and weekly exam.
27	6	Recovery & complication& Infant resuscitation	Anesthesia	Data show and discussion	Quiz and weekly exam.
28	6	Induced hypotension.	Anesthesia	Data show and discussion	Quiz and weekly exam.
29	6	C.P.R.	Anesthesia	Data show and discussion	Quiz and weekly exam.
30	6	Emergency conditions.	Anesthesia	Data show and discussion	Quiz and weekly exam.

264. 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.

265. Learning and Teaching Resources

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

266. Course Name:

Intensive Care Unit Techniques

267. Course Code:

ANS312

268. Semester / Year:

1st and 2nd Semester / 3rd stage

269. Description Preparation Date:

26/2/2024

270. Available Attendance Forms:

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

4 hours weekly: 2 theory + 2 clinical

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

Name: Aqeel Azeez Arrar

Email: akeelazeez@uomisan.edu.iq

273. Course Objectives

1. Identify all the devices in the intensive care unit
2. How to deal with the devices (mechanical ventilation).
3. How to resuscitate the patient using modern equipment.
4. How to care for the patient when an emergency occurs.

274. Teaching and Learning Strategies

Using update strategies for teaching and learning such as discussion; Presentation; seminar, Case study

275. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	INTENSIVE CARE UNIT	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
2	4	INTENSIVE CARE UNIT (Equipment and systems) .	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
3	4	Ventilation Mechanical <ul style="list-style-type: none">• Invasive ventilation• Non-invasive ventilation	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
4	4	Non-invasive ventilation (NIV)	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
5	4	Mechanical Ventilation Invasive Ventilation	Intensive Care Unit	Data show and	Quiz and weekly exam.

			Techniques	discussion	
6	4	I:E Ratio	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
7	4	Assist-Control Mandatory Ventilation (ACV)	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
8	4	Synchronized Intermittent Mandatory Ventilation (SIMV)	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
9	4	Pressure Support Ventilation (PSV)	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
10	4	Positive End-expiratory Pressure PEEP	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
11	4	Hypoxia and Oxygen Therapy	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
12	4	Anoxia, hypoxia, and hypoxemia	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
13	4	Types of Hypoxia: Hypoxemic, Anemic, Stagnant and Histotoxic	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
14	4	Oxygen Therapy	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
15	4	Low flow oxygen systems	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
16	4	High Flow Oxygen Delivery Devices	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
17	4	Hazards of oxygen therapy	Intensive Care Unit	Data show and discussion	Quiz and weekly exam.

			Techniques		
18	4	THROMBOEMBOLIC	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
19	4	Thromboprophylaxis & Risk factors	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
20	4	Mobilization	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
21	4	Pneumothorax in ICU	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
22	4	Spontaneous Pneumothorax	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
23	4	Barotrauma and Volutrauma	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
24	4	Tension Pneumothorax	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
25	4	Stress ulcerations	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
26	4	Chronic Obstructive Pulmonary Disease	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
27	4	Head Injury	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
28	4	A B O blood groups and RH	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
29	4	Advanced Trauma Life Support	Intensive Care Unit	Data show and discussion	Quiz and weekly exam.

			Techniques		
30	4	Central venous pressure (CVP)	Intensive Care Unit Techniques	Data show and discussion	Quiz and weekly exam.
276. 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.					
277. Learning and Teaching Resources					
Required textbooks (curricular books, if any)			ICU Protocols		
Main references (sources)			Handbook of ICU Therapy		
Recommended books and references (scientific journals, reports...)					
Electronic References, Websites					

1. Course Name:
anesthetic equipment
2. Course Code:
ANS313
3. Semester / Year:
2023-2024
4. Description Preparation Date:
1/3/2024
5. Available Attendance Forms:
Weekly Attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
7. Course administrator's name (mention all, if more than one name)
Name: Amjed Qasim Mohammed Email: alatwanyamjad@gmail.com

8. Course Objectives:

General objective: Introducing all medical devices used in anesthesia.

Special goals-:

At the end of the academic year, the student will be able to:

- Use of all different anesthesia devices.
- Maintenance and maintenance of all anesthesia equipment.

Introducing all parts of medical devices used in anesthesia and their techniques

9. Teaching and Learning Strategies

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1			Breathing system and their component, definition, classification, working principle	By displaying the lecture to the students on the projector and explaining it in detail, each section separately, then receiving questions and inquiries from the students about the current lecture.	Through repeated daily examinations. Emphasizing the student's mental presence before physical presence
2			Breathing system and their component, definition, classification, working principle		
3			Modification of breathing system, procedure for checking breathing system		
4			Modification of breathing system, procedure for checking		

			breathing system		
5			Airway management device: artificial airway, face mask, laryngeal mask		
6			Airway management device: artificial airway, face mask, laryngeal mask		
7			Endotracheal tubes, definition and types, ETT for special purpose		
8			Endotracheal tubes, definition and types, ETT for special purpose		
9			Laryngoscope, aids to intubation, emergency airway		
10			Laryngoscope, aids to intubation, emergency airway		
11			Manual resuscitator, components and other use for manual resuscitator		
12			Manual resuscitator, components and other use for manual resuscitator		
13			Anesthesia ventilator, principle of working and type of ventilator		
14			Anesthesia ventilator, principle of working and type of ventilator		
15			Advanced types in ventilator : principles and example		
16			Advanced types in ventilator : principles and example		
17			Humidifier and nebulizer: definition, importance of humidification		
18			Humidifier and nebulizer: definition, importance of		

			humidification		
19			Classification and examples of humidifier and nebulizer		
20			Classification and examples of humidifier and nebulizer		
21			Equipment for pediatric anesthesia, special equipment, ventilator, suction equipment		
22			Equipment for pediatric anesthesia, special equipment, ventilator, suction equipment		
23			Equipment for local analgesia: spinal, epidural, and major nerve block		
24			Equipment for local analgesia: spinal, epidural, and major nerve block		
25			Physiological monitoring: principles and non-invasive monitoring, classification of monitoring equipment		
26			Physiological monitoring: principles and non-invasive monitoring, classification of monitoring equipment		
27			Monitoring of blood pressure, invasive and non- invasive, pulse oximeter		
28			Monitoring of blood pressure, invasive and non- invasive, pulse oximeter		
29			ECG and temperature monitoring equipment		
30			ECG and temperature		

			monitoring equipment		
11. Course Evaluation					
12. 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:
Medicine
2. Course Code:
ANS314
3. Semester / Year:
2023/2024
4. Description Preparation Date:
19 /4 /2024
5. Available Attendance Forms:
Weekly Attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
7. Course administrator's name (mention all, if more than one name)
Name: Dr. Hayder Ali Hussein Email: hayderalihussein@uomanara.edu.iq
8. Course Objectives

9. Teaching and Learning Strategies

10. Course Structure

Week	Hou rs	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1			Jaundice		
2			Types and treatment		
3			Peptic ulcer		
4			Duodenal ulcer		
5			Acute renal failure		
6			Chronic renal failure		
7			Ischemic heart disease		
8			Arrhythmias		
9			Cardiac arrest		
10			Heart failure		
11			Types and treatment		
12			hypertension		
13			Types and treatment		
14			Upper R tract infection		
15			Lower R TI		
16			Pneumonia		
17			T.B		
18			COPD		
19			Emphysema		
20			Asthma		
21			Lung tumor		
22			Pulmonary embolism		
23			Respiratory failure		
24			Plural effusion		
25			Types and treatment		
26			DM		
27			Types and treatment		
28			Cushing syndrome		
29			Fluid disturbances		
30			Electrolyte disturbances		

11. Course Evaluation	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Davidson 2020
Main references (sources)	Medical surgical nursing 2022
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

278. Course Name:
Surgery (2)
279. Course Code:
ANS315
280. Semester / Year:
(First + Second semester , Third Year)
281. Description Preparation Date:
12/ 3/ 2024
282. Available Attendance Forms:
Weekly attendance
283. Number of Credit Hours (Total) / Number of Units (Total)
(5 units) (4 Hr. / Weekly)
284. Course administrator's name (mention all, if more than one name)
Name: Sami Khudeir Suhaim Email: samkhs23@gmail.com
285. Course Objectives:
General goals //
At the end of the course, the student will be able to identify all diseases that infect the human body

Specific (Behavioral) goals //

- 1- At the end of the course, the student will be able to identify the human diseases.
- 2- At the end of the course, the student will be able to distinguish the types of surgical procedures.
- 3- At the end of the course, the student will be able to determine the specific criteria for surgical diagnosis.
- 4- At the end of the course, the student will be able to describe the causative factors that effect on body disorders.

286. Teaching and Learning Strategies

- **Brainstorming strategy**
- **Modeling learning strategy**
- **Group work or cooperative learning strategy**
- **Discussion strategy**

287. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4 hrs.	Understanding and assimilation	Digestive Tract (GIT) General Review & Surgical Approaches	Brainstorming strategy	Oral and written Examination
2	4 hrs.	Understanding and assimilation	Salivary glands	Teamwork strategy.	Oral and written Examination
3	4 hrs.	Understanding and assimilation	Tongue & oral cavity	Project strategy	Oral and written Examination
4	4 hrs.	Understanding and assimilation	Oesophagus	Discussion strategy	Oral and written Examination

5	4 hrs.	Understanding and assimilation	Stomach & duodenum	Brainstorming strategy	Oral and written Examination
6	4 hrs.	Understanding and assimilation	Liver	Teamwork strategy.	Oral and written Examination
7	4 hrs.	Understanding and assimilation	Gall bladder & bile ducts	Project strategy	Oral and written Examination
8	4 hrs.	Understanding and assimilation	Spleen & pancreas	Discussion strategy	Oral and written Examination
8	4 hrs.	Understanding and assimilation	Small & large intestine	Teamwork strategy.	Oral and written Examination
9	4 hrs.	Understanding and assimilation	Intestinal obstruction & fistula	Project strategy	Oral and written Examination
10	4 hrs.	Understanding and assimilation	Vermiform appendix , peritoneum	Discussion strategy	Oral and written Examination
11	4 hrs.	Understanding and assimilation	Rectum & anus	Teamwork strategy.	Oral and written Examination
12	4 hrs.	Understanding and assimilation	Abdominal wall & Hernia	Project strategy	Oral and written Examination
13	4 hrs.	Understanding and assimilation	Breast	Discussion strategy	Oral and written Examination
14	4 hrs.	Understanding and assimilation	Urinary tract: surgical anatomy, Congenital anomalies, Investigations	Teamwork strategy.	Oral and written Examination
15	4 hrs.	Understanding and assimilation	Trauma to the: Kidneys, Ureter, Bladder, Urethra	Project strategy	Oral and written Examination
16	4 hrs.	Understanding and assimilation	Trauma to the: Kidneys, Ureter, Bladder, Urethra	Discussion strategy	Oral and written Examination
17	4 hrs.	Understanding and assimilation	Urinary Tract Infections (UTI)	Teamwork strategy.	Oral and written Examination
18	4 hrs.	Understanding and assimilation	Urinary Tract Infections (UTI)	Project strategy	Oral and written Examination
19	4 hrs.	Understanding and assimilation	Urinary tumours.	Discussion strategy	Oral and written Examination
20	4 hrs.	Understanding and assimilation	Urogenital Tract in Males: Prostate, Testis, Penis	Teamwork strategy.	Oral and written Examination
21	4 hrs.	Understanding and assimilation	Urogenital Tract in Males: Prostate, Testis, Penis	Project strategy	Oral and written Examination
22	4 hrs.	Understanding and assimilation	Thorax surgery: Respiratory	Discussion strategy	Oral and written Examination

			Pathophysiology & General review		
23	4 hrs.	Understanding and assimilation	Pneumothorax, Haemothorax	Teamwork strategy.	Oral and written Examination
24	4 hrs.	Understanding and assimilation	Chest tube: Applications & Management	Project strategy	Oral and written Examination
25	4 hrs.	Understanding and assimilation	Chest tube: Applications & Management	Discussion strategy	Oral and written Examination
26	4 hrs.	Understanding and assimilation	Lung tumours, Mediastina masses	Teamwork strategy.	Oral and written Examination
27	4 hrs.	Understanding and assimilation	Types of Thoracic operations	Project strategy	Oral and written Examination
28	4 hrs.	Understanding and assimilation	Congenital heart diseases, Acquired heart diseases	Discussion strategy	Oral and written Examination
29	4 hrs.	Understanding and assimilation	Cardiopulmonary resuscitation	Teamwork strategy.	Oral and written Examination
30	4 hrs.	Understanding and assimilation	Digestive Tract (GIT) General Review & Surgical Approaches	Project strategy	Oral and written Examination

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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

8. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Handbook of clinical anesthesia fourth edition 2020
Main references (sources)	Principles of physiology for the anesthetist fourth edition 2020
Recommended books and references (scientific journals, reports...)	Medical and surgical textbook
Electronic References, Websites	Browse the Google network using the desired subject key.

1. Course Name:	
Computer applications	
2. Course Code:	
ANS316	
3. Semester / Year:	
The first and second semester of the third stage / 2023-2024	
4. Description Preparation Date:	
16/2/2024	
5. Available Attendance Forms:	
weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
60 hours/4 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Hameed Hassan Khalf Email: hameedre334@gmail.com	
8. Course Objectives	
Providing the student with knowledge in managing and using various computer applications.	<ul style="list-style-type: none"> • Getting to know the statistical program SPSS, the concept of the program, its operation, and the steps for downloading data. • Encyclopedia of Human body program <p>The concept of the program, its operation, identifying the components of the main screen, methods for dealing with data - the search methods provided by the program, which represent a close picture with conducting a search on the World Wide Web of Information (the Internet).</p>
9. Teaching and Learning Strategies	
Strategy	<ul style="list-style-type: none"> • Lectures • Reports

- quizzes

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	Two hours		The Statistical program SPSS, the concept of the program, its operation, and steps for downloading data.	Practical lecture	Oral Exams.
Second	Two hours		Identify the components of the main screen, to enter data, save and retrieve data, types of data (direct or calculated).	Practical lecture	Oral exams.
Third	Two hours		- Sorting and altering data, determining the statistical procedure through the statistical topics that The student addresses it in statistics lessons. - How to insert a variable or case, merge files, and analysis. Descriptive statistics	Theoretical lecture And practical	Oral exams
Fourth	Two hours		Identify the statistical summary of the given data and benefit from the data Which it provides in exploring data or reports related to columns Or Rows.	Theoretical lecture And practical	Oral exams

Fifth	Two hours		Compare Means, comparison between variables Correlate or Regression.	Theoretical lecture And practical	Oral exams
Sixth	Two hours		Conduct some non-parametric tests such as Chi Square.	Theoretical lecture And practical	Oral exams
Seventh	Two hours		Quality control panel applications.	Theoretical lecture And practical	Daily exam
Eighth	Two hours		Dealing with charts such as bar chart, pie chart, histogram, line graph, scatter diagram, and others. Operating system, functions, goals, classification examples For some operating systems.	Theoretical lecture And practical	Oral exams
Ninth - Fifteenth	Two hours		Handling orders: - Summation (cross tabs), custom tables (core tables), covariance models (one-way), non-parametric methods (single sample, two samples, independent, two samples linked, several independent samples, several samples linked).	Theoretical lecture And practical	Oral exams
Sixteenth - Nineteenth	Two hours		Encyclopedia of Human body program. The program concept, its	Theoretical lecture And practical	Oral exams

			operation, identifying the components of the main screen, methods for dealing with data - The search methods provided by the program represent a close picture of performing a search on the network International Information Center (Internet).		
Twentieth	Two hours		Identify the vocabulary of the human body and benefit from the presentation methods it provides.	Theoretical lecture And practical	Oral exams
Twenty-one - Thirty	Two hours		The modern version of Bodyworks that works under the Windows environment. The concept of the program, its operation and characteristics, the components of the main screen, and learning how to deal with tools and menus. The options it provides and how to get the exact details. Discussing the presentations and explanations that the program provides for various human	Theoretical lecture And practical	Daily exam

			<p>body systems, such as - Skeletal, Nervous, Muscles..... etc.</p> <ul style="list-style-type: none"> - Benefiting from the audio or pronunciation of some of the vocabulary provided in addition to learning about existing real action films. - How to access the precise details provided through the database and search index For that. - Addressing community health by choosing Health & Fitness, which deals with types of food, weight loss, food calories, weights, and aids. Primary, drugs and others. - Identifying the causes of deaths, births, fetal stages, sexual diseases and methods of prevention Minya by choosing Living. - Useful options such as educational lessons or quick tests that provide an easy and quick testing tool for the 		
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			person to know his academic level in the subjects he is studying. Introducing this program.		
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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)	Principles of statistics/ Dr. Muhammad Hassan Amir Hanna Hormuz
Main references (sources)	Modern statistics principles books/SPSS programming book
Recommended books and references (scientific journals, reports...)	Principles of Statistics / Ahmed Abdel Samie Taiba 2008 / local and international magazines specialized in the field of statistics and quantitative management.
Electronic References, Websites	The Iraqi Virtual Library/and external Internet research.

289. Course Name:

English

290. Course Code:

ANS317

291. Semester / Year:

The first and second course/ Third year

292. Description Preparation Date:

16/2/2024

293. Available Attendance Forms:

Weekly

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

Four hours each week

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

Name: Asst. Fatima Raheem

Email: fatimaraheemjabbarabbas@uomanara.edu.com

296. Course Objectives

- The student's ability to speak English and develop his use of diverse terms, as well as helping him create a strong background in the use of the English language in a way that suits the aspects of his study.

297. Teaching and Learning Strategies

- 1- Lectures using PowerPoint and the data show
- 2- A detailed explanation of the material within the lecture orally
- 3- Using weekly exams as well as quizzes inside the lecture
- 4- Request reports on some terms in English that have a direct connection to their academic studies
- 5- The need for students to attend the lecture to understand the subject and the lecture itself, so there are degrees of attendance within the degrees of endeavor
- 6- Developing students' learning on various skills, including speaking and listening, as well as using the language in their daily lives

298. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Tense system	English	Power point lecture and data show	Quiz
2	2	Auxiliary verbs	English	Power point lecture	Oral

	2			and data show	questions and answers
3	2	Model auxiliary verbs and full verbs	English	Power point lecture and data show	Quiz
4	2	English tense usage	English	Power point lecture and data show	Quiz
5	2	Reading and speaking	English	Power point lecture and data show	Oral conversations
6	2	Introduction to the present perfect, simple and continuous	English	Power point lecture and data show	Quiz
7	2	Narrative tenses	English	Power point lecture and data show	Oral questions
8	2	Questions forms	English	Power point lecture and data show	Quiz
9	2	Introduction to the future forms	English	Power point lecture and data show	Questions and answers
10	2	Present simple for timetables	English	Power point lecture and data show	Quiz
11	2	Reading and speaking	English	Power point lecture and data show	Conversations
12	2	Reading and speaking	English	Power point lecture and data show	Conversations

299. Course Evaluation

The pursuit of English from 40 grades, 30 grades from examinations; 5 of which are for attendance, and 5 for the rest of the activities, daily interaction, and quizzes.

300. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Head way book for upper intermediate students
Main references (sources)	The head way Plus for upper intermediate students
Recommended books and references (scientific journals, reports...)	None
Electronic References, Websites	None

Course Description Guide

Fourth Grade

301. Course Name:					
Anesthesia					
302. Course Code:					
ANS411					
303. Semester / Year:					
1 st and 2 nd Semester / 4 th stage					
304. Description Preparation Date:					
26/2/2024					
305. Available Attendance Forms:					
306. Number of Credit Hours (Total) / Number of Units (Total)					
6 hours weekly: 2 theory + 4 clinical					
307. Course administrator's name (mention all, if more than one name)					
Name: Mohammed Abbas Kadhim Email: mohammedabbas66@yahoo.com					
308. Course Objectives					
<ul style="list-style-type: none"> 4. Define anesthesia equipment 5. Define Anesthesia drugs 6. Teach students how to deal with the client during pre – Intra – Post anesthesia 					
309. Teaching and Learning Strategies					
Using update strategies for teaching and learning such as discussion; Presentation; seminar, Case study					
310. Course Structure					
Week	Hours	Required Learning	Unit or subject name	Learning method	Evaluation method

		Outcomes			
1	6	Understanding and assimilation	Maternal Anatomical & Physiological changes	Data show and discussion	Quiz and weekly exam.
2	6	Understanding and assimilation	Pediatric Anatomical & Physiological difference.	Data show and discussion	Quiz and weekly exam.
3	6	Understanding and assimilation	Geriatric Anatomical & Physiological changes	Data show and discussion	Quiz and weekly exam.
4	6	Understanding and assimilation	Anaesthesia-Effects on Respiratory function.	Data show and discussion	Quiz and weekly exam.
5	6	Understanding and assimilation	Endotracheal intubation-difficult intubation	Data show and discussion	Quiz and weekly exam.
6	6	Understanding and assimilation	Positioning in anaesthesia , legal point about surgery, regent surgery, emergency surgery.	Data show and discussion	Quiz and weekly exam.
7	6	Understanding and assimilation	Hypoxia during surgery and post operative legal point about pre-medical visit & physicians consultations.	Data show and discussion	Quiz and weekly exam.
8	6	Understanding and assimilation	CO ₂ changes “ Hypercapnoea” “ Hypocapnoea” Applications	Data show and discussion	Quiz and weekly exam.
9	6	Understanding and assimilation	Desirable ventilator characteristics	Data show and discussion	Quiz and weekly exam.
10	6	Understanding and assimilation	Obeisity & Anaesthesia	Data show and discussion	Quiz and weekly exam.
11	6	Understanding and assimilation	Alkohol & Anaesthesia	Data show and discussion	Quiz and weekly exam.
12	6	Understanding and assimilation	Renal Disease & Anaesthesia	Data show and discussion	Quiz and weekly exam.
13	6	Understanding and assimilation	Liver Disease & Anaesthesia	Data show and discussion	Quiz and weekly exam.

14	6	Understanding and assimilation	Anaemia & Anaesthesia Sickle Cell Anaemia.	Data show and discussion	Quiz and weekly exam.
15	6	Understanding and assimilation	Gastric Acid Aspiraiton syndrome, pre-eclampsia	Data show and discussion	Quiz and weekly exam.
16	6	Understanding and assimilation	Coronaray artery diseases in non- cardiac surgery.	Data show and discussion	Quiz and weekly exam.
17	6	Understanding and assimilation	Hypertension, Atherosclerosis, Heart failure, old.	Data show and discussion	Quiz and weekly exam.
18	6	Understanding and assimilation	Valvular lesions & Anaesthesia, General note about open heart surgery.	Data show and discussion	Quiz and weekly exam.
19	6	Understanding and assimilation	One lung anaesthesia, Bronchoscopy.	Data show and discussion	Quiz and weekly exam.
20	6	Understanding and assimilation	Diabetes Mellitis & Anaesthesia.	Data show and discussion	Quiz and weekly exam.
21	6	Understanding and assimilation	Thyroid surgery & Anaesthesia, Pheochromoeytoma	Data show and discussion	Quiz and weekly exam.
22	6	Understanding and assimilation	T.U.R., Pyloric stenosis, Burns.	Data show and discussion	Quiz and weekly exam.
23	6	Understanding and assimilation	Upper air way obstruction causes & anaesthesia.	Data show and discussion	Quiz and weekly exam.
24	6	Understanding and assimilation	Massive blood transfusion.	Data show and discussion	Quiz and weekly exam.
25	6	Understanding and assimilation	Control of I.c.p, Head injury, Air embolism and emergency.	Data show and discussion	Quiz and weekly exam.
26	6	Understanding and assimilation	Criteria for brain death, General notes about neuroanaesthesia.	Data show and discussion	Quiz and weekly exam.
27	6	Understanding and	Day clinic , Dental Anaesthesia.	Data show and	Quiz and weekly exam.

		assimilation		discussion	
28	6	Understanding and assimilation	Techniques of local analgesia Indication, contra indication, upper limb problems, lower limb problems, toxic reaction.	Data show and discussion	Quiz and weekly exam.
29	6	Understanding and assimilation	Shock syndrome & Anaesthesia in general .	Data show and discussion	Quiz and weekly exam.
30	6	Understanding and assimilation	Hypersensitivity reactions & Anaesthesia “in general	Data show and discussion	Quiz and weekly exam.

311. 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.

Daily Preparation	Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
5	5	5	5	20	60	100

312. Learning and Teaching Resources

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

1. Course Name:

Anesthetic equipment

2. Course Code:

ANS412

3. Semester / Year:

1st +2nd / Fourth year

4. Description Preparation Date:

1/3/2024

5. Available Attendance Forms:

Weekly

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

8 units/ 6 hours weekly

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

Name: Amjed Qasim Mohammed

Email: alatwanyamjad@gmail.com

8. Course Objectives

General goal: To identify all medical devices used and advanced in anesthesia

Own goal:

At the end of the academic year, the student will be able to:

- Use of all advanced equipment used in anesthesia.
- Maintenance and maintenance of all anesthesia equipment.
- Identify all parts of the anesthesia machines used and their techniques

9. Teaching and Learning Strategies

The teaching strategy in this subject, as it is a basic subject in the anesthesia department, is to explain the lecture in detail to the students and discuss among ourselves the nature of the subject and the most important things that the scientific topics have focused on, after that listening to the students' various

questions and inquiries and answering them completely.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6 hrs.	Understanding and assimilation	Physiological monitoring: gases, inspired O ₂ concentration, CO ₂ and volatile anaesthetic agent	Brainstorming strategy	Oral and written Examination
2	6 hrs.	Understanding and assimilation	Physiological monitoring: gases, inspired O ₂ concentration, CO ₂ and volatile anaesthetic agent	Teamwork strategy.	Oral and written Examination
3	6 hrs.	Understanding and assimilation	Measurement of respiratory volume, measurement of gases in blood	Project strategy	Oral and written Examination
4	6 hrs.	Understanding and assimilation	Measurement of respiratory volume, measurement of gases in Blood	Discussion strategy	Oral and written Examination
5	6 hrs.	Understanding and assimilation	Automatic record keeping, advantage and equipments for automatic record	Brainstorming strategy	Oral and written Examination
6	6 hrs.	Understanding and assimilation	Automatic record keeping, advantage and equipments for automatic record	Teamwork strategy.	Oral and written Examination
7	6 hrs.	Understanding and assimilation	Atmospheric pollution, measurement and control of pollution , scavenging system	Project strategy	Oral and written Examination
8	6 hrs.	Understanding and assimilation	Atmospheric pollution, measurement and control of pollution , scavenging system	Discussion strategy	Oral and written Examination
9	6 hrs.	Understanding and assimilation	Medical suction apparatus, component, choice, standard and testing	Brainstorming strategy	Oral and written Examination
10	6 hrs.	Understanding and assimilation	Medical suction apparatus, component, choice, standard and	Teamwork strategy.	Oral and written Examination

			Testing		
11	6 hrs.	Understanding and assimilation	Cleaning and sterilization: decontamination, disinfection and sterilization	Project strategy	Oral and written Examination
12	6 hrs.	Understanding and assimilation	Cleaning and sterilization: decontamination, disinfection and sterilization	Discussion strategy	Oral and written Examination
13	6 hrs.	Understanding and assimilation	Check list and treatment of anaesthetic machine	Brainstorming strategy	Oral and written Examination
14	6 hrs.	Understanding and assimilation	Check list and treatment of anaesthetic machine	Teamwork strategy.	Oral and written Examination
15	6 hrs.	Understanding and assimilation	Electrical hazard and their prevention, and accident associated with main electrical supply	Project strategy	Oral and written Examination
16	6 hrs.	Understanding and assimilation	Electrical hazard and their prevention, and accident associated with main electrical supply	Discussion strategy	Oral and written Examination
17	6 hrs.	Understanding and assimilation	Surgical diathermy, accident due to use of diathermy,	Brainstorming strategy	Oral and written Examination
18	6 hrs.	Understanding and assimilation	Surgical diathermy, accident due to use of diathermy,	Teamwork strategy.	Oral and written Examination
19	6 hrs.	Understanding and assimilation	Defibrillator and pacemaker	Project strategy	Oral and written Examination
20	6 hrs.	Understanding and assimilation	Defibrillator and pacemaker	Discussion strategy	Oral and written Examination
21	6 hrs.	Understanding and assimilation	Laser: principle and clinical application of laser, and safety spectrum	Brainstorming strategy	Oral and written Examination
22	6 hrs.	Understanding and assimilation	Laser: principle and clinical application of laser, and safety spectrum	Teamwork strategy.	Oral and written Examination

23	6 hrs.	Understanding and assimilation	Equipment for MRI anesthesia, and miscellaneous equipment in anesthesia(urine output equipment, peripheral nerve stimulator	Project strategy	Oral and written Examination
24	6 hrs.	Understanding and assimilation	Equipment for MRI anesthesia, and miscellaneous equipment in anesthesia(urine output equipment, peripheral nerve stimulator	Discussion strategy	Oral and written Examination
25	6 hrs.	Understanding and assimilation	Electronics in anaesthetic machine, ergonomics and critical incident, electronic control of breathing system	Brainstorming strategy	Oral and written Examination
26	6 hrs.	Understanding and assimilation	Electronics in anaesthetic machine, ergonomics and critical incident, electronic control of breathing system	Teamwork strategy.	Oral and written Examination
27	6 hrs.	Understanding and assimilation	Risk management :principles of risk management, risk reduction related to equipment	Project strategy	Oral and written Examination
28	6 hrs.	Understanding and assimilation	Risk management :principles of risk management, risk reduction related to equipment	Discussion strategy	Oral and written Examination
29	6 hrs.	Understanding and assimilation	Maintence of equipments	Brainstorming strategy	Oral and written Examination
30	6 hrs.	Understanding and assimilation	Maintence of equipments	Teamwork strategy.	Oral and written Examination

11. Course Evaluation

Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
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10	5	5	20	60	100
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12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Fundamental of anaesthesia, fourth edition, Ted Lin, Tim Smith, and Colin Pinnock
Main references (sources)	
Recommended books and references (scientific journals, reports...)	Clinical anesthesiology, fifth edition , Morgan & Mikhail's, 2013
Electronic References, Websites	Browse the Google network using the desired subject key.

313. Course Name:

Intensive Care Technology

314. Course Code:

ANS413

315. Semester / Year:

1st and 2nd Semester / 4th stage

316. Description Preparation Date:

26/2/2024

317. Available Attendance Forms:

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

6 hours weekly : 2 theory + 4 clinical

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

Name: Mohammed Abbas Kadhim

Email: mohammedabbas66@yahoo.com

320. Course Objectives

7. Define Intensive Care equipment
8. Identify how to operate and handle the ICU devices
9. Teach students how to deal with the critical patients

321. Teaching and Learning Strategies

Using update strategies for teaching and learning such as discussion; Presentation; seminar, Case study

322. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6	Understanding and assimilation	Recognition and management of critically ill patient.	Data show and discussion	Quiz and weekly exam.
2	6	Understanding and assimilation	Defibrillators	Data show and discussion	Quiz and weekly exam.
3	6	Understanding and assimilation	Defibrillators	Data show and discussion	Quiz and weekly exam.
4	6	Understanding and assimilation	Defibrillators	Data show and discussion	Quiz and weekly exam.
5	6	Understanding and assimilation	Defibrillators	Data show and discussion	Quiz and weekly exam.
6	6	Understanding and assimilation	Q2 regulator	Data show and discussion	Quiz and weekly exam.
7	6	Understanding and assimilation	Aims and classification of patient monitoring	Data show and discussion	Quiz and weekly exam.
8	6	Understanding and assimilation	E.C.G monitors attached to patient	Data show and discussion	Quiz and weekly exam.
9	6	Understanding and assimilation	E.C.G monitors attached to patient	Data show and discussion	Quiz and weekly exam.
10	6	Understanding and assimilation	E.C.G monitors attached to	Data show and	Quiz and weekly exam.

			patient	discussion	
11	6	Understanding and assimilation	E.C.G monitors attached to patient	Data show and discussion	Quiz and weekly exam.
12	6	Understanding and assimilation	E.C.G monitors attached to patient	Data show and discussion	Quiz and weekly exam.
13	6	Understanding and assimilation	Monitors in central monitoring station	Data show and discussion	Quiz and weekly exam.
14	6	Understanding and assimilation	Monitors in central monitoring station	Data show and discussion	Quiz and weekly exam.
15	6	Understanding and assimilation	Monitors in central monitoring station	Data show and discussion	Quiz and weekly exam.
16	6	Understanding and assimilation	Monitors in central monitoring station	Data show and discussion	Quiz and weekly exam.
17	6	Understanding and assimilation	Monitors in central monitoring station	Data show and discussion	Quiz and weekly exam.
18	6	Understanding and assimilation	Monitors in central monitoring station	Data show and discussion	Quiz and weekly exam.
19	6	Understanding and assimilation	Alarm system & devices	Data show and discussion	Quiz and weekly exam.
20	6	Understanding and assimilation	Alarm system & devices	Data show and discussion	Quiz and weekly exam.
21	6	Understanding and assimilation	Memory devices	Data show and discussion	Quiz and weekly exam.
22	6	Understanding and assimilation	Memory devices	Data show and discussion	Quiz and weekly exam.
23	6	Understanding and assimilation	Memory devices	Data show and discussion	Quiz and weekly exam.
24	6	Understanding and assimilation	Monitoring and records of	Data show and	Quiz and weekly exam.

			critically ill patient.	discussion	
25	6	Understanding and assimilation	Recording devices	Data show and discussion	Quiz and weekly exam.
26	6	Understanding and assimilation	Recording devices	Data show and discussion	Quiz and weekly exam.
27	6	Understanding and assimilation	Recording devices	Data show and discussion	Quiz and weekly exam.
28	6	Understanding and assimilation	Recording devices	Data show and discussion	Quiz and weekly exam.
29	6	Understanding and assimilation	Recording devices	Data show and discussion	Quiz and weekly exam.
30	6	Understanding and assimilation	Recording devices	Data show and discussion	Quiz and weekly exam.

323. 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.

Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
10	5	5	20	60	100

324. Learning and Teaching Resources

Required textbooks (curricular books, if any)	New technologies in anesthesia and intensive care
Main references (sources)	New technologies in anesthesia and intensive care
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	Intensive Care Res. 2023

325. Course Name:					
Medicine & surgery					
326. Course Code:					
ANS414					
327. Semester / Year:					
first and second semester of the Fourth stage					
328. Description Preparation Date:					
18/2/2024					
329. Available Attendance Forms:					
Weekly / theoretical + practical					
330. Number of Credit Hours (Total) / Number of Units (Total)					
300 hours/6 credits					
331. Course administrator's name (mention all, if more than one name)					
Mohammed lilo saadon			Email: mo.saddon27@gmail.com		
332. Course Objectives					
Introducing the student to the various organs of the body after injury in terms of anatomy, and its complications. As well as teaching the student the symptoms and signs of these conditions and methods dealing with it.					
333. Teaching and Learning Strategies					
Strategy		<ul style="list-style-type: none"> • Lectures (theoretical + practice) • Reports • quizzes 			
334. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	Five hours	Understanding and assimilation	Shock (types, patho physiology, management)	Project strategy	Oral and written Examination
Second	Five hours	Understanding and assimilation	Burn, plastic surgery	Discussion strategy	Oral and written Examination
Third	Five hours	Understanding and assimilation	Traumatology	Teamwork strategy	Oral and written Examination
Fourth	Five hours	Understanding and assimilation	Traumatology	Project strategy	Oral and written Examination
Fifth	Five hours	Understanding and assimilation	Warfare injuries	Discussion strategy	Oral and written Examination
Sixth	Five hours	Understanding and assimilation	Head injuries, SOL, mangement of unconscious	Teamwork strategy	Oral and written Examination

			patient		
Seventh	Five hours	Understanding and assimilation	Spinal injuries, peripheral nerve injuries	Project strategy	Oral and written Examination
Eighth	Five hours	Understanding and assimilation	Tracheostomy, otolaryngology	Discussion strategy	Oral and written Examination
Ninth	Five hours	Understanding and assimilation	Ophthalmology	Teamwork strategy	Oral and written Examination
Tenth	Five hours	Understanding and assimilation	Orthopaedic Surgery: Fractures & Dislocations	Project strategy	Oral and written Examination
Eleventh	Five hours	Understanding and assimilation	Osteomyelitis: Acute & Chronic, Tumours of musculoskeletal system	Discussion strategy	Oral and written Examination
Twelfth	Five hours	Understanding and assimilation	Wrist, hand, foot	Teamwork strategy	Oral and written Examination
Thirteenth	Five hours	Understanding and assimilation	Amputations	Project strategy	Oral and written Examination
Fourteenth	Five hours	Understanding and assimilation	Endocrinology: Pituitary gland	Discussion strategy	Oral and written Examination
Fifteenth	Five hours	Understanding and assimilation	Thyroid gland	Teamwork strategy	Oral and written Examination
Sixteenth	Five hours	Understanding and assimilation	Parathyroid gland & calcium balance.	Project strategy	Oral and written Examination
Seventeenth	Five hours	Understanding and assimilation	Adrenal gland	Discussion strategy	Oral and written Examination
Eighteenth	Five hours	Understanding and assimilation	D.M : complications, management, preparation for operation .	Teamwork strategy	Oral and written Examination
Nineteenth	Five hours	Understanding and assimilation	Preparation of patient with obstructive jaundice	Project strategy	Oral and written Examination
Twenty	Five hours	Understanding and assimilation	Preparation of patient with portal hypertension due to cirrhosis	Discussion strategy	Oral and written Examination
Twenty-one	Five hours	Understanding and assimilation	Management of haematemesis, melaena	Teamwork strategy	Oral and written Examination
Twenty-two	Five hours	Understanding and assimilation	Management of haemopneumothorax, flail chest	Project strategy	Oral and written Examination
Twenty-third	Five hours	Understanding and assimilation	Management of respiratory failure, ARDS	Discussion strategy	Oral and written Examination
Twenty-four	Five hours	Understanding and assimilation	• Management of coagulopathy, DIC	Teamwork strategy	Oral and written Examination
Twenty-fifth	Five hours	Understanding and assimilation	Management of septicaemia, MOFS	Project strategy	Oral and written Examination
Twenty-	Five	Understanding and	Surgical Precautions in	Discussion	Oral and written

sixth	hours	assimilation	theater & ICU	strategy	Examination
Twenty-seven	Five hours	Understanding and assimilation	Transplantation	Teamwork strategy	Oral and written Examination
Twenty-eighth	Five hours	Understanding and assimilation	New Techniques in Surgery	Project strategy	Oral and written Examination
twenty-ninth	Five hours	Understanding and assimilation	Emergencies in Female's genital tract: Injuries, Ectopic Prenancy	Discussion strategy	Oral and written Examination
Thirty	Five hours	Understanding and assimilation	Abortion, Caesarean section , hysterectomy	Teamwork strategy	Oral and written Examination

335. 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

Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
10	5	5	20	60	100

336. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	<i>"Principles and Practice of Surgery" 7th Edition</i> <i>Davidson Principles & Practice of Medicine", 23rd edition</i>
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

337. Course Name:

Nursing

338. Course Code:

ANS415

339. Semester / Year:

1st and 2nd Semester / 4th stage

340. Description Preparation Date:

27/2/2024

341. Available Attendance Forms:

Weekly Attendance

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

5 hours weekly

- Theory 1 hour
- clinical 4 hours

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

Name: Dr. Mezher Khlaif Hassooni

Email: mezherkhlaifhassooni@uomanara.edu.iq

344. Course Objectives

• **General goals //**

At the end of the course, the student will be able to Identify the nursing concepts

.....

Specific (Behavioral) goals //

- 4- At the end of the course, the student will be able to identify nursing process
- 2- At the end of the course, the student will be able to make nursing care plan for clients' needs.
- 3- At the end of the course, the student will be able to determine wisely on how to manage and intervention the patient when an emergency occurs.

345. Teaching and Learning Strategies

- **Brainstorming strategy**
- **Modeling learning strategy**
- **Group work or cooperative learning strategy**
- **Discussion strategy**
- **Listening to the students' various questions and answering them completely**

346. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	5	Understanding and assimilation	Introduction about nursing	Brainstorming strategy	Oral and written Examination
2	5	Understanding and assimilation	Concept of nursing process & stages	Teamwork strategy.	Oral and written Examination
3	5	Understanding and assimilation	Preoperative nursing management & general physical assessment	Project strategy	Oral and written Examination
4	5	Understanding and assimilation	Preoperative nursing management & general physical assessment	Discussion strategy	Oral and written Examination
5	5	Understanding and assimilation	Pre-anaesthetic , intra anaesthetic and post anaesthetic management of the patient.	Brainstorming strategy	Oral and written Examination
6	5	Understanding and assimilation	Pre-anaesthetic , intra anaesthetic and post anaesthetic management of the patient.	Teamwork strategy.	Oral and written Examination
7	5	Understanding and assimilation	Intraoperative nursing management	Project strategy	Oral and written Examination
8	5	Understanding and assimilation	Intraoperative nursing management	Discussion strategy	Oral and written Examination
9	5	Understanding and	Intraoperative nursing management	Brainstorming	Oral and written

		assimilation		strategy	Examination
10	5	Understanding and assimilation	Nursing care in the recovery room	Teamwork strategy.	Oral and written Examination
11	5	Understanding and assimilation	Nursing care in the recovery room	Project strategy	Oral and written Examination
12	5	Understanding and assimilation	Nursing care in the recovery room	Discussion strategy	Oral and written Examination
13	5	Understanding and assimilation	Post-operative nursing care	Brainstorming strategy	Oral and written Examination
14	5	Understanding and assimilation	Post-operative nursing care	Teamwork strategy.	Oral and written Examination
15	5	Understanding and assimilation	Management of the patient in the cardiac care unit	Project strategy	Oral and written Examination
16	5	Understanding and assimilation	Management of the patient in the cardiac care unit	Discussion strategy	Oral and written Examination
17	5	Understanding and assimilation	Management of the patient in the cardiac care unit	Brainstorming strategy	Oral and written Examination
18	5	Understanding and assimilation	Management of the cardiovascular surgery patient	Teamwork strategy.	Oral and written Examination
19	5	Understanding and	Management of the	Project	Oral and

		assimilation	cardiovascular surgery patient	strategy	written Examination
20	5	Understanding and assimilation	Nursing management of intravenous therapy	Discussion strategy	Oral and written Examination
21	5	Understanding and assimilation	Nursing management of intravenous therapy	Brainstorming strategy	Oral and written Examination
22	5	Understanding and assimilation	Nursing management of intravenous therapy	Teamwork strategy.	Oral and written Examination
23	5	Understanding and assimilation	Nursing management of intravenous therapy	Project strategy	Oral and written Examination
24	5	Understanding and assimilation	Management of patient with musculo-skeletal dis-function & trauma , fracture	Discussion strategy	Oral and written Examination
25	5	Understanding and assimilation	Management of patient with musculo-skeletal dis-function & trauma , fracture	Brainstorming strategy	Oral and written Examination
26	5	Understanding and assimilation	Critical care of some cases	Teamwork strategy.	Oral and written Examination
27	5	Understanding and assimilation	Critical care of some cases	Project strategy	Oral and written Examination
28	5	Understanding and assimilation	First Aid	Discussion strategy	Oral and written Examination

29	5	Understanding and assimilation	First Aid	Brainstorming strategy	Oral and written Examination
30	5	Understanding and assimilation	First Aid	Teamwork strategy.	Oral and written Examination

347. 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.

Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
10	5	5	20	60	100

348. Learning and Teaching Resources

Required textbooks (curricular books, if any)	OXFORD MEDICAL HANDBOOKS "Oxford Handbook of Critical Care Nursing"
Main references (sources)	Brunner & Suddarth's Textbook of Medical-surgical Nursing
Recommended books and references (scientific journals, reports...)	Brunner & Suddarth's Textbook of Medical-surgical Nursing
Electronic References, Websites	Copyright © 2018 by Wolters Kluwer Health / Lippincott Williams & Wilkins.

1. Course Name:

English

2. Course Code:

ANS416

3. Semester / Year:

The first and second course/ fourth year

4. Description Preparation Date:

16/2/2024

5. Available Attendance Forms:

Weekly

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

Four hours each week

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

Name: Asst. Fatima Raheem

Email: fatimaraheemjabbarabbas@uomanara.edu.com

8. Course Objectives

- The student's ability to speak English and develop his use of diverse terms, as well as helping him create a strong background in the use of the English language in a way that suits the aspects of his study.

9. Teaching and Learning Strategies

1- Lectures using PowerPoint and the data show

2- A detailed explanation of the material within the lecture orally

3- Using weekly exams as well as quizzes inside the lecture

4- Request reports on some terms in English that have a direct connection to their academic studies

5- The need for students to attend the lecture to understand the subject and the lecture itself, so there are degrees of attendance within the degrees of endeavor

6- Developing students' learning on various skills, including speaking and listening, as well as using the language in their daily lives

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1 - 3		Tense system	English	Power point lecture	Quiz

	2			and data show	
4-6	2	Auxiliary verbs	English	Power point lecture and data show	Oral questions and answers
7-9	2	Model auxiliary verbs and full verbs	English	Power point lecture and data show	Quiz
10- 12	2	English tense usage	English	Power point lecture and data show	Quiz
13 - 14	2	Reading and speaking	English	Power point lecture and data show	Oral conversations
15 -16	2	Introduction to the present perfect, simple and continuous	English	Power point lecture and data show	Quiz
17 - 19	2	Narrative tenses	English	Power point lecture and data show	Oral questions
20 -22	2	Questions forms	English	Power point lecture and data show	Quiz
23- 25	2	Introduction to the future forms	English	Power point lecture and data show	Questions and answers
26	2	Present simple for timetables	English	Power point lecture and data show	Quiz
27-29	2	Reading and speaking	English	Power point lecture and data show	Conversations
30	2	Reading and speaking	English	Power point lecture and data show	Conversations

11. Course Evaluation

Daily Exam	Oral Exam	Report	Monthly Exam	Final Exam	Total
10	5	5	20	60	100

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Head way book for upper intermediate students
Main references (sources)	The head way Plus for upper intermediate students

Recommended books and references (scientific journals, reports...)	None
Electronic References, Websites	None