

**Republic of Iraq
Ministry of Higher
Education
& Scientific Research
Al-Ayen Iraqi University
College of Health and Medical
Technologies**



**Al-Ayen Iraqi University
College of Health and Medical
Technologies
department of Anesthesia
Technologies
Quality Assurance Unit
Course Description
Anesthesia 1**

1. Course Name:	
Anesthesia 1	
2. Course Code:	
MTAN3204	
3. Semester / Year: 1st semester	
1st Semester	
4. Description Preparation Date:	
16/01/2025	
5. Available Attendance Forms:	
Delivering theoretical lectures in person with laboratory training	
6. Number of Credit Hours (Total) / Number of Units (Total)	
120 hours (45 hrs. theory + 75 hrs. practical)	
7. Course administrator's name (mention all, if more than one name)	
Name: Lecturer Dr. Majid Fakhir Mutar Alhamaidah	
Email: majid.mutar@alayen.edu.iq	
8. Course Objectives	
General Objective: To familiarize the student with anesthetic agents and equipment used, as well as to prepare the patient before the procedure, monitor them during the procedure, and provide care during the recovery phase. Specific Objective: By the end of the year, the student should be capable of the following: 1. Identifying the different types of anesthetic agents. 2. Administering the required anesthetic doses. 3. Providing care to the patient based on the nature of the procedure. 4. Monitoring the patient during the procedure and during recovery.	
9. Teaching and Learning Strategies	
Strategy	1. Brainstorming strategy and learning through modeling. 2. Teamwork strategy or collaborative learning or discussion. 3. Project-based strategy for problem-solving or problem-based learning. 4. Storytelling strategy and blending different strategies.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	8	A 1 /A2/ A3 C1/ C2	Assessment of patients before anesthesia and premedication	Lecture + Discussion / Laboratory.	Quiz + Direct Question Attendance.
3+ 2	16	A 1 /A2/ A3 C1/ C2	Preoperative Preparation for elective surgery	Lecture Discussion Laboratory.	Quiz + Direct Question Attendance.
4	8	A 1 /A2/ A3 C1/ C2	Maternal anatomy and physiological changes	Lecture Discussion Laboratory.	Quiz + Direct Question Attendance.
5	8	A 1 /A2/ A3 C1/ C2	Anesthesia for obstetrics & gynecology	Lecture Discussion Laboratory.	Quiz + Direct Question Attendance.
6	8	A 1 /A2/ A3 C1/ C2	Pediatric anatomy and physiological changes	Lecture Discussion Laboratory.	Quiz + Direct Question Attendance.
7	8	A 1 /A2/ A3 C1/ C2	Anesthesia for pediatric patients.	Lecture Discussion Laboratory.	Quiz + Direct Question Attendance.
8	8	A 1 /A2/ A3 C1/ C2	Geriatric anatomy and physiological changes	Lecture Discussion Laboratory.	Quiz + Direct Question Attendance.
10+9	16	A 1 /A2/ A3 C1/ C2	Anesthesia for geriatric patients.	Lecture Discussion Laboratory.	Quiz + Direct Question Attendance.
11	8	A 1 /A2/ A3 C1/ C2	Anesthesia for orthopedic patients	Lecture Discussion Laboratory.	Quiz + Direct Question Attendance.
13+12	16	A 1 /A2/ A3 C1/ C2	Anesthesia for thoracic surgery.	Lecture Discussion Laboratory.	Quiz + Direct Question Attendance.
14	8	A 1 /A2/ A3 C1/ C2	Anesthesia for Neurosurgery	Lecture Discussion Laboratory.	Quiz + Direct Question Attendance.
15	8	A 1 /A2/ A3 C1/ C2	Anesthesia for ENT	Lecture Discussion Laboratory.	Quiz + Direct Question Attendance.

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	Monthly Exam	Practical	Final Exam	Total
5	5	5	10	15	60	100

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1.Clinical anesthesiology ----- Morgan and Mikhail----6th edition 2. Anesthesia for medical students----Oste and Bryce--Smith
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	3. Clinical anesthesiology-----4th edition--- Appleton and Lange
Main references (sources)	British Journal of Anesthesiology
Recommended books and references (scientific journals, reports...)	American Society of Anesthesiologists
Electronic References, Websites	Pub med, Google scholar, Resea Gate

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College of Health and Medical
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**Al-Ayen Iraqi University
College of Health and Medical
Technologies
Department of Anesthesia
Technologies
Quality Assurance Unit
Course Description**

1. Course Name: Anesthesia Equipment Techniques	
Second course	
2. Course Code:	
MTAN3203	
3. Semester / Year:	
2024-2025	
4. Description Preparation Date:	
20\1\2025	
5. Available Attendance Forms:	
Attendance lectures	
6. Number of Credit Hours (Total) / Number of Units (Total)	
90 hours / 8 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Mushtaq twayess abdulhussein Email: mushtaqtwayess2@gmail.com	
8. Course Objectives	
Course Objectives: Identify all anesthesia machines and intensive care unit And the unity of awakening. Knowledge of operating and working on device	1. Use all different selection devices. 2. Maintenance and maintenance of cooling devices. 3. Introduction to all parts of the device Medical techniques used in anesthesia.
9. Teaching and Learning Strategies	
Strategy	Active learning: Group discussions: Encouraging students to participate interactive discussions on academic topics, which enhance critical thinking and expression of opinions Project-based education: Group projects: Assigning students to projects that require research and cooperation, such as preparing reports giving presentations. Individual projects: Encouraging students to conduct independent research on topics of interest to them, which

enhances writing skills about their specializations

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2 hours theoretical & 4 hours practical	A 1 /A2/ A3 C1/ C2	Modification of breathing system	Theoretical and practical lectures	Exam in the last 10 minutes
2	2 hours theoretical & 4 hours practical	A 1 /A2/ A3 C1/ C2	(lack, bain and Humphrey),	Theoretical and practical lectures	Explanation of reports by students
3	2 hours theoretical & 4 hours practical	A 1 /A2/ A3 C1/ C2	circle breathing and soda lime	Theoretical and practical lectures	Brainstorming questions at the end of the lecture
4&5	4 hours theoretical & 8 hours practical	A 1 /A2/ A3 C1/ C2	procedure for checking breathing system	Theoretical and practical lectures	Distributing students into groups and applying the application to devices
6	2 hours theoretical & 4 hours practical	A 1 /A2/ A3 C1/ C2	Anesthesia ventilator, principle of working and type of ventilator,	Theoretical and practical lectures	viva voce
7	2 hours theoretical & 4 hours practical	A 1 /A2/ A3 C1/ C2	Types of ventilator	Theoretical and practical lectures	Working on operating the

	hours practical			practical lectures	devices
8	2 hours theoretical&4 hours practical	A 1 /A2/ A3 C1/ C2	manley MP3	Theoretical and practical lectures	Exam in the last 10 minutes
9&10	4 hours theoretical&8 hours practical	A 1 /A2/ A3 C1/ C2	penlon ventilator and high-frequency jet ventilator	Theoretical and practical lectures	We ask oral questions
11	2 hours theoretical&4 hours practical	A 1 /A2/ A3 C1/ C2	Equipment for local analgesia: spinal, epidural, and major nerve block	Theoretical and practical lectures	Dialogue questions during the lecture Dialogue questions during the lecture
12&13	4 hours theoretical&8 hours practical	A 1 /A2/ A3 C1/ C2	peripheral nerve stimulator and nerve block stimulator	Theoretical and practical lectures	direct questions
14	2 hours theoretical&4 hours practical	A 1 /A2/ A3 C1/ C2	Defibrillator and pacemaker	Theoretical and practical lectures	Oral questions
15	2 hours theoretical&4 hours practical	A 1 /A2/ A3 C1/ C2	Blood warmer	Theoretical and practical lectures	Asking students some questions about the lectures

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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

Mid 40 (25 theoretical & 10 practical & 5 attendance and daily exams)

Final 60 (35 theoretical & 25 practical)

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Anesthesia equipment, principle and application Jan Ehrenwerth, MD, 2nd edition 2. The Manual Textbook of Anesthetic Equipment, Warren Sandberg, MD, PhD 2nd edition
Main references (sources)	
Recommended books and references (scientific journals, reports...)	Anesthesia and analgesia
Electronic References, Websites	Google scholar , pumped a web of science

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**Al-Ayen Iraqi University
College of Health and Medical
Technologies
Department of Anesthesia
Technologies
Quality Assurance Unit
Course Description**

1. Course: Computer Applications	
2. Course Code: MTAN3205	
3. Semester / Year First Semester / 2024-2025 / First Stage	
4. Date of preparation of this description 24/1/2025	
5. Available attendance forms Physical presence within the university	
6. Number of Credit Hours (Total) / Number of Units (Total)	
4 Hours 1 (Theoretical) 2 (Practical)	
7. Course administrator's name (if more than one name)	
Name: Eng. Mustafa Abdel Ghani Nasser Email: mustafmustaf952@gmail.com	
8. Course Objectives	
Other skills related to employability and personal development. Encourage the student to write simple research towards previous lectures to create a state of balance between methodological information and source information Urging the student to make practical projects on the computer and holding seminars among students about the methodology of the subject Encourage the student to evaluate the answer of fellow students from other students to develop Self-development	Course Objectives: The teaching of the course aims to provide students with knowledge about Basic computer in general
9. Teaching and Learning Strategies	
	Strategy

10. Course Structure					
Evaluation method	Learning method	Unit or subject name	Required Learning Outcomes	Hours	Week

Evaluation method	Method of education	Unit / Subject Name	Required Learning Outcomes	Hours	The week
Testing & Apply	Interactive	Excel	C1/C2/C3/C4	3	.1
Testing & Apply	Interactive	Handling cells	C1/C2/C3/C4	3	.2
& Testing Application	Interactive	Working with files	C1/C2/C3/C4	3	.3
& Testing Application	Interactive	Using Functions	C1/C2/C3/C4	3	.4
& Testing Application	Interactive	Format cells	C1/C2/C3/C4	3	.5
& Testing Application	Interactive	Format tables	C1/C2/C3/C4	3	.6
& Testing Application	Interactive	Format tables	C1/C2/C3/C4	3	.7
& Testing Application	Interactive	Handling cells	C1/C2/C3/C4	3	.8
& Testing Application	Interactive	Statistical Program	C1/C2/C3/C4	3	.9
& Testing	Interactive	Statistical Program	C1/C2/C3/C4	3	.10

Application					
& Testing Application	Interact ive	Working with files and data	C1/C2/C3/C4	3	.11
& Testing Application	Interact ive	Application of analysis Descriptive	C1/C2/C3/C4	3	.12
& Testing Application	Interact ive	Application of averages and comparisons	C1/C2/C3/C4	3	.13
& Testing Application	Interact ive	Application of statistical packages	C1/C2/C3/C4	3	.14
Testing & Application	Interact ive	Working with charts	C1/C2/C3/C4	3	.15

Computer Fundamentals and Office Applications - ٢	1 Required textbooks
And the Ministry of Higher Education and Scientific Research - Research and Development Department	
Basics of Computer and Internet "Mustafa Series for Science- Dr. for -Dr. Ziad Muhammad Abboud, Dar Al ٢ 0202 Office Publishing and Distribution, Baghdad 0202	2 Main references (sources)

Using two researches from my research 1. Encryption a text using affine cipher and hiding it in the colored image by using the Quantization stage, <u>Nada Abdul Aziz Mustafa ,Iraq, Baghdad, University of Baghdad, College of Languages</u> 2. The Effect of the Smoothing Filter on an Image Encrypted By the Blowfish Algorithm Then Hiding It in A BMP Image <u>Nada Abdul Aziz Mustafa, Iraq, Baghdad, University of Baghdad, College of Languages</u> 3.Computer literacy BASICS 2012, LeBlanc, Brandon." A closer look at the, windows 7. 2009 4.Computing Fundamentals, Innovative training works USA, Inc, 2006	Recommended books and references ,) reports , Scientific fields(
. Word 2010 Digital Classroom Book https://www.agitraining.com/books/microsoft-office-books/word-2010-digital-classroom-book	WebsitesReferences, Web

**Republic of Iraq
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College of Health and Medical
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**Al-Ayen Iraqi University
College of Health and Medical
Technologies
Department of Anesthesia
Technologies
Quality Assurance Unit
Course Description**

1. Course Name:	
Basic of intensive care (1)	
2. Course Code:	
MTAN3202	
3. Semester / Year:	
Semester (1) / 3 rd level	
4. Description Preparation Date:	
9/1/2025	
5. Available Attendance Forms:	
Full-time and official attendance hours	
6. Number of Credit Hours (Total) / Number of Units (Total)	
Lecture: 2 , Practical: 2 , Total: 4 (2+2)	
7. Course administrator's name (mention all, if more than one name)	
Name: Lecture Hussein Ali Hussein Email: hussein.hussein@alayen.edu.iq	
8. Course Objectives	
General objective: The teaching of the course aims to provide students with knowledge about the basics of dealing with patients and the use and maintenance of intensive care equipment in intensive care units.	Specific objectives: - At the end of the year, the student will be able to: 1- Form a general idea about intensive care, its types and design. 2- Deal with, use and operate intensive care devices. 3- Be able to provide health care and observe the principles of occupational safety for himself and the patient in intensive care. 4- Maintain and follow up on the devices for patient care.
9. Teaching and Learning Strategies	
Strategy	Blended learning - Lectures (Interactive) - Online Lectures (Interactive) - Role play - Team-based learning (group discussion, presentation) - Discussion - Problem solving
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	A 1/A2/A4 B1/B2/B3/B4 C1/C2/C3/C4	ICU organization and design	Lectures (Interactive) Online Lectures (Interactive) Role play Team-based learning (presentation) Discussion Problem solving	Midterm exams Final exams evaluations
2	2	A 1/A2/A4 B1/B2/B3/B4 C1/C2/C3/C4	Equipment in ICU	Lectures (Interactive) OnlineLectures (Interact Role play Team-based learning (presentation) Discussion Problem solving	Midterm exams Final exams evaluations
3	2	A 1/A2/A4 B1/B2/B3/B4 C1/C2/C3/C4	Indication for ICU Admission and mechanical ventilation	Lectures (Interactive) OnlineLectures (Interact Role play Team-based learning (presentation) Discussion Problem solving	Midterm exams Final exams evaluations
4	2	A 1/A2/A4 B1/B2/B3/B4 C1/C2/C3/C4	clinical monitoring in ICU (respiratory monitoring	Lectures (Interactive) OnlineLectures (Interact Role play Team-based learning (presentation) Discussion Problem solving	Midterm exams Final exams evaluations
5	2	A 1/A2/A4 B1/B2/B3/B4	clinical monitoring in ICU (cardiovascular	Lectures (Interactive) OnlineLectures (Interact	Midterm exams Final exams

		C1/C2/C3/C4	and hemodynamic monitoring)	Role play Team-based learning presentation) Discussion Problem solving	evaluations
6	2	A 1/A2/A4 B1/B2/B3/B4 C1/C2/C3/C4	Hypoxia and oxygen therapy	Lectures (Interactive) OnlineLectures (Interact Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations
7	2	A 1/A2/A4 B1/B2/B3/B4 C1/C2/C3/C4	thromboembolism prophylaxis	Lectures (Interactive) OnlineLectures (Interact Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations
8	2	A 1/A2/A4 B1/B2/B3/B4 C1/C2/C3/C4	Noninvasive ventilation indication, modes	Lectures (Interactive) OnlineLectures (Interact Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations
9	2	A 1/A2/A4 B1/B2/B3/B4 C1/C2/C3/C4	Invasive mechanical ventilation	Lectures (Interactive) OnlineLectures (Interact Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations

10	2	A 1/A2/A4 B1/B2/B3/B4 C1/C2/C3/C4	Common modes of mechanical ventilation and its waves)	Lectures (Interactive) OnlineLectures (Interact Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations
11	2	A 1/A2/A4 B1/B2/B3/B4 C1/C2/C3/C4	sedation and analgesia in the ICU	Lectures (Interactive) OnlineLectures (Interact Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations
12	2	A 1/A2/A4 B1/B2/B3/B4 C1/C2/C3/C4	Ventilator-Associated Pneumonia	Lectures (Interactive) OnlineLectures (Interact Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations
13	2	A 1/A2/A4 B1/B2/B3/B4 C1/C2/C3/C4	Pneumothorax and hemothorax	Lectures (Interactive) OnlineLectures (Interact Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations
14	2	A 1/A2/A4 B1/B2/B3/B4 C1/C2/C3/C4	tension pneumothorax, stress ulcer	Lectures (Interactive) OnlineLectures (Interact Role play Team-based learning presentation) Discussion	Midterm exams Final exams evaluations

				Problem solving	
15	2	A 1/A2/A4 B1/B2/B3/B4 C1/C2/C3/C4	Weaning from mechanical ventilation	Lectures (Interactive) Online Lectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations

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)	Non
Main references (sources)	1.Morgan and Mikhail's clinical anesthesiology 6th edition (McGraw 2018) 2.Marino's The ICU Book 4 th edition. 3.Textbook of critical care – Jean-Louis Vincent; Fred Moore (7th edition)
Recommended books and references (scientific journals, reports...)	1.Handbook of ICU Therapy, 3 rd edition.
Electronic References, Websites	University educational platform

**Al-Ayen Iraqi University
College of Health and Medical
Technologies
Department of Anesthesia
Technologies
Quality Assurance Unit
Course Description
surgery (1)**

1. Course Name:	
surgery (1)	
2. Course Code:	
(1)MTAN3206	
3. Semester / Year: Semester	
Semester (1) / second level	
4. Description Preparation Date:	
9/1/2025	
5. Available Attendance Forms:	
Full-time and official attendance hours	
6. Number of Credit Hours (Total) / Number of Units (Total)	
Lecture: 2 , Practical: 2 , Total: 4 (2+2)	
7. Course administrator's name (mention all, if more than one name)	
Name: Ass. Lec. Amjad Abbas Ogaib	
Email: amjad141981@gmail.com	
8. Course Objectives	
General objectives:	
To familiarize the student with the different organs of the body and the impact of injuries and diseases on them from an anatomical and physiological perspective, to familiarize the student with the different organs of the body and the impact of injuries and diseases and the signs of these cases and the basic frameworks and consequences (complications) resulting from them. Also, to teach the student how to deal with them.	
Special objectives:	
To familiarize the student with the cases that require intervention and clarify the nature of this intervention (as they may encounter during the work in operations and intensive care) with a focus on emergency cases. At this stage, the digestive, urinary, respiratory, vascular (cardiac) systems are studied.	
9. Teaching and Learning Strategies	
Strategy	Blended learning - Lectures (Interactive) - Online Lectures (Interactive)

	Role play Team-based learning (group dissuasion, presentation) Discussion Problem solving				
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	A 1 C1/ C3	Trauma to the : K kidn , Ureter , Bladder , Urethra	Lectures (Interacti Online Lectures (Interacti Role play Team-based learning presentation) Discussion Problem solving	Midterm exam Final exams evaluations
2	2	A 1 C1/ C3	Hydronephrosis , Urinary stor UTI	Lectures (Interacti OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exam Final exams evaluations
3	2	A 1 C1/ C3	DVT & pulmonary embolism	Lectures (Interacti OnlineLectures (Interactive)	Midterm exam Final exams evaluations

				Role play Team-based learning presentation) Discussion Problem solving	
4	2	A 1 C1/ C3	Bariatric surgery	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exam Final exams evaluations
5	2	A 1 C1/ C3	Gynecology (hysterectomy caesarean section)	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exam Final exams evaluations
6	2	A 1 C1/ C3	Urogenital Tract in Males : Prostate , Testis , Penis	Lectures (Interactive) OnlineLectures (Interactive) Role play	Midterm exam Final exams evaluations

				Team-based learning presentation) Discussion Problem solving	
7	2	A 1 C1/ C3	Thorax surgery : Respiratory path physiology & General review	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exam Final exams evaluations
8	2	A 1 C1/ C3	Trauma to thorax : Rib Fracture Flail Chest	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exam Final exams evaluations
9	2	A 1 C1/ C3	Pneumothorax , Haemothorax	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based	Midterm exam Final exams evaluations

				learning presentation) Discussion Problem solving	
10	2	A 1 C1/ C3	Pleural Effusion , Empyema	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exam Final exams evaluations
11	2	A 1 C1/ C3	Chest tube : Application Management	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exam Final exams evaluations
12	2	A 1 C1/ C3	Pediatric surgery	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning	Midterm exam Final exams evaluations

				presentation) Discussion Problem solving	
13	2	A 1 C1/ C3	Types of Thoracic operation	Lectures (Interactive) Online Lectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exam Final exams evaluations
14	2	A 1 C1/ C3	Osteomyelitis	Lectures (Interactive) Online Lectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exam Final exams evaluations
15	2	A 1 C1/ C3	Orthopedic surgery, fracture and dislocation	Lectures (Interactive) Online Lectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exam Final exams evaluations

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)	Non
Main references (sources)	Oxford hand book of clinical surgery, sixth edition, bailey and love 28th Edition 2022 Harrisons principle of internal medicine 2th edition 20
Recommended books and references (scientific)	Davidson's Principles and Practice of Medicine

journals, reports...)	
Electronic References, Websites	University educational platform

**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
Al-Ayen Iraqi University**

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: ALAyen Iraqi National University

Faculty/Institute: College of Health and Medical Technologies

Scientific Department: . Dept. of Anesthesia techniques

Academic or Professional Program Name: College of Health and Medical Technologies/Department of Anesthesia Technologies

Final Certificate Name: Bachelor of Anesthesia Techniques

Academic System: annual

Description Preparation Date:

File Completion Date:

Signature:

Head of Department Name:

Date:

Signature:

Scientific Associate Name:

Date:

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

Signature:

Approval of the Dean

1. Program Vision

The Department of Anesthesia will be a distinguished academic and research center at the local and international levels, contributing to the development of the field of anesthesia and providing quality health services.

2. Program Mission

Preparing specialized cadres in the field of anesthesia capable of providing distinguished medical services, and promoting scientific research to develop medical technologies in a way that contributes to serving society and achieving sustainable development.

3. Program Objectives

1. Providing high-quality education in the field of anesthesia through an advanced academic environment.
2. Establishing advanced laboratories that allow practical training according to the latest medical technologies.
3. Encouraging scientific research and creativity in the field of anesthesia and related specialties.
4. Enhancing cooperation with health institutions and research centers locally and internationally.
5. Qualifying graduates capable of meeting the needs of the labor market and contributing to improving health care.
6. Establishing a virtual operating room that simulates what is found in teaching hospitals
7. Utilizing artificial intelligence technologies to develop students' skills

4. Program Accreditation

Under preparation

5. Other external influences

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6. Program Structure

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

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

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours

8. Expected learning outcomes of the program

A.Knowledge

Learning Outcomes	1.Understanding human anatomy, organ functions, and pathophysiology related to anesthesia procedures. 1 2. Knowing the basic principles of the effect of anesthetic and analgesic drugs on different body systems. 2 3. Describe the the types and objectives of anesthesia methods (general, local, and regional) and choosing the appropriate method for each case. 4. Knowing the principles of safety during anesthesia, including the management of complications and understanding international and local protocols in the field of anesthesia.
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B.Skills

Learning Outcomes	1.The ability to assess the health status of patients before surgery, including collecting medical history and conducting necessary examinations. 2.Skills to insert devices such as breathing tubes and intravenous catheters accurately and safely. 3.Monitoring the patient's vital functions during and after the operation, and using modern medical devices. 4. Preparing and injecting anesthetic drugs and controlling appropriate doses according to the case and identifying and managing side effects efficiently.
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C.Ethics	
Learning Outcomes	1.Commitment to the highest standards of quality in providing medical care. 2.Interact with modern developments in the field of anesthesia and healthcare technologies. 3.Act with integrity and honesty in all medical practices. 4.Commitment to updating knowledge and skills through participation in training courses and scientific conferences

9. Teaching and Learning Strategies

Blended learning

- Lectures (Interactive)

Online Lectures (Interactive)

Tutorial

Role play

Computer-based learning (computers e-learning, free downloadable software usage, Webinar)

Team-based learning (group dissuasion, presentation)

Discussion

Case study

Problem solving

10. Evaluation methods

Midterm and final exam
Evaluations

11.Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Assistant Lecturer	Medical surgical	internal medicine				

Qasim Kani Hayif	nursing					
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Professional Development

Mentoring new faculty members

Professional development of faculty members

1. Participation in training courses held within the college.
2. Participation in professional courses held within the college within the prescribed curricula, as well as professional education courses
3. There are specific units within the personal development programme that give students the opportunity and encourage them to engage in professionally relevant qualifications that allow students to reflect on their professional development.

12. Acceptance Criterion

This is done according to the acceptance rate in the medical group (College of Medical and Health Technologies) within the electronic form approved by the Ministry of Higher Education and Scientific Research.

13. The most important sources of information about the program

1. The official website of the college or university: Colleges and universities provide a special section on their official websites that contains:

- Description of the study program.
- Curricula and academic plan.
- Admission and registration requirements.
- Job opportunities after graduation.

Example: Visit the website of the Ministry of Higher Education or the website of the technical university that offers the program.

2. Academic guides

Academic guides published by colleges, such as the student guide, which contain comprehensive information about the program, objectives, and study plans.

Department Professors

Communicating with program professors or teaching staff is a valuable resource for understanding the nature of the study, its requirements, and its future prospects.

4. Program Students and Graduates

Current students or graduates can share their personal experience about the program, its difficulties, and the best ways to succeed in it.

5. Scientific articles and research

View research and articles related to anesthesia techniques published in:

Medical journals.

Academic databases such as PubMed, Elsevier, Springer.

6. Specialized books and references

Scientific books on anesthesia techniques, including topics such as:

Basics of anesthesia.

Use of devices and technology in anesthesia.

Critical case management.

7. Conferences and workshops

Attend medical conferences or workshops that address the latest developments in the field of anesthesia techniques.

14. Program Development Plan

. Curriculum Development

- **Updating Academic Content:**

- Introduce new courses covering advanced anesthesia techniques, such as smart anesthesia and image-guided anesthesia.
- Add specialized courses in emerging fields, such as pediatric and geriatric anesthesia techniques.

- **Aligning with Global Standards:**

- Benchmark the curriculum against similar international programs and ensure compliance with global accreditation standards.

- **Enhancing Practical Training:**

- Increase the number of hours dedicated to hands-on training in hospitals

2. Upgrading Infrastructure

- **Modern Laboratories:**

- Equip simulation labs with advanced anesthesia systems to train students for real-world scenarios.

- **Advanced Equipment:**

- Provide state-of-the-art devices, such as automated anesthesia machines, patient monitoring systems, and mechanical ventilators.

3. Strengthening Practical and Clinical Training

- **Partnerships with Hospitals:**

- Establish agreements with leading hospitals and medical centers to offer students extensive field training opportunities.

- **Advanced Training Programs:**

- Provide specialized training opportunities locally and internationally, such as regional anesthesia and advanced surgical anesthesia.

4. Faculty Development

- **Skill Enhancement for Instructors:**

- Offer training workshops for faculty members on the latest techniques and teaching methodologies.
- Recruit professionals and practitioners in the field of anesthesia to enrich the teaching experience and bring practical expertise.

5. Advancing Scientific Research

- **Encouraging Student Research:**

- Motivate students to conduct research on anesthesia techniques and present their findings at scientific conferences.

6. Developing Students' Professional and Soft Skills

- **Soft Skills Training:**

- Conduct workshops on communication skills for interacting with medical teams and patients.

- **Safety and Quality Principles:**

- Promote a culture of patient safety and risk management during surgeries.

7. Enhancing Employment Opportunities for Graduates

- **Graduate Follow-Up Office:**

- Support graduates in securing job opportunities through partnerships with hospitals and healthcare facilities.

- **Career Fairs:**

- Organize career fairs to connect students with employers in the healthcare sector.

8. Integrating Technology in Education

- **E-Learning Platforms:**

- Implement e-learning systems and virtual simulation tools for teaching theoretical and practical courses.

9. Community Engagement

- **Raising Awareness of Anesthesia Technologists' Role:**

- Organize seminars and awareness campaigns to highlight the importance of the anesthesia technologist profession.

- **Continuous Education Programs:**

- Offer continuing education programs for professionals to update their skills and knowledge.

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
Level three	MTAN2003	internal medicine	basic	√								√		√	

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

Course Description Form

1. Course Name:					
internal medicine (1)					
2. Course Code: MTAN2003					
internal medicine (1)					
3. Semester / Year: Semester					
Semester (1) / second level					
4. Description Preparation Date:					
30/4/2025					
5. Available Attendance Forms:					
Full-time and official attendance hours					
6. Number of Credit Hours (Total) / Number of Units (Total)					
Lecture: 2 , Practical: 2 , Total: 4 (2+2)					
7. Course administrator's name (mention all, if more than one name)					
Name: Ass. Lec. Qasim Kani Hayif					
Email: qasimkani@gmail.com					
8. Course Objectives					
General goal: To familiarize students with all chronic diseases that affect the body's organs and blood. Special goals: At the end of the year, the student will be able to distinguish the signs of the symptoms that affect him. -1 Respiratory system. -2 Digestive system. -3 The renal and urinary system and the kidneys. -4 Or the land of the liver. -5 Mother of the endocrine glands.					
9. Teaching and Learning Strategies					
Strategy	Blended learning • Lectures (Interactive) - Online Lectures (Interactive) - Role play - Team-based learning (group dissuasion, presentation) - Discussion - Problem solving				
10. Course Structure					
Week	Hours	Required Learning	Unit or subject name	Learning method	Evaluation method

		Outcomes			
1	2	A 1 C1/ C3	Pulmonary T.B..	Lectures (Interactive) Online Lectures (Interactive) Role play Team-based learning (presentation) Discussion Problem solving	Midterm exams Final exams evaluations
2	2	A 1 C1/ C3	Pulmonary T.B.	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning (presentation) Discussion Problem solving	Midterm exams Final exams evaluations
3	2	A 1 C1/ C3	Chronic obstructive pulmonary diseases: chronic bronchitis, emphysema, asthma	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning (presentation) Discussion Problem solving	Midterm exams Final exams evaluations
4	2	A 1 C1/ C3	Chronic obstructive pulmonary diseases: chronic bronchitis, emphysema, asthma	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning (presentation) Discussion Problem solving	Midterm exams Final exams evaluations
5	2	A 1 C1/ C3	Tumors of the lung	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning (presentation) Discussion Problem solving	Midterm exams Final exams evaluations
6	2	A 1 C1/ C3	Tumors of the lung.	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning (presentation) Discussion Problem solving	Midterm exams Final exams evaluations

7	2	A 1 C1/ C3	Vascular lung disease: pulmonary thrombo-embolism	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations
8	2	A 1 C1/ C3	Vascular lung disease: pulmonary thrombo-embolism.	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations
9	2	A 1 C1/ C3	Respiratory failure : definition, types, management..	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations
10	2	A 1 C1/ C3	Respiratory failure : definition, types, management.	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations
11	2	A 1 C1/ C3	Diseases of the pleura: pleural effusion: types, causes, investigation, treatment.	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations
12	2	A 1 C1/ C3	Diabetes mellitus: definition/clinical features complications/ treatment	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations
13	2	A 1	Diabetes mellitus: definition/clinical	Lectures (Interactive)	Midterm exams

		C1/ C3	features/ complications/ treatment	OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Final exams evaluations
14	2	A 1 C1/ C3	Cushing syndrome: diagnosis, clinical features, Investigations and treatment	Lectures (Interactive) OnlineLectures (Interactive) Role play Team-based learning presentation) Discussion Problem solving	Midterm exams Final exams evaluations
15	2	A 1 C1/ C3	Disturbances of water and electrolytes.		

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)	Non
Main references (sources)	Oxford hand book of clinical medicine, sixth edition, Longmore, Murray,2004 Harrisons principle of internal medicine 2th edition 20
Recommended books and references (scientific journals, reports...)	Davidson's Principles and Practice of Medicine
Electronic References, Websites	University educational platform