

**Ministry of Higher Education
and Scientific Research
Supervision and Scientific
Evaluation Authority
Department of Quality
Assurance and Academic
Accreditation Division**



Academic Program Description Manual

academic Program Description Template

University Name: **Uruk Private University**

College / Faculty: College of Medical and Health Technologies-

Scientific Department: Anesthesia techniques

Name of the Academic or Professional Program: Bachelor's Degree

Name of the Final Certificate: Anesthesia techniques

Study System: **Courses**

Date of Course Description Preparation:

Date of Form Completion:

Signature:

Name of Assistant Dean for Scientific Affairs:

Assist.. Dr. Faiza Hazem Hassan

Date: 26/4/2026

Signature:

Name of Department Head:

Dr. Zuhair Ibrahim Hassoun

Date:

26/4/2026



File Reviewed By:

Quality Assurance and University Performance Division

Director of the Quality Assurance and University Performance Division:

Dr. Hanan Ali Hammoudi

Signature:

Date:

26/4/2026



Approval of the Dean

الأستاذ الدكتور
علي عباس صادي الشعم

Introduction:

The educational program is considered a coordinated and organized package of academic courses that includes procedures and experiences structured into academic modules. The primary purpose of this structure is to build and refine the skills of graduates, making them qualified to meet labor market requirements. The program is reviewed and evaluated annually through internal or external auditing procedures and programs, such as the external examiner program.

The academic program description provides a brief summary of the main features of the program and its courses, highlighting the skills intended to be developed in students based on the program's academic goals. This description is essential as it forms the foundation for obtaining program accreditation. It is written collaboratively by the teaching staff under the supervision of the scientific committees within the academic departments.

This second edition of the guide includes an updated description of the academic program, reflecting updates to the previous guide in light of new developments in the Iraqi educational system. It covers the description of academic programs in their traditional formats (annual, semester-based) and includes the standardized description format adopted under the letter of the Directorate of Studies No. dated ٣/٥/٢٠٢٣ for programs based on the Bologna Process. ٢٩٠٦/٣م

In this context, we emphasize the importance of writing accurate descriptions of academic programs and course syllabi to ensure the effective implementation of the educational process.

Concepts and Terminology:**Academic Program Description:**

Provides a concise summary of the program's vision, mission, and goals, including a detailed description of the intended learning outcomes according to defined learning strategies.

Course Description:

Offers a brief summary of the key features of the course and the learning outcomes expected to be achieved by the student, indicating whether the student has made full use of the available learning opportunities. It is derived from the academic program description.

Program Vision:

An aspirational image of the future of the academic program, portraying it as innovative, inspiring, motivating, realistic, and applicable.

Program Mission:

Summarizes the goals and the activities required to achieve them, and outlines the program's development paths and directions.

Program Goals:

Statements that describe what the academic program aims to achieve within a specified period. They must be measurable and observable.

Curriculum Structure:

All courses/subjects included in the academic program, according to the adopted learning system (semester-based, annual, Bologna Process), whether required by the ministry, university, college, or academic department, along with the number of credit units.

Learning Outcomes:

A coherent set of knowledge, skills, and values acquired by the student after successfully completing the academic program. Each course should have clearly defined learning outcomes that contribute to achieving the program's goals.

Teaching and Learning Strategies:

The strategies used by faculty members to enhance student learning. These are planned methods followed to achieve learning goals and describe all in-class and extracurricular activities designed to accomplish the program's learning outcomes.

١. Program Vision

The department aims to supply various healthcare institutions with specialized medical personnel to address the current and future shortage in the field of anesthesia.

٢. Program Mission

To provide a stimulating technical educational and research environment that promotes learning and creativity, contributes to preparing highly competent graduates, achieves effective local and international academic collaboration, and strengthens partnerships with various community sectors.

٣. Program Objectives

The department aims to prepare highly skilled healthcare personnel specialized in anesthesia techniques to work in healthcare institutions. Upon graduation, students will be able to:

١. Prepare the patient before surgery in the operating room.
٢. Administer appropriate anesthesia doses to the patient.
٣. Operate and maintain anesthesia devices and equipment.
٤. Handle anesthetic substances used for patient sedation.

١. Program Accreditation

A detailed study has been submitted to obtain accreditation, including the self-assessment report, the improvement plan, and the compliance report.

٢. Other External Influences

Laboratories, library, hospitals, internet.

١. Program Structure

Program Structure	Number of Courses	Credit Units	Percentage	*Notes
Institution Requirements	٤٧	١٩١	% ١٠٠	
College Requirements	٢٣			
Department Requirements	٤٧	١٩١	% ١٠٠	
Summer Training	٢	Fulfilled	% ١٠٠	
Others				

* Notes may include whether the course is mandatory or elective.

١. Program Description

Year / Level	Course Code	Course Title	Credit Hours	
First Year / First Semester			Theoretical	Practical
First Semester	MEP١٧١.١	Medical Physics (١)	٢	٤
First Semester	ANA١٧١.١	Anatomy (١)	٢	٤
First Semester	GEP١٧١.١	General Physiology (١)	٢	٤
First Semester	GEC١٧١.١	General Chemistry	٢	٤
First Semester	BIO١٧١.١	Biology	٢	٤
First Semester	COP١٧١.١	Computer Fundamentals (١)	١	٢
First Semester	HUR١٧١.١	Human Rights and Democracy	٣	—
First Semester	ENG١٧١.١	English Language	٢	—
First Year / Second	MEP١٧١.٢	Medical Physics (٢)	٢	٤

Semester				
Second Semester	ANA١٧١.٢	Anatomy (٢)	٢	٤
Second Semester	GEP١٧١.٢	General Physiology (٢)	٢	٤
Second Semester	BIC١٧١.٢	Biochemistry	٢	٤
Second Semester	MIC١٧١.٢	Microbiology	٢	٤
Second Semester	COP١٧١.٢	Computer Fundamentals (٢)	١	٢
Second Semester	ARL١٧١.٢	Arabic Language	٢	—
Second Year / First Semester	BAN١٧٢.١	Fundamentals of Anesthesia (١)	٢	٤
	BAE١٧٢.١	Fundamentals of Anesthesia Equipment (١)	٢	٤
	APH١٧٢.١	Applied Physiology (١)	٢	٤
	BOS١٧٢.١	Fundamentals of Surgery (١)	١	٤
	BOM١٧٢.١	Fundamentals of Internal Medicine (١)	٢	٤
	PHA١٧٢.١	Pharmacology (١)	٢	٢
	MET١٧٢.١	Medical Terminology	٢	—
	CRB١٧٢.١	Crimes of the Ba'ath Regime in Iraq	٢	—
Second Year / Second Semester	BOA١٧٢.٢	Fundamentals of Anesthesia (٢)	٢	٤
	BAE١٧٢.٢	Fundamentals of Anesthesia Equipment (٢)	٢	٤
	APH١٧٢.٢	Applied Physiology (٢)	٢	٤
	BOS١٧٢.٢	Fundamentals of Surgery (٢)	١	٤
	BOM١٧٢.٢	Fundamentals of Internal Medicine (٢)	٢	٤
	PHA١٧٢.٢	Pharmacology (٢)	٢	٢
	STA١٧٢.٢	Statistics	١	٢
	ARL١٧٢.٢	Arabic Language	٢	—
Third Year / First Semester	ANE١٧٣.٠	Anesthesia (١)	٢	٥
	ICU١٧٣.٠	Intensive Care Techniques (١)	٢	٤
	AET١٧٣.٠	Anesthesia Equipment Techniques (١)	٢	٤
	MED١٧٣.٠	Internal Medicine (١)	٢	٤
	SUR١٧٣.٠	Surgery (٢)	١	٣

	COM173..	Computer Applications (۲)	۱	۲
	SUM173..	Summer Training	.	—
Third Year / Second Semester		Anesthesia (۲)	۲	۵
		Fundamentals of Intensive Care (۲)	۲	۴
		Anesthesia Equipment Techniques (۲)	۲	۴
		Internal Medicine (۲)	۲	۴
		Surgery (۲)	۱	۳
		Computer Applications (۲)	۱	۲
Fourth Year / Full Year	ANE174..	Anesthesia (۳)	۲	۴
	AET174..	Anesthesia Equipment Techniques (۳)	۲	۴
	ICU174..	Intensive Care Techniques (۲)	۲	۴
	MES174..	Surgical Internal Medicine	۱	۴
	NUR174..	Nursing	۱	۴
	RES174..	Graduation Project	—	—
	PET174..	Professional Ethics	۱	—
	ENG174..	English Language	۱	—

۱. Expected Learning Outcomes of the Program

Knowledge

۱. Preparing specialized personnel in anesthesia techniques.
۲. Managing operating rooms and intensive care units in both public and private hospitals.

Skills

۱. The student should use tools correctly.
۲. The student should apply what they have learned in practice.
۳. The student should prepare the necessary materials.
۴. The student should perform appropriate procedures in response to various

cases.

◦.Solid understanding of the principles of anesthesiology and related sciences.

٦. Technical proficiency in the field, including monitoring vital signs during anesthesia.

٧. Good command of medical terminology.

٨. Good proficiency in the English language.

Values

١. Working with a team spirit.

٢. Understanding the importance of academic subjects.

٣. Commitment to the ethics of the academic institution.

٤. Receptiveness to information and cognitive engagement. .

١. Teaching and Learning Strategies

Blended learning, which consists of in-person education—including smart classrooms and specialized educational laboratories according to the scientific subjects—along with electronic communication with students for assigning tasks and providing instructions.

٢. Assessment Methods

Examinations, reports, discussions, attendance, daily quizzes, and student activities.

١. Teaching Staff

Faculty Members

Academic Rank	Specialization	Requirements / Specific	Number of Faculty Members
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			Skills (if any)			
	Public	Private			Permanent Staff	Lecturer / Adjunct
Prof. Dr. Ali Al-Shahham	Medicine	Board in Surgery	Dean		Yes	
Asst. Prof. Dr. Faiza Hazem	Chemistry Sciences	Cosmetic (Medicine/Surgery)	Assistant Dean for Scientific Affairs		Yes	
Asst. Prof. Dr. Hajar Kazem Shahad	Medicine	Chemistry	Assistant Dean for Administrative Affairs		Yes	
Asst. Prof. Dr. Zuheir Ibrahim Hassoun	Veterinary Medicine	Inorganic (Chemistry)	Head of Anesthesia Department		Yes	
Lect. Asst. Awad Mohammed Awad	Biology	Board	Department Rapporteur		Yes	
Zeinab Abdulkhalik Taha	Veterinary Medicine	Surgery	Department Rapporteur		Yes	
Prof. Dr. Duraid Abdulhadi	Medicine	Diploma in Genetic Engineering and Biotechnological Techniques	Lecturer		Yes	
	Biology	Toxicology	Lecturer		Yes	Yes
Asst. Prof. Dr. Ahmed Saadoun	Medicine	Board in Anesthesiology	Lecturer		Yes	
Asst. Prof. Dr. Hala Mohammed Jawad	Medicine	Molecular Science	Lecturer			Yes
Asst. Prof. Dr. Tamara Fares Abdalnour	Veterinary Medicine	Board in Anesthesiology	Lecturer			Yes
Prof. Dr. Raad Hammoudi	Veterinary Medicine	Board in Anesthesiology	Lecturer		Yes	
Asst. Prof. Dr.	Nursing	Physiology	Lecturer		Yes	

Saad Talib						
Asst. Prof. Dr. Ahmed Ajlan	Medicine	Anatomy	Lecturer		Yes	
Prof. Dr. Azhar Subaih	Medicine	Adult Nursing	Lecturer		Yes	
Asst. Prof. Dr. Mohammed Barisam	Medicine	Board in Internal Medicine	Lecturer		Yes	

Professional Development

Guidance for New Faculty Members:

- Commitment to official working hours.
- Adherence to the scheduled times for lectures, exams, and the overall educational process.
- Encouragement to conduct scientific research.
- Monitoring the progress and completion rate of lectures.
- Conducting self-assessment evaluations.

Professional Development for Faculty Members:

- Engaging in various scientific activities (seminars, courses, discussion panels, etc.).
- Participation in scientific conferences.
- Participation in continuing education scientific activities.

١. Admission Criteria

Centralized admission according to the regulations of the Ministry of Higher Education and Scientific Research.

٢. Main Sources of Information about the Program

- Faculty staff
- Lecturers' presentations
- College library
- Electronic library
- Textbooks
- Supplementary books
- Website and internet

. Program Development Plan

Develop and establish specialized scientific laboratories to enable students to engage with the latest modern technologies.

Program Skills Map															
				Intended Learning Outcomes of the Program											
Year / Level	Course Code	Course Title	Core or Elective	Knowledge				Skills				Values			
				ᐱ	ᐱ	ᐱ	ᐱ	ᐱ	ᐱ	ᐱ	ᐱ	ᐱ	ᐱ	ᐱ	ᐱ
First Year / Semester 1 + Semester 2	MEP17101	Medical Physics ᐱ	Core	√	√	√	√	√	√	√	√	√	√	√	√
	ANA17101	Anatomy ᐱ	Core	√	√	√	√	√	√	√	√	√	√	√	√
	GEP17101	General Physiology ᐱ	Core	√	√	√	√	√	√	√	√	√	√	√	√
	GEC17101	General Chemistry	Core	√	√	√	√	√	√	√	√	√	√	√	√
	BIO17101	Biology	Core	√	√	√	√	√	√	√	√	√	√	√	√
	COP17101	Computer Fundamentals ᐱ	Core	√	√	√	√	√	√	√	√	√	√	√	√
	HUR17101	Human Rights and Democracy	Core	√	√	√	√	√	√	√	√	√	√	√	√
	ENG17101	English Language	Core	√	√	√	√	√	√	√	√	√	√	√	√
	MEP17102	Medical Physics ᐱ	Core	√	√	√	√	√	√	√	√	√	√	√	√

ANA17102	Anatomy √	Core	√	√	√	√	√	√	√	√	√	√	√	√	√
GEP17102	General Physiology √	Core	√	√	√	√	√	√	√	√	√	√	√	√	√
BIC17102	Biochemistry	Core	√	√	√	√	√	√	√	√	√	√	√	√	√
MIC17102	Microbiology	Core	√	√	√	√	√	√	√	√	√	√	√	√	√
COP17102	Computer Fundamentals √	Core	√	√	√	√	√	√	√	√	√	√	√	√	√
ARL17102	Arabic Language	Core	√	√	√	√	√	√	√	√	√	√	√	√	√
BAN17201	Fundamentals of Anesthesia (√)	Core	√	√	√	√	√	√	√	√	√	√	√	√	√
BAE17201	Fundamentals of Anesthesia Equipment (√)	Core	√	√	√	√	√	√	√	√	√	√	√	√	√
APH17201	Applied Physiology (√)	Core	√	√	√	√	√	√	√	√	√	√	√	√	√
BOS17201	Fundamentals of Surgery (√)	Core	√	√	√	√	√	√	√	√	√	√	√	√	√
BOM17201	Fundamentals of Internal Medicine (√)	Core	√	√	√	√	√	√	√	√	√	√	√	√	√

	PHA17201	Pharmacology (1)	Core	√	√	√	√	√	√	√	√	√	√	√	√
	MET17201	Medical Terminology	Core	√	√	√	√	√	√	√	√	√	√	√	√
	CRB17201	Crimes of the Ba'ath Regime in Iraq	Core	√	√	√	√	√	√	√	√	√	√	√	√

Please place a checkmark in the boxes corresponding to the individual program learning outcomes being assessed.

Course Description Template

١. Course Title
Anesthesia Techniques
٢. Course Code
٣. Semester / Year
First Semester – Second Semester / First Year First Semester – Second Semester / Second Year ☐ First Semester – Second Semester / Third Year First Semester – Second Semester / Fourth Year
٤. Date of Description Preparation:
٧/٥/٢٠٢٥
٥. Available Attendance Mode:
Person
٦. Total Study Hours: ١٦٦ / Total Credit Units: ١٩١
٧. Course Coordinator(s) [Name(s) to be listed if more than one]

me:
mail

٨. Course Objectives

Course Objectives	Preparing the patient before surgery in the operating room Administering the appropriate doses of anesthesia to the patient. Operating and maintaining anesthesia devices and equipment Handling anesthetic substances used for patient sedation.
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٩. Teaching and Learning Strategies

Category:	Using lectures to communicate with students, along with PowerPoint slides, whiteboards, specialized educational laboratories, and short scientific video clips.
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١٠. Course Structure

Week	Hours	Intended Learning Outcomes	Unit or Topic Title	Teaching Method	

Week 1 – Week 15	Irs.	*Physics of skeleton, pressure. *Energy, work and power of the body. *Heat and cold in medicine *Specific heat, heat capacity, latent heat, thermometer and it's kinds, heat transfer by conduction, convection and radiation. - Regulation of heat through the human body. *Boyle's law, diffusion and mixing of gases. *Physics of lung and breathing. *Evaporation of	Medical physic	Lectures Theory + Practical	Midterm Exams, Daily Quizzes and Oral Questions

		liquids, vapour pressure and boiling point, humidity, laminar and turbulent flow in liquid.			
Week 1 –rs. Week 15		* Introduction, Anatomical terms *Body cavities and its organs. *Superficial anatomy of human body. *Human body tissues types and characteristic . *Skin anatomy and its functions skin color . *General skeletal structure (Skull, and neck). *Vertebral column structure, numbers and its function. *Diaphragm and abdominal wall muscles.	Anatomy	Lectures Theory + Practical	Midterm Exams, Daily Quizzes and Oral Questions

		*Anatomy of heart, wall, valve and its function *Structure of blood vessels wall arteries, veins and capillaries. *Lymphatic system – lymph glands. *Respiratory system upper respiratory tract. *Respiratory system- lower respiratory tract *Alveoli- lungs- pleural activity. *Upper and lower Limbs			
Week 1 -rs. Week 15		*Definition of physiology; cell physiology; cell membrane components and structure. *Movement of fluid, solutes and gas	General physiology (1	Lectures Theory + Practical	Midterm Exams, Daily Quizzes

		across the cell membrane. *Muscular system : types & characteristics *Contraction mechanism, fatigue, muscular pain *Types of nerve cells functions of nerve impulse, synapses and reflexes *Action potential of nerve and muscle fiber *Blood; functions, component, plasma and serum *Red blood cells, shape, origin, Hb structure and Anemia *W.B.Cs, platelets ; functions, origin, structure *Blood clotting mechanism			and Oral Questions
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		*Cardiovascular system ,heart valve cycle, HR conductive system. *Heart sounds and murmurs, ECG *Blood pressure *Respiratory system, Pleura , Types of mechanism of respiration. *Oxygen Transportin and exchange Carbon dioxide transporting and exchange ,Lung Vol. and capacity, types of Hypoxia			
Week 14rs. Week 15		*Scope of biochemistry in health and disease cell and cell constituents. *Some aspects of physical chemistry, G	General Chemistry	Lectures Theory + Practical	Midterm Exams, Daily

		laws, Boyle's law, Graham's Law of diffusion, Dalton's Law of partial pressure, General gas equation, the international system of units. *Radio activity and radioactive isotopes. *Solutions and methods of expressing concentrations colloidal solution. *The PH concept, Acid base balance, chemical equilibrium, common ion effect. *Buffer and buffer systems of physiological importance in living systems. *Blood, blood constituents, body fluids, regulation of blood PH and body			Quiz zes and Oral Que stio ns
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		fluids. *Water and electroly balance – osmotic pressure of body fluids, control of total electrolytes and body fluids. *Carbohydrates classification reaction main carbohydrates in human body. *Metabolism of carbohydrates, blood glucose factors controlling glucose level in blood *Glucose abnormalities, diabetes mellitus, ketosis, glycosuria, glucose tolerance curve. *Lipids, classification derived lipids, compound, lipids. *Lipid metabolism,			
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		lipid abnormalities. *Proteins, classification, functions, peptide bonds, amino acids, chemical reactions *Nucleic acids and their Expression, DNA Replication, Mutation RNA Topology.			
Week 1 – 15 Week 15	rs.	*Introduction to biology, the cells, prokaryotic and eukaryotic cells, animal and plant cell *The Structure of cell types , shape and size *Movement in and out of cells: diffusion , osmosis , active transport. *Cell division: Amitosis, Mitosis and Meiosis	Biology	Lectures Theory + Practical	Midterm Exams, Daily Quizzes and Oral Questions

		*Nucleic acid: DNA and RNA, DNA Replication *Protein Biosynthesis *Human body tissues Epithelial tissues *Muscular and Nervous tissues *Connective tissues: Bone and cartilage *Blood (R.B.C and WBC) and lymph			
Week 1 –rs. Week 15		Guarantees for the respect and Protection Human Rights At the national and international levels: • Constitutions and laws • Freedom of the press and public opinion • Civil society organizations • Regional organizations (e.g., the Arab League)	Human Rights and Democracy	Lectures	Midterm Exams, Daily Quizzes and Oral Questions

		the European Union, the Organization of American States) • The United Nations and its specialized agencies			
		General Concept of Water Awareness • Means of achieving awareness • Dimensions of water awareness • Uses of water awareness			
		Water and Environmental Awareness in Iraq • Challenges facing water awareness • Proposed measures to solve the freshwater shortage crisis			
		The Concept of			

		Equality • The historical development of the concept of equality • The modern development of the idea of equality • Gender equality • Equality among individuals regardless of their beliefs			
Week 1 –rs. Week 15		Computer Fundamentals • Concept of Computers & Life Cycle Stages The concept of the computer and the stages of the computer life cycle • Evolution of Computer Generations • Advantages and Applications of	Principles of Computer 1	Lectures Theory + Practical	Midterm Exams, Daily Quizzes and Oral Questions

		Computers Benefits of using computers and fields application • Classification of Computers Based on purpose, size and data type Computer Components • Computer Components ◦ Hardware components ◦ Software components			
		Our Personal Computer • The concept of computer security and software licenses			
		Computer Safety & Software Licenses • Ethics in the digital			

		world • Types of violations • Computer security • Computer privacy • Software Licenses and Types ◦ Intellectual property ◦ Cyber intrusion ◦ Malware ◦ Key steps for protection against hacking ◦ Health risks associated with computer use Operating Systems • Definition, Functions, Objectives, and Classification • Examples of operating systems • Windows 7 Operating System			
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		○ Desktop components ○ Start menu ○ Taskbar			
		olders and Files • Icons • Operations on windows • Desktop background			
		ontrol Panel • Windows Control Panel categories • Defragmentation • File organization • Installing and uninstalling software			
		ommon Computer Settings and Maintenance • Printer management • Adjusting time and date			

		Disk maintenance			
Week 1 –rs. Week 15		*Cardinal Numbers/years/price/times (in words and figures).Phonetic of alphabet letters, Punctuation.Countries/Capitals, arrange words (makes full sentence)/ arrange letters (make full word). *Question words (what, where, when, who, why, how, whom, whose, which).Abbreviation (short form), adjectives (and their opposite). *Simple present, Simple past, Present continuous. *Possession (all	English Language	Lectures Theory	Midterm Exams, Daily Quizzes and Oral Questions

		types).Pronunciation s at the end of a word).Pronouns (all types). *Medical terminology Language of medicine Medical terms *Spelling of medical terms Pronunciation medical terms *Suffixes, Prefixes, ro *Body structure Plan of the body *Orientation and directional terms Bod positions *Body cavities			
Week 1 –rs Week 15		*History of anesthesi and introduction + scope of anesthesiology. *Choice of anesthetic technique	Basics of Anesthesia(1	Lectures Theory + Practical	Midt erm Exa ms, Dail y activ

		*Preanesthetic visit and assessment *Premedication aims and therapeutic management *General pharmacology *Inhalational anesthetic agents (in details) *Intravenous anesthetic agents (in details) *Muscle relaxants (in details) & reversal			ities
Week 1 –rs. Week 15		*electrical components and activity of the Heart *the cardiac action potential in ventricular muscle and pacemaker tissues *contractile	Applied Physiology (1	Lectures Theory + Practical	Midterm Exams, Daily Quizzes

		cardiomyocytes and excitation contraction Coupling *ECG and Arrhythmias *cardiac cycle *heart sound and waveforms generated during cardiac Cycle *the left ventricle pressure-volume Loop *cardiac innervation and control of heart rate *cardiac reflexes *systemic Circulation *blood pressure regulation *physiology of microcirculation(starling law of capillary) *venous circulation and venous return *coronary circulation *spirometry and lung volumes			and Oral Questions
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Week 1- week 15	rs.	*metabolic response - injury *inflammation acute - chronic *shock & type path - physiology *wounds , tissue repair & scar *Surgical infection *Patient safety *Preoperative care & - care in operation *Head injury, - management of - unconscious patient *Abscess , cellulites , - carbuncle & - nonspecific infection *Gangrene , type & - causes *Fluid therapy *Nutritional Support - surgery *Acid – base balance *Spinal injury	Basics of Surgery (1)	Theory + Practical	Midterm Exams, and Daily Quizzes
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		peripheral nerve injury *Principles of laparoscopic surgery			
Week 1 -rs. Week 15		*Diseases due to infection/ concepts of infection major manifestations /methods of diagnosis bacteremia/ septicemia / principles of management. *Diseases of the respiratory system- Introduction *Major manifestation / investigations/ respiratory function tests. *Diseases of the C.V.S introduction/ major manifestation investigations. *Principles of electrocardiography, normal ECG/S.	Basics of Medicine (1)	Lectures Theory + Practical	Midterm Exams, and Daily Quizzes

		Tachycardia/ S. Bradycardia/ S. arrhythmia. *AIDS *Diseases of the GIT/ Introduction/ major manifestation/ investigations. *Diseases of the liver introduction/ Bilirub metabolism/ major manifestations / investigations. *Diseases of the kidn / introduction major manifestations / investigations.			
Week 1 – Week 15	rs.	*Principles of Drug Therapy. Pharmacokinetics. Absorption, distribution, metabolism and excretion of the drug	Pharmacology (1)	Lectures Theory + Practical	Midt erm Exa ms, Dail y Quiz

		Pharmacodynamics. Drug-receptors interaction. Efficacy, potency, agonists, antagonists *Cholinergic agonists and antagonists *Adrenergic agonists and adrenergic antagonists *Drugs affecting cardiovascular system - Antihypertensive drugs. - Heart Failure *Drugs affecting cardiovascular system - Anti-arrhythmic. - Antianginal drugs *Diuretics *Antihistamines *Drugs for Disorders the Respiratory System *Drugs for anemia			zes and repo rts
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		*Anticoagulants and Antiplatelet Agents *Skeletal muscle relaxants. *Local anesthetics *General anesthetics			
Week 1 – Week 15	rs.	*Introduction– structural analysis- Basic rules of medical word building. *Major suffixes- suffixes denoting a state or condition. *Major suffixes- suffixes denoting medical actions. *Prefixes- prefixes of No.& measures. *Prefixes- prefixes of color. *Prefixes- prefixes of direction & position. *Prefixes- prefixes of	Medical terminology	Lectures Theory	Midterm Exams, and Daily Quizzes

		size, time & place. *Prefixes- prefixes of negation. Prefixes- prefixes of type. *Roots. Word terminals. Conditions. The body as a whole. *Skin & its appendages. Gastrointestinal Trac *Respiratory system. Cardiovascular Syste *Blood & lymphatic system *Musculoskeletal system *Urogenital system. *Endocrine system. *Nervous system. *Special senses. *Oncology. *Speciality related termes.			
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Week 1 Week 15	rs.	*Operating room design and function *Cannula and giving set and device for intravenous infusion *Physical principles: behavior of molecule of solid and liquid, heat and temperature - Physical principles: properties of gases, temperature, and flow of fluid through tubes and orifice *Endotracheal tube (ordinary tube) , laryngoscope, airway (oropharyngeal and nasopharyngeal), tracheostomy, Facemask *Breathing system and their component, definition,	Basics Anesthesia equipment (1)	Lectures Theory + Practical	Midterm Exams, Daily Quizzes and Oral Questions
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		classification, working principle			
Week 1 –rs. Week 15		*Preoperative assessment (evaluation) & risk evaluation + optimization *Preoperative preparation for elective surgery. *Maternal anatomical and physiological changes *Anesthesia for obstetrics & gynecology. *Pediatric anatomical and physiological changes *Anesthesia for pediatric patients. *Geriatric anatomical	Anesthesia	Lectures Theory + Practical	Midterm Exams, Daily Quizzes and Oral Questions

		and physiological changes *Anesthesia for geriatric patients. *Anesthesia for obese patients *Anesthesia for thoracic surgery. *Anesthesia for Neurosurgery *Anesthesia for ENT			
Week 1 –rs. Week 15		• ICU organization, design, equipment • Indication for ICU and mechanical ventilation • clinical monitoring in ICU (respiratory monitoring, cardiovascular monitoring, hemodynamic and cranial monitoring) • Hypoxia and oxygen therapy	Basics of Intensive Care	Lectures Theory + Practical	Midterm Exams, Daily Quizzes and Oral Questions

		• thromboembolism prophylaxis • HFNC, Noninvasive ventilation indications and modes • Invasive mechanical ventilation (modes of ventilation, waves) • sedation and analgesia in the ICU • Ventilator-Associated Pneumonia • Pneumothorax, hemothorax, tension pneumothorax, stress ulcer • weaning			
Week 1 –rs. Week 15		• Jaundice: classification, causes, clinical features, diagnosis. • Peptic ulcer disease : Duodenal ulcer, Gastric ulcer • Cerebrovascular	Medicine	Lectures Theory + Practical	Midterm Exams, Daily Quiz

		accident • Renal failure: acute renal failure, chronic renal failure: clinical features, • investigations and treatment. • Ischemic heart diseases: clinical features, diagnosis, treatment. • Arrhythmias: cardiac arrest. • Heart failure: definition, classification, causes, precipitating factors, • investigations, treatment. • Hypertension: definition, types: primary and secondary hypertension. • complications,			zes and Oral Que stio ns
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		investigations/ treatment. • Infections of the respiratory tract: upper respiratory tract infections. • Lower respiratory tract infections: pneumonia			
Week 1 –rs Week 15		• Digestive Tract (GIT) General Review & Surgical Approaches • Salivary glands • Investigation & Diagnosis (Diagnosis Image) endoscopy & tissue Diagnosis • Oesophagus • Stomach & duodenum • Liver • Gall bladder & bile ducts • Spleen & pancreas • Small & large intestine • Intestinal obstruction	Surgery (1)	Lectures Theory + Practical	Midterm Exams, Daily Quizzes and Oral Questions

		• & fistula • Vermiform appendix peritoneum • Rectum & anus • Abdominal wall & Hernia • Breast • Burn, plastic surgery			
Week 1 –rs. Week 15		• Airway management device: supra glottis device, laryngeal mask all types, i-gel ,cobra airway, Combe tube ...etc • Endotracheal tubes for special purpose, double lumen tube • Laryngoscope modification, aids to intubation, emergency Airway • Humidifier and nebulizer: definition, importance of	Anesthetic Equipment Technology (2)	Lectures Theory + Practical	Midterm Exams, Daily Quizzes and Oral Questions

		humidification Classification and examples of humidification and nebulizer • Medical suction apparatus, components, choice, standard and testing			
Week 1 –rs. Week 15		• anesthesia for emergency operation • Endotracheal intubation-difficult intubation + difficult intubation management guidelines. • Emergency Airway Management of trauma patient / failed intubation drill • Anesthetic Management of patient with ischemic heart disease undergoing	Advance Anesthesia (1)	Lectures Theory + Practical	Midterm Exams, Daily Quizzes and Oral Questions

		non-cardiac surgery. • Anesthetic Management of patient with valvular heart disease • Anesthetic Management of patient with heart failure/ Anesthetic Management of patient with cardiomyopathy • Anesthetic Management of patient with Asthma, COPD and Restrictive Pulmonary Disease • Perioperative Management of patient with Aspiration Pneumonia/ Pulmonary Embolism • Hematological Diseases and Anesthesia • Electro-convulsive			
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		therapy (ECT) and anaesthesia • Anesthetic Management for Thyroidectomy/ Explorative Laparotomy • Anesthetic & Diabetes mellitus			
Week 1 –rs. Week 15		• pulmonary embolism and pulmonary edema • acute renal failure and CRRT • sepsis and septic shock • multiple trauma (severe multiple trauma, chest injury, spinal cord injury) • environment injuries (submersion, burns, thermal injury and envenomation) • infection and antimicrobial therapy	Intensive Care Technology (1)	Lectures Theory + Practical	Midterm Exams, Daily Quizzes and Oral Questions

		• ICU care after cardiac surgery • transport of critically ill patients • Nutrition in ICU			
Week 1 –rs. Week 15		• Shock (types, patho physiology, management) • Organization and function and immune system • Genetics and disease • Type & genetics disease • Principle & critical care medicine • Autoimmune disease • Ophthalmic disease • Principle of general medicine • Disease of the nerve and muscle • Disorder of spin and spinal cord • Heavy metal poisoning	Advance Medicine	Lectures Theory + Practical	Midterm Exams, Daily Quizzes and Oral Questions

		• Disease of blood • Infection of nervous system • Endocrinology: Pituitary gland • Thyroid gland			
Week 14 Week 15	rs.	• Physiological monitoring: principle monitoring, classification of monitoring equipment invasive (Doppler) Monitoring of blood pressure, invasive (CVP) and non-invasive (arterial blood pressure) pulse oximeter E.T CO2 EC and temperature monitoring equipment • Monitoring for gases, inspired O2 concentration, nitrous	Anesthetic Equipment Technology (3)	Lectures Theory + Practical	Midterm Exams, Daily Quizzes and Oral Questions

		oxide and volatile anaesthetic agent concentration analyzer • measurement of gases in blood (blood gas analyzer) • Measurement of respiratory volume (Wright respirometer), Measurements of volume, flow and pressure, force and pressure • Electrical hazard and their prevention, and accident associated with main electrical supply Risk management: principles of risk management, risk reduction related to equipment, Surgical diathermy, accident			
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		due to use of diathermy • Hemofiltration			
Week 1 Week 15	rs.	Unit One – Ethics The concept and origin of ethics General rules of ethics Sources of ethics Ethical values The importance of ethics for the individual and society Unit Two – Work and Profession Work and its importance Work behavior The concept of profession Definition of profession The difference between the concepts of work, profession,	Professional Ethics	Lecture Theory	Midterm Exams, Daily Quizzes and Oral Questions

		and craft Standards on Which the Profession Should Be Based Unit Three – Professional Ethics The essence of professional ethics Positive outcomes of adhering to professional ethics Characteristics of professional ethics Traits of professional ethics Steps toward an acceptable level of professional ethics Unit Four – Values and Professional Ethics			
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		Integrity Honesty Sincerity Justice Good conduct Work proficiency Unit Five – Unethical Behavior Patterns in the Profession Administrative corruption Unethical administrative behavior Definition of administrative corruption Types of administrative corruption Bribery The concept of bribery			
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		Types of bribery The difference between a gift and a bribe Reasons and motives behind bribery Fraud The concept of fraud The nature of fraud at work Manifestations of fraud in job performance Unit Six – Tools and Methods for Instilling the Values of Professional Ethics Methods for instilling professional ethics Levels of building and establishing			
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		professional ethics Tools and methods to instill professional ethics Key considerations in drafting a professional code of ethics How to promote ethical behavior at work according to (Kreitner and Kinicki) Unit Nine – Ethics of Practicing Medical Professions <i>(Specifically for the College of Health and Medical Technology)</i> Characteristics and traits of the medical technologist Duties of the medical			
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		technologist toward their profession, the patient, and society Patient rights Justice and equality Maintaining the confidentiality of patient information Respecting patient privacy Informed consent Comprehensive care Putting the patient's interest above all else Communication with patients The right to access medical records			
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١. Course Assessment

Grade distribution out of 100 is based on the tasks assigned to the student, such as daily preparation, quizzes, oral and monthly exams, written exams, reports, etc.

٢. Learning and Teaching Resources

Required Textbooks (Prescribed curriculum, if any)	
Main References (Sources)	*Fundamental of an aesthesia, fourth edition, Ted Lin, Tim Smith, and Colin Pinnock *Lecture note on clinical an aesthesia, 2nd edition CARL GWINNUTT, 2004 *Clinical anesthesiology, fifth edition , Morgan & Mikhail's, 2013 *. Clinical anesthesia, eighth edition, Paul G. Barash, MD et al. 2017 *Pharmacology and physiology for anesthesia, foundation and clinical application, 2nd edition, Hugh C. Hemmings, Jr., MD, PhD, FRCA, 2013 *Pharmacology and physiology in anesthetic practice, fifth edition, Pamela Flood, MD, MA, 2015 *Basic surgical technique, Fiona Myint, seventh edition *Text book of surgery , COURTNEY M. TOWNSEND, JR., MD, 21 edition, 2022 *Oxford hand book of clinical medicine, sixth edition, Longmore, Murray,2004 *Harrisons principle of internal medicine 2th edition 2018

	*Essentials of Medical Pharmacology Seventh Edition KD TRIPATHI MD Ex-Director-Professor and Head of Pharmacology, 2013 *. MEDICAL PHARMACOLOGY& THERAPEUTICS Fifth Edition, Derek G. Waller BSc (HONS), DM, MBBS (HONS), FRCP University of Southampton, Southampton, United Kingdom *Anesthesia equipment, principle and application, Jan Ehrenwerth, MD, 2nd edition *The MGH Textbook of Anesthetic Equipment, Warren S. Sandberg, MD, PhD 2nd edition
☐ Recommended Supporting Books and References (scientific journals, reports, etc.)	Reports prepared by students during the study period, including case observations and clinical cases in hospitals.
Electronic References and Internet Websites	

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