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
Year One
College of medicine
University of Alkafeel

2025-2026

Academic Program Description Form

University Name: Alkafeel
Faculty/Institute: College of Medicine
Year name: One
Year moderator: Lect. Dr. Mohammed Jaafar Mohammed Hassan Al-anssari
Academic or Professional Program Name: MBChB
Final Certificate Name: MBChB
Academic System: Courses
Description Preparation Date: 2025-2026
File Completion Date: 10-9-2025

Signature:

Year moderator
Lect. Dr. Mohammed Jaafar Mohammed Hassan Al-anssari
Date: 10-9-2025

Signature:

Scientific Associate Name:
Asst. Prof. Dr. Fatimah Kareem Khalaf
Date: 10-9-2025

The file is checked by:
Department of Quality Assurance and University Performance
Director of the Quality Assurance and University Performance Department:
Asst. Lect. Ameer Mohammed Kadhim

Date: 10-9-2025

Signature:

Approval of the Dean
Asst. Prof. Dr Samer Makki Mohamed Al Hakkak

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 quarterly

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 (Semesters) 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.

1. Program Vision

World-class medical school recognized for excellence in education, research and clinical care, and to prepare the next generation of compassionate, innovative health care professional.

2. Program Mission

Following the most updated and recognized parameters and fostering the scientific research to prepare qualified graduate in medicine to comply with the community needs and modernity in the profession.

3. Program Objectives

1. Prepare graduates capable of diagnosis, treatment, and follow-up of patients.
2. Convey medical knowledge and skills through university education, continuous learning, and higher research work.
3. Fostering professional and moral values in providing health care.
4. joining the students in the process of complying and improving the knowledge through scientific research.

4. Program Accreditation

Does the program have program accreditation? No (the first batch of the college are now a 4th year students)

5. Other external influences

Is there a sponsor for the program?
Yes, Ministry of Higher Education- Private Education Department and Higher Education Authority- Attabah Abbasia

6. **Program Structure**				
Program Structure	**Number of Courses**	**Credits**	**Percentage**	**Reviews**
Institution Requirements	**2**	**44**	**5%**	**Basic**
College Requirements	**15**	**44**	**5%**	**Basic**
Department Requirements	**2**	**44**	**5%**	**Basic**
Summer Training	**Nil**	**Nil**	**Nil**	
Other				

7. Program Description				
Year/Level	**Course Code**	**Course Name**	**Credit Hours**	
			Theoretical	**Practical**
Year one	**AN001**	**Anatomy S1**	**2**	**2**
		Anatomy S2	**2**	**2**
	BIO001	**Biology S1**	**2**	**3**
		Biology S2	**2**	**3**
	PHY001	**Physiology**	**2**	**-**
	PHC001	**Physics S1**	**2**	**2**
		Physics S2	**2**	**2**
	CH001	**Chemistry S1**	**2**	**3**
		Chemistry S2	**2**	**2**
	PC001	**Computer S1**	**2**	**2**
		Computer S2	**2**	**1**
	ENG001	**English language S1**	**2**	**2**
		English language S2	**2**	**2**
	HR001	**Human rights**	**1**	**-**
	ECPD001	**ECPD 1**	**2**	**4**

8. Expected learning outcomes of the program	
Knowledge	
Human Anatomy/Physiology/ biology **Chemistry** **Physics**	Gain a comprehensive understanding of the structure and function of the human body at the cellular, tissue, organ, and system levels. Grasp the chemical processes within living organisms and their role in health and disease. Knowledge of the physics of the human body through knowledge of the natural structure and function of the body, the systems of the main organs, and the physical laws that control them
Skills	
Early Clinical and Professional Development (ECPD)	Develop the skills to gather a comprehensive medical history from patients and perform a thorough physical examination.
Medical Terminology	Become proficient in medical terminology to accurately document and discuss patient conditions.
Ethics	
Medical Ethics	To treat all patients according to principles of medical ethics, emphasizing patient confidentiality, informed consent, and professional integrity
Patient safety	To develop essential clinical skills with the overall aim of ensuring patients' safety.

9. Teaching and Learning Strategies
1. **Theory lectures** 2. **Laboratory sessions** 3. **Display and presentation.** 4. **Interactive discussion** 5. **Brainstorming** 6. **Small group teaching** 7. **Flipped classroom.** 8. **Seminar** 9. **Clinical visit**

10. Interactive Learning Activities (ILA)

10. Evaluation methods
1. Homework and individual and group reports 2. Daily quizzes (Formative and Summative Exams) 3. Practical skills assessment 4. Midterm and end of term exams 5. Graduation projects

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Asst.Prof.Dr. Samer Makki Mohammed		✓			✓	
Asst.Prof.Dr. Fatima Kareem Khalaf		✓			✓	
Lect.Dr. Mohammed Jaafar Al-anssari		✓			✓	
Prof. Dr. Adel H. Omran Alkhayatt		✓			✓	
Lect.Dr. Firas Fadhil Mohamed		✓			✓	
Asst.Lect. Qusay Mohsin Kadhim		✓			✓	
Lect.Dr. Ali Kamal		✓			✓	
Lect. Dr Hayder Talib Mohammed Ali		✓			✓	
Lect.Dr. Haider Abdulwahab		✓			✓	
Asst. Lect. Asmaa Murtadha		✓			✓	
Asst.Lect Huda Falah Judi		✓			✓	
Asst.Lect. Ameer Mohammed Kadhim		✓			✓	
Asst.Lect. Thulfiqar Kamil Yousef		✓			✓	

Asst.Lect. Nahidh Al-Jaberi		✓			✓	
Asst. Lect Ghaith Hassan Alwan		✓			✓	
Asst.Prof.Dr. Ahmed Nasser		✓				✓
Lect.Dr. Hayder Majid Ali		✓				✓

Professional Development
Mentoring new faculty members
Subjecting new teachers to courses on teaching methods and taking a teaching competency test, and only by passing it are they allowed to teach, while following up on their teaching methods and giving them feedback.
Professional development of faculty members
Follow up on teaching methods for all teachers by the Office of the Assistance Dean for Scientific Affairs, prepare seminars and workshops to develop teaching and speaking skills, and ensure the preparation and presentation of lectures in the continuing medical education curriculum.

12. **Acceptance Criterion**
The academic average for the student's graduation from preparatory school, physical and mental health according to the standards established and approved by the Ministry of Higher Education and Scientific Research
13. **The most important sources of information about the program**
1. Approved and authenticated documents for the general curriculum of the college and the courses, vision, mission, and goals of the university and college in both Arabic and English. 2. The website of the Ministry of Higher Education and Scientific Research. 3. The official website of AlKafeel University and its College of Medicine.
14. Program Development Plan
Systematic and recurring self-evaluation studies of the program based on evaluating the learning and teaching outcomes of students and obtaining feedback from students about the program's components. 2) Regular meetings with teaching staff in local and foreign medical colleges to learn about new curricula and teaching methods. 3) Holding workshops on developing curricula and teaching methods in the college or attending those held in neighboring universities.

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
Year One	BIO001	Biology	Basic			/			/					/	
	AN001	Anatomy	Basic			/				/			/		
	CH001	Chemistry	Basic		/				/				/		
	PHC001	Physics	Basic		/				/					/	
	PHY001	Physiology	Basic			/							/		
	PC001	Computer	Basic			/				/				/	
	ENG001	English language	Basic				/				/			/	
	ECPD001	ECPD 1	Basic		/					/					/
	HUM001	Human Rights	Basic			/									/

Course Description Form

1. Course Name:
Biology
2. Course Code:
BIO001
3. Semester / Year:
1st + 2nd Semester / 2025-2026
4. Description Preparation Date:
September 9 2025
5. Available Attendance Forms:
Class + Lab
6. Number of Credit Hours (Total) / Number of Units (Total)
75 T + 90 P / 4.5 credits
7. Course administrator's name
Asst. Lect. Nahidh Al-Jaberi Lect.Dr. Mohammed Jaafar Al-anssari mohammed.alanssari@alkafeel.edu.iq Lect. Dr Hayder Talib Mohammed Ali Asst. Lect. Asmaa Murtadha
8. Course Objectives

Course Objectives	1. Providing students with the scientific basics necessary to understand the human body, including its structure and functions. 2. Understand the structure and functions of cells, organs, and systems in the human body. 3. Providing students with the necessary skills to understand medical and applied research. 4. Understand how diseases and disorders occur. 5. Providing students with the opportunity to apply the theoretical knowledge acquired in lectures.
9. Teaching and Learning Strategies	
Strategy	• Study usually includes a combination of theoretical lectures and practical experiments in a medical biology laboratory. • The laboratory provides students with the opportunity to apply what they have learned in theoretical lectures and develop critical thinking and proble solving skills.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1		Introduction to biosafety and security and biosafety	Lecture	

			barriers in bio labs		**Daily quizzes (Formative and Summative Exams)** **Midterm examination** **Practical final examination** **Theoretical final examination**
1	**1**		Biosafety level and biological agents	Lecture	
2	**1**		Bio risk, Biohazard and management system	Lecture	
2	**1**		Types of biological wastes	Lecture	
3	**1**		Transportation of biological materials	Lecture	
3	**1**		Accident response	Lecture	
4	**1**		Definitions in cell biology	Lecture	
4	**1**		Introduction & type of living cells	Lecture	
5	**1**		The Chemical components of cells	Lecture	
5	**1**		The plasma membrane	Lecture	
6	**1**		The plasma membrane	Lecture	
6	**1**		Exocytosis & endocytosis	Lecture	
			Midterm	Lecture	
7	**1**		The cytoplasm	Lecture	
7	**1**		Cytoskeleton	Lecture	
8	**1**		The endomembrane system	Lecture	
8	**1**		The endomembrane system	Lecture	
9	**1**		Cell junctions	Lecture	
9	**1**		Cell junctions	Lecture	
10	**1**		Mitochondria (structure and function	Lecture	
10	**1**		Mitochondria (structure and function	Lecture	

11	**1**		The nucleus (structurer and function)-1	Lecture	
11	**1**		The nucleus (structure, function)-1	Lecture	
12	**1**		Nucleolus and chromatin	Lecture	
12	**1**		Cell cycle	Lecture	
13	**1**		The cell division (mitosis)	Lecture	
13	**1**		The cell division (meiosis)	Lecture	
14	**1**		Meiosis	Lecture	
14	**1**		Introduction to Anatomy Definitions and descriptions	Lecture	
15	**1**		Planes and terminology	Lecture	
15	**1**		Body cavities and abdomino- pelvic regions	Lecture	
16	**1**		Skin and fascia,	Lecture	
16	**1**		Locomotor system, osteology	Lecture	
17	**1**		Locomotor system, myology	Lecture	
17	**1**		Locomotor system the joints	Lecture	
18	**1**		Locomotor system, synovial joints	Lecture	
18	**1**		Nervous system, PNS.	Lecture	
19	**1**		Nervous System, CNS	Lecture	
19	**1**		Nervous system autonomic	Lecture	
20	**1**		Heart	Lecture	
20	**1**		Blood vessels	Lecture	
21	**1**		lymphatic system	Lecture	
21	**1**		The kingdom Monera	Lecture	

			(introduction and classification)		
22	**1**		The protozoa	Lecture	
22	**1**		Platyhelminthes (classification, general characteristics, life cycle, and pathogenic symptoms	Lecture	
1	**2**		ارشادات في السلامة والوقاية المهنية في المختبر	Lab	
2	**2**		light microscope	Lab	
3	**2**		Other types of microscopes (Dissecting microscope)	Lab	
4	**2**		Micro technique and blood cells	Lab	
5	**2**		Ultrastructure of the eukaryotic cell (plasma membrane, bulk transport)	Lab	
6	**2**		Ultrastructure of the eukaryotic cell (cell organelles, endomembrane system	Lab	
7	**2**		Ultrastructure of Cytoskeleton types	Lab	
8			Midterm exam	Lab	
9	**2**		Cell division, mitosis	Lab	
10	**2**		Cell division, meiosis l, II	Lab	
11	**2**		Terminology, Planes and Body cavities	Lab	
12	**2**		Locomotor system	Lab	

13	**2**		Heart, blood vessels and lymphatics	Lab	
14	**2**		Nervous system	Lab	

11.Course Evaluation

For each semester: Evaluation semester 10, Theoretical mid-semester 20, Final Practical 20, and Final theoretical 50

12.Learning and Teaching Resources

Required textbooks	[1] Lippincott Illustrated Reviews: Cell and Molecular Biology. Second Edition Nalini Chandar, Susan Viselli, [2] Human biology / Sylvia S. Mader, Michael Windelspecht. Fifteenth edition. | New York, NY: McGraw-Hill Education, [3] Molecular Biology of the cell, Bruce Albert,6th Edit (2017)
Main references (sources)	**Same as above**
Recommended books and references (scientific journals, reports...)	Additional resources are provided in each lecture separately if required
Electronic References, Websites	

1. Course Name:
Computer
2. Course Code:
PC001
3. Semester / Year:
1st + 2nd Semester / 2025-2026
4. Description Preparation Date:
September 9 2025
5. Available Attendance Forms:
Class + Lab
6. Number of Credit Hours (Total) / Number of Units (Total)
1T + 2P / 2 Credits
7. Course administrator's name
Name: Asst. Lect Ghaith Hassan Alwan
8. Course Objectives

Course Objectives	To make the student able to use a computer and essential computer-base programs, including the writing of algorithms, using internet resources, and writing skills of report/research.
9. Teaching and Learning Strategies	
Strategy	Focus on practical training using the computer laboratory to simulate the teach who uses the interactive whiteboard

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1-4	**4**		Database Concepts. Relationships and Queries. Database form.	**Lectures**	**Daily quizzes (Formative and Summative Exams)** **Midterm Exam** **Practical Final Exam**
5-8	**4**		SPSS Define a variety of statistical variables. The basic analysis in SPSS		
9-12	**4**		MS-Word 2010. Introduction Ms-Word. Working with Insert menu		

13-15	**4**		Internet & Email Google for search. Creating an account (Gmail). Medical Websites		**Theoretical final Exam**
1-2	**3**		How to create database and table	**Lab sessions**	
3-4	**3**		How to construct forms		
5-6	**3**		How to deal with queries		
7-8	**3**		Working with indents		
9-10	**3**		Adding a header, page, orientation, word Art		
11-12	**3**		How to use google to search		
13-14	**3**		Creating an account in Gmail		
15	**3**		How to use medical websites		

11.Course Evaluation

For each semester: Evaluation semester 10, Theoretical mid-semester 20, Final Practical 20, and Final theoretical 50

12.Learning and Teaching Resources

Required textbooks (curricular books, any)	**Mukesh Sharma, "Basic Computer Course", Abhishek Publications**
Main references (sources)	**Connie Morrison & Et Al., "Computer Literacy Basics", Cengage**
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:
Physics
2. Course Code:
PHC001
3. Semester / Year:
1st + 2nd Semester / **2025-2026**
4. Description Preparation Date:
September 9 2025
5. Available Attendance Forms:
Obligatory- classes and labs
6. Number of Credit Hours (Total) / Number of Units (Total)
120 hours (6 credits)
7. Course administrator's name
Prof. Dr. Adel H. Omran Alkhayatt **adelh.alkhayatt@alkafeel.edu.iq**
8. Course Objectives

Course Objectives	**1. Training the student to develop the necessary comprehens academic framework in the subject of medical physics.** **2. Practical understanding of medical physics in the field diagnostic radiology, health and nuclear physics.** **3. Develop basic knowledge and understanding of the relations between physics theories and their applications in medicine.** **4. Developing deductive ability and linking practical and theoreti physics and their applications in the medical field.** **5. Preparing the student for higher level courses in the medical fi**

9. Teaching and Learning Strategies

Strategy	Understanding the theoretical basics through the lecture using the display screen a video clips, and completing the performance and practical skills by conducting experiments in the scientific laboratory.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
	2		**Terminology, Modeling,**	**Lectures**	

			measurement, how to make a full diagnose		
	2		Forces on and in the human body, Distribution of mass in the human body.		Daily quizzes (Formative and Summative Exams)
	2		Frictional force, Dynamics, Clinical applications of Gravity		
	2		Centrifuge, Sedimentation velocity. Mathematical problems for medical applications		Reports
	2		Heat and cold in medicine, Physiological applications of heat transfer		Midterm Exam
	2		Thermo-grams for mapping the body's Temperature		Practical final Exam
	2		Heat therapy, the techniques for producing heat in body.		Theoretical Final Exam
	2		Cold in medicine		
	2		Energy, work, and power of the body Conservation of energy in the body, energy change in the body		
	2		Work and power, heat losses from the body		
	2		Pressure, measurement of pressure in the body,		

			Pressure inside the skull, Eye pressure.		
	2		**pressure in the digestive system, pressure in the urinary bladder, pressure effects while diving, hyperbaric oxygen therapy (HOT)**		
	2		**Physics of the skeleton, The functions of bones, Types of bones.**		
	2		**Elastic properties of biological materials. Compressibility. Bone remodeling**		
	2		**Lubrication of bone joints. The function of synovial fluid. Measurement of bone mineral in the human body.**		
	2		**The physics of lung and breathing function of lung, The airways.**		
	2		**How the blood and lung interact, principles of diffusion.**		
	2		**Measurement of lung volume, pressure-airflow-volume relationships of the lung**		
	2		**Compliance, physics of alveoli, The breathing mechanism, airway resistance**		

	2		**Work of breathing, Physics of some lung diseases, Mathematical problems for medical applications**		
	2		**Major components of the cardiovascular system (CVS), work done by the heart**		
	2		**Laplace law, Bernoulli's principle, Viscosity &Poiseuille's law**		
	4		**a. How to write a report in practical physics? b. methods for finding errors c. The Principle of vernier and the use of vernier caliper. (Sheet)**	**Lab**	
	4		**The use of micrometer and traveling microscope. (Sheet)**		
	4		**a. Simple pendulum: (Armitage P.22) a. Acceleration of gravity. b. Method of data analysis and representation**		
	4		**a. Flow of water through a capillary tube: To show that the rate of flow is proportional to the applied pressure. (Armitage P.42) b. Flow of water through a capillary**		

			tube to deduce the viscosity of water. (Armitage P.43)		
	4		Variation of the resistance of a wire with temperature and measurement of its temperature coefficient. (Armitage P.140)		
	4		a. Surface tension of water by the capillary tube method. (Armitage P.36)		
	4		Blood pressure. (Sheet)		
	4		Determination of the speed of sound using a resonance tube (using a set of tuning forks). (Armitage P.122)		
	4		Hooks law (Armitage P.18) Armitage P.216)		

11. Course Evaluation

Quizzes (10), Midterm examination (20), Theoretical final examination (50), practical final examination (20)

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	**1. Medical physics by John Cameron and James Skorfronnick** **2. Physics for biology and pre-medical studer D.M. Burne &S.G.G. MacDonald** **3. Practical Physics in SI by E. Aramitage**
Main references (sources)	**College Physics / OpenStax College Rice University / 2013**
Recommended books and references (scientific journals, reports...)	**Chrestens' physics of diagnostic radiology**
Electronic References, Websites	

Course Description Form

Academic Year/ Semester	**2025-2026 / First + second semester**
Specialty	**Anatomy**
Name of the course	Introduction & Upper limbs
Objectives of the course	**1)** Understanding the terms used in describing different regions of the body. **2)** Brief descriptions of the basic structures that compose the body. **3)** Description of the structure of the bones, muscles, joints , nerves & blood vessels of the upper limb **4)** Emphasize the clinical significance of upper limb structures and relations facilitating the understanding of a disease process on anatomical grounds. **5)** Provide surface markings of upper limb structures on the body wall emphasizing peripheral pulses and palpable bony landmarks. **6)** Direct the anatomical knowledge towards the appearance of structures when they are imaged in radiographs.
Description of the course	The course involves a regional study of the upper limb with an emphasis on the (skeletal, muscular, nervous & vascular structures) that is a foundation & the building block for all areas of health sciences in the future subsequent courses like medicine, surgery& radiology.
Number of theoretical hours	30 hours (2hours /week)
Number of practical hours	30 hours (2hours /week)
number of credit	3 credits
Teacher's name	Hayder Majid Ali
The Academic title	Lecturer
Official email address	hayder.majid@jmu.edu.iq
Mobile phone number (WhatsApp)	07708783761

The Course Curriculum/theoretical part:

Week	Hours	Syllabus Subjects
1	1	Osteology of the upper limb
	1	Superficial structures of the upper limb
	1	Anterior thoraco-appendicular muscle
2	1	Posterior thoraco-appendicular muscles. Joints of the pectoral region
	1	Scapulohumeral muscles
	1	The shoulder joint, functional and clinical anatomy
3	1	The axilla: boundaries and axillary vessels and lymph nodes. Clinical Correlates
	1	The brachial plexus
	1	The arm: anterior compartment
4	1	The arm: posterior compartment
	1	Clinical anatomy of fractures of humerus
	1	The cubital fossa and elbow joint. Applied anatomy of cubital fossa
5	1	Flexor compartment of the forearm
	1	Extensor compartment of the forearm
	1	Nerves and vessels of the forearm. The radio-ulnar joints
6	1	Clinical anatomy of fractures of radius & ulna
	1	The wrist region and the Hand (muscles)
	1	The Hand (blood vessels and nerves)
7	1	MID-TERM EXAM
8	1	Osteology of the lower limb
	1	Superficial thigh structures & the femoral triangle. Applied anatomy
	1	Femoral sheath, the anterior and adductor compartment. Adductor Canal

9	**1**	Gluteal region; anatomy and its clinical correlate
	1	The hip joint; anatomy and main clinical conditions related
	1	Clinical anatomy of fractures of femur
10	**1**	Popliteal fossa; anatomy and applied anatomy
	1	The knee joint; anatomy and main clinical conditions related
	1	Anterior & lateral crural compartments. The dorsum of the foot
11	**1**	Posterior crural compartment
	1	The sole of the foot
	1	The ankle joint and joints of the foot
12	**1**	Arches of the foot; anatomy and clinical significance
	1	Posture and gait
	1	Venous drainage of the lower limb & varicose veins
13	**1**	Nerve injuries in the lower limb
	2	Imaging and cross-sectional anatomy of the lower limb
14	**2**	Applied anatomy of lower limb (cutaneous nerves and peripheral pulses)
15	**2**	How to analyses clinical Scenarios based on anatomical knowledge. Examples and discussion

Course curriculum/practical part:

Week	Hours	Syllabus Subjects
	3	Radiographic anatomy (plane X Ray of upper limb bones) / fracture of clavicle
	3	Venipuncture technique / Abnormalities of Sensory Function
	3	Radical mastectomy
	3	Paralysis of serratus anterior (winging of scapula) / Fibromyalgia

	3	Painful arc syndrome and shoulder dislocation / rotator cuff injuries / adhesive capsulitis of shoulder joint
	3	Compression of axillary artery to control bleeding / enlargement of axillary LN
	3	Main injuries of brachial plexus
	3	Fracture of humerus / examining the brachial artery pulsation and its compression to control bleeding / bicipital reflex
	3	Radial nerve injury
	3	Supra-epicondylar fracture of humerus / tennis elbow / golfer elbow
	3	fracture of radius and ulna / Muscle Testing of Flexor Digitorum Superficialis and Flexor Digitorum Profundus / radial pulse examination
	3	Subluxation and Dislocation of Radial Head in children / ulnar and radial nerve injuries
	3	Scaphoid fracture / wrist ganglion / carpal tunnel syndrome
	3	Dupuytren Contracture of Palmar Fascia / median nerve injury / tenosynovitis / Palmar Wounds and Surgical Incisions
	3	radiographic anatomy (plane X Ray of lower limb bones) / fracture of femur
	3	Abnormalities of Sensory Function / Varicose Veins, Thrombosis, and Thrombophlebitis
	3	Femoral Hernia / Femoral Pulse and Cannulation of Femoral Artery / Regional Nerve Blocks of femoral nerve
	3	Injury to Superior Gluteal Nerve; Trendelenburg test / sciatic nerve block and injury / intra-gluteal injection
	3	Fractures of Femoral Neck / Surgical Hip

		Replacement / Dislocation of Hip Joint /coxa vara and valga
	3	Popliteal pulse and aneurysm / baker cyst
	3	Knee Joint Injuries / Arthroscopy of Knee Join / Knee Replacement
	3	Fracture of tibia and fibula / Injury to Common Fibular Nerve and Footdrop
	3	Injury to tibial nerve / Posterior Tibial Pulse examination / Inflammation and Rupture of Calcaneal Tendon / Calcaneal Bursitis
	3	Palpation of Dorsalis Pedis Pulse / Ankle Sprains / Pott Fracture–Dislocation of Ankle
	3	Plantar Fasciitis / Plantar Reflex / Sural Nerve Grafts
	3	Flat foot

References:

Textbooks:
• Moore KL & Dalley AF (2006): Clinically Oriented Anatomy. 5th Ed. Lippincott Williams & Wilkins. Philadelphia
References:
• Moffat DB (1987): Lecture notes on anatomy. Blackwell publications. Oxford
• Snell RS (2000): Clinical anatomy for medical students. 6th Ed. Williams & Wilkins. Philadelphia
• Grant's atlas of anatomy (CD)
• McMinn's color atlas of human anatomy (CD)
• McMinn & Abrahams's clinical atlas of human anatomy (CD)
28
• Jaffar A & Al-Salihi A (2000): Selected topics in anatomy (CD). Al-Nahrain University publication.
• Netter's interactive anatomy (CD). Ciba publications
• Weir J & Abrahams P: Imaging atlas of the human body (CD)

1. Course Name:	
Chemistry	
2. Course Code:	
CH001	
3. Semester / Year:	
1st + 2nd semester/ **2025-2026**	
Description Preparation Date:	
September 9 2025	
4. Available Attendance Forms:	
Large Group Lectures + labs	
5. Number of Credit Hours (Total) / Number of Units (Total)	
135 hours 7 Units	
6. Course administrator's name	
Asst. Prof. Dr. Ahmed Naseer Kaftan	ahmedn.kaftan@uokufa.edu.iq
Asst. Lect. Huda Falah Joodi	falahhudhud1993@gmail.com
Asst. Lect. Thulfiqar kamil yousef	thualfaqqar.kamel@alkafeel.edu.iq
Asst. Lect. Youssra Ammar	yousraa.ammar@alkafeel.edu.iq
7. Course Objectives	
Course Objectives	**Upon successful completion of this course, students will be able to:** • **Explain the basic principles of clinical chemistry and its role in healthcare.** • **Correlate alterations in carbohydrate, lipid, and protein metabolism with various disease states.** • **Interpret common clinical chemistry tests used to assess renal, liver, and electrolytes.** • **Identify potential clinical significance of abnormal laboratory results in different disease contexts.**

	• **Explain the role of enzymes in metabolism and discuss the consequences of enzyme deficiencies.** • **Apply acquired knowledge to analyze c studies and clinical scenarios involv disorders related to the focus areas.**

8. Teaching and Learning Strategies

Strategy	**This course will combine lectures, discussions, case studies, and laboratory exercises to provide students with a comprehensive understanding of clinical chemistry and its significance in the diagnosis and management of human diseases. Additionally, the course will incorporate laboratory sessions, allowing students to gain practical experience with basic biochemical techniques**

9. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
	4		Radioactivity, radiation dosages medical uses of radioactive Isotopes	**Lectures**	**Daily quizzes (Formative and Summative Exams)** **Reports** **Midterm Exam** **Practical + Theoretical Final Exams**
	4		Aqueous solutions, solubili concentrations of solutions. Electrolytes& nonelectroly		
	2		Osmosis & osmotic pressur		
	2		Gases & their medical relations and diffusion of respiratory gases.		
	4		Colloids and their propertie emulsions, emulsifying agents, dialysis, Hemodialysis		
	5		Acid and Bases, pH buffer acid-base balance in blood		
	3		Reaction rate, activation energy chemical equilibriur		
	3		Organic Chemistry: Alkane double & triple bonds, resonance. Alkenes: geometric isomers importance in living system and Aromatic compounds		
	4		Alcohols, Phenols and Thic		
	4		Aldehydes & Ketones		

	4		Carboxylic acids: Esters & thioesters.		
	4		Stereoisomers: Chiral compounds, optical activity diastereomers		
	2		Polymers		
	1		introduction: - Biochemistry and its Clinic importance		
	6		Carbohydrates *Definition. *Classifying carbohydrates The three – Dimensional structure of Monosaccharide. *The cycle structure of Monosaccharide. Mutarotation. *Reactions of Monosaccharide. *Disaccharide. * Polysaccharide		
	6		Lipids * Definition. *Fatty acids *Waxes. *Triacylglycerol (Triglycerides) . *Phosphoglycerates. *Sphingolipids. *Biological membrane. *Soaps. *Terpenes. *Steroids. *Steroids hormones. * Prostaglandins		
	8		Proteins *Amino Acids. *Properties of α-Amino acids. *Reactions of Amio acids. *Peptide bonds. *Primary structure of proteins.		

			*Secondary structure of proteins. *Tertiary structure of proteins. *Quaternary structure of proteins. * Denaturation of proteins		
	6		Enzymes *Enzymes as catalysts. *Naming and classifying enzymes. *Enzyme cofactors. *How enzymes catalyze reactions. *Lysozyme. *Enzyme inhibition. *Control of enzyme activity *Poisons. *Chemical compounds that fight infections. * Diagnostic enzymology		
	3		Vitamins *a) Water soluble vitamins (folic acids, vit.c, vit. B1, v B2, B3, vit. B6, vit. B12. b) Fat soluble vitamins (vit A, vit. D, vit. E, vit.K)		
	6		General laboratory apparatuses, saf procedures & first Aid	**Lab sessions**	
	6		Analysis of silver group		
	6		Acid-Base titration		
	6		The standardization of basic solutions		
	3		Equivalent mass of unknown acid.		
	3		pH & pH Meters Osmosis & dialysis Preparation of some colloid		
	3		Determination of an unknown chloride		

	6		Aspirin synthesis purification by crystallization		
	6		A test for functional groups		
	3		General urine examination		
	9		Carbohydrates: (Moli Benedict, Barfoed, Bial, Seliwannof's Iodine Tests.)		
	6		Lipids: (Grease Stain Test, Reaction Test, Copp Acetate Test, Reaction of Soap, Cholesterol) Saponification Value of Fat.		
	9		Amino Acids & Proteins: (Ninhydrin,Xanthoprotic, Rosenheim, Millon's, Lead Sulfide, Nitroprusside, Sakaguchi & Biurett Tests.		
	3		Paper Chromatography Amino Acids.		
	3		Spectrophotometry (Riboflavin).		
	3		Spectrophotometry (Albumin-Biurett).		
	3		Enzymes: The Determinati of The Progress Curve of Cas by Trypsin.		

10.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

11.Learning and Teaching Resources

Required textbooks (curricular books, if any)	• Clinical Chemistry & Metabolic Medicine. Martin Crook • Clinical Biochemistry (Lecture Notes), Peter Rae

Main references (sources)	• Clinical Chemistry & Metabolic Medicine. Martin Crook • Clinical Biochemistry (Lecture Notes), Peter Rae
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:	
English	
2. Course Code:	
ENG001	
3. Semester / Year:	
First and Second Semesters 2025-2026	
4. Description Preparation Date:	
September 9 2025	
5. Available Attendance Forms:	
Lectures and practical lessons (speaking- listening)	
6. Number of Credit Hours (Total) / Number of Units (Total)	
1T+2P (2 Credits)	
7. Course administrator's name	
Name: Lect.Dr Firas Fadhil Mohamed	
8. Course Objectives	
Course Objectives	At the end of this course students shall be proficient in the following skills: •Reading an English text properly. •Understanding the text correctly. •Using questions and negatives Learning new words Essential doctor-patient communication skills.
9. Teaching and Learning Strategies	
Strategy	This course shall provide students with the essential skills of reading, writing, listening, and speaking. Students shall be trained in the strategies understanding the English written medical text and the concept of comprehension through reading. The course is anticipated to help establish a link between using the English language properly and internalizing the grammatical rules. Concepts such as axillary verbs, tenses, modal verbs, asking short and gentle questions, and negatives shall be introduced throughout the course.

10. Course Structure

Week	Hours	Unit or subject name	Learning method	Evaluation method
	2	Capability (can, negative) request a offers + Adverbs Divisions of the Back. Abbreviations. Body organism Pronunciation	**Lectures**	**Daily quizzes (Formative and Summative Exams)** **Short oral tests** **Written tests**
	2	Polite way to ask: Please and thank you. Some and any, like and would like. Exercises: medical word building, positions, medical terms morphology		
	2	Present simple + present continuous Integumentary system. Dermatology: introduction about terms		
	2	it's time to go, future and question wor Medical terms: suffixes and prefixes		
	2	The family+ Verb to be + possess adjectives. Cross-section of the skin exercise		
	2	Meeting people+ questions and negativ short answers Disorders and treatment. Skin lesions		
	2	Jobs + Possessives + present simple with exercises. Questions and negatives. Inflammatory Disorders. Skin Infections		
	2	Present simple in careers and hobbies Burns + common dermatology diseases		
	2	Where do you live: there is, there are + how many some and any Disorders and Symptoms. Abbreviatic of medical terms		
	2	Prepositions of place + demonstrative pronoun (this, these, those, that) Diagnoses, procedures, and treatments		
	2	Ability (can cannot, could). Simple past tense (was were)		

		Term and pronunciation of medical terms related to dermatology		
	2	Simple past tense (was born) + could Case study, chief complaint, present illness: consultation Impression		
	2	Regular and irregular verbs + Time expression in the past and present. Labeling the skin /Exercise		
	2	Revision		
	2	Communication + seminar	Lab session	
	2	Terminal illness and dying + seminar		
	2	Working in a team + seminar		
	2	Diversity at work + seminar		
	2	Reading comprehension /endocr system+ seminar		
	2	Reading comprehension/ proteins + seminar		
	2	Reading comprehension / mechanism breathing		
	2	reading comprehension/ normal and abnormal cells		
		Listening skill/ patient care + seminar		
	2	Listening skill/ Vocabulary, signs and symptoms		
	2	Listening skill/ A case history + semina		
	2	Non-technical language+ seminar		
	2	Exercises about culture project + seminar		
	2	Revision		

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 participation and Daily oral: 5%;
Quizzes: 5%;
Written Midterm 20%;
Written Final Exam 70%

12.Learning and Teaching Resources

Required textbo (curricular books, any)	Sam McCarter Medicine I, Oxford English for Careers. "New Headway Beginner Plus". + A Short Course in Medi Terminology.

	(Theoretical)
Main referen (sources)	Sam McCarter Medicine II, Oxford English for Careers.
Recommended books and references (scientific journals, reports...)	Oxford Handbook of Clinical Medicine 7th edition, Longmore et al. ISI 978-019-856837-7
Electronic Referenc Websites	https://elt.oup.com/student/oefc

Course Description Form

1. Course Name:	
Physiology I	
2. Course Code:	
PHY001	
3. Semester / Year:	
Semester Two/ **2025-2026**	
4. Description Preparation Date:	
September 9 2025	
5. Available Attendance Forms:	
Lectures	
6. Number of Credit Hours (Total) / Number of Units (Total)	
4 hour per week/ 3 credit	
7. Course administrator's name	
Asst.Prof.Dr. Samir Makki Mohammed Asst.Prof.Dr. Fatima Kareem Khalaf Name: Asst. Lect. Qusay Mohsin Kadhim qusay.mohsin@alkafeel.edu.iq Lect. Dr. Ali Kamal ali.kamal@alkafeel.edu.iq	
8. Course Objectives	
Course Objectives	The course is designed to enable the student to: **1**. Introduce students to electrical and magnetic effects generated inside the body, and applications of electricity and magnetism to the surface of the body. **2**. Study Physics of the ear and hearing and the Generation Ultra Sound, Mechanism of ultrasound imaging, Types of ultrasound mode and applications, Doppler technique. **3**. Characteristics, Measurement of light, and Application of visible light in medicine to study the Physics of Eyes and Vision. 4. Discusses the physical principles involved in the diagnostic use of X-rays in medicine and the therapeutic uses of X-rays. **5**. To provide students with a solid foundation in the principles and practices of nuclear medicine, and to equip them with the knowledge and skills necessary to safely and effectively use radionuclides in a clinical setting.
9. Teaching and Learning Strategies	
Strategy	First year medical school lays the foundation for your understanding of the human body, and cell physiology is a crucial part of that. **Active Learning Techniques**: • Lectures with Integration: Don't just listen passively. Look for connections between concepts, ask questions, and take detailed notes that highlight these connections. • Discuss how cellular malfunctions contribute to diseases. This will solidify understanding and make the material more relevant. • Group Discussions and Activities: Work with peers to explain concepts, debate ideas, and answer practice questions. This

	collaborative learning helps solidify understanding and identify areas needing clarification.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1 2 3 + 4 5 6 7 8 9 10 11 12 13 14 15	1 1 2 1 1 1 1 1 1 1 1 1 1 1		1. Introduction to cell physiology. 2. Physiology of cell membrane. 3. Cell organelles (2 lectures). 4. Transport across cell membrane. 5. Nervous System and Homeostasis. 6. Neurons and Neuralgia cells. 7. Electrical signals in Neurons (Ion Channels). 8. Resting membrane potential. 9. Introduction to body fluid. 10. Basic principle of osmosis. 11. Na+ balance. 12. K+ balance. 13. Water balance. 14. Edema. 15. Red Blood Cells 16. Anemia 17. Polycythemia 18. White blood cell	Lectures	**Daily quizzes (Formative and Summative Exams)** **Lab reports** **Mid Term Exams** **Final exams**

			19. Inflammation 20. Immunity 21. Tolerance 22. Blood groups 23. Hemostasis		

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)	Guyton and Hall Textbook of Medical Physiology, 13th edition, 2016.
Main references (sources)	1- Ganong's Review of Medical Physiolog 25th edition, 2016. 2- Lippincott Medical Physiology, 2nd Edition, 2018.
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

1. Course name:
ECPD 1
2. Course code:
ECPD001
3. Semester/ Year :
Annual program/ 2025-2026
4. Description Preparation Date
September 9 2025
5. Available attendance forms:
Class + Skill Lab+ Hospital visits
6. Number of study hours (total) / Number of units) total:(
60 theory lectures+ 60 Practical sessions = 3 Credit Points
7. Course instructor name
Lect. Dr. Haider Abdul-Wahab Alhakim **haidar.alhakim@alkafeel.edu.iq**
8. Course objectives
Early start, creates, develops, and improve the skills of medical college students from a clinical standpoint, as well as from a professional and personal standpoint, so that they become highly competent and able to perform the practical tasks they will face when they begin their work after graduating from college in the service of their patients and their community.
9. Teaching and learning strategies

Strategy	**1) Theory lectures as LGT to cover the knowledge of the clinical aspect of medical management (diagnosis) and professionalism and medical ethics.** **2) Training at the clinical skills lab.** **3) Field visits to the hospitals and PHC clinics.**

10.Course structure					
week	hours	Required learning outcomes	Name of unit or topic	Learning method	Evaluation method
1			General Introduction (I'm a doctor)		
2			Structure of Health Service in Iraq		
3			ECPD Introduction		
4			Basic Anatomy for the vital Signs		Daily quizzes (Formative and Summative Exams)
5			Basic Physiology for the vital signs		
6			Vital Signs: Basic concepts of assessment.		
7			Basic Principles of History Taking.	LGT	Mid-year
8			Medical Ethics	SGT	Exams
9			Basic Principles of Clinical Examination	ILA session	
10			Student Selected Component (SSC).		OSCE exams
11			Communication Skills		
12			Basic Life Support (BLS)		
13			Common Emergencies		Final Exams
14			Professionalism		
15			PHC Visit Guide		
16			Hospital Visit Guide		
17			Medical Recording		
18					
19					
20					
21					

			Confidentiality		
22			**Teamwork Concept**		
23			**OSCE Guide** **Assessment**		
24			**Practicing Basics of History Taking in Clinical Skills Lab**		
25					
26			**Hospital/PHC visit-Observation**		
27					
28			**Reflection**		
29			**Practicing Basics of General Physical Examination in Skills Lab**		
30			**Hospital/PHC Visits-Observation** **Reflection** **Practicing Vital Signs Assessment in Skills Lab.** **Hospital/PHC Visit-Observation** **Reflection** **Practicing Basic Procedures: Using Glucometer** **Taking Swabs (Nose, Throat, Skin)** **Teaching women how to use and read Pregnancy test** **Advising how to collect mid-stream urine sample.**		

			Practicing SC & IM Injection on Manikins. **Assessment**		

11.Course Evaluation	
The final exam (70 marks) / Mid-year exam (15 marks) / Practical sessions (OSCE) – 15 marks	
12.Learning and teaching resources	
Required textbooks (methodology if any)	
Main References (Sources)	**[1] Essentials of General Surgery** **[2] Nursing Care Guides** **[3] Osmosis from Elsevier**
Recommended supporting books and references (scientific journals, reports...)	
Electronic references ,websites	