



جامعة البتايك



Academic Program Description

Al-Bayan University College of Health & Medical Techniques

2027 - 2026

Department of Aesthetic and Laser Techniques
September 10, 2026

University	Al-Bayan University
Faculty/Institute	College of Health and Medical Techniques
Scientific Department	Aesthetic and Laser Techniques
Academic/Professional Program Name	Course Description
Final Certificate Name	Bachelor in Aesthetic and Laser Techniques
Academic System	Morning/Evening
Description Preparation Date	10-09-2026
File Completion Date	19-09-2026

Head of Department

Signe



Name Prof. Dr. Abdul Sattar Jabbar Taha

Date 25-09-2026

Scientific Associate

Signe



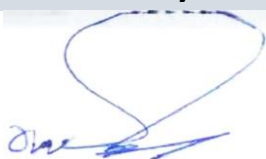
Name Lec. Dr. Mytham Jabouri
Abdullhussein

Date 25-09-2026

This File has been checked by Quality Assurance and University Performance
Director of Quality Assurance and University Performance Department

Head of Quality Assurance Section

Signe



Name Lec. Sarah Abdullatif

Date 25-09-2026



Approval of the Dean
Prof. Dr. Ghaith Ali Jasim

1. Program Vision

Our vision is to provide preparations for medical technologists to possess high scientific skills in accordance with international standards, able to work within an effective teamwork atmosphere in order to participate in the treatment and alleviation of the suffering of dermatology patients. All these preparations will be provided during the period of theoretical study and practical training at the University, along with cosmetology centers at the Institutes of the Iraqi Ministry of Health, in order to achieve the highest degrees of scientific and practical competence for graduates, and be qualified for work. In hospitals in general, and hemodialysis centers in particular.

2. The Message of the Academic Program

The Department of laser cosmetology Technologies works with its unique staff to provide the latest laboratory equipment in the field of laser therapy and provide high-quality scientific material to graduate professional cadres in the field of laser therapy and Cosmetology and meet the constant need of the labor market in this specialty and promote sustainable development of this field.

3. The Objectives of the Academic Program

- **1-Introducing the student to the new department and what he will learn from it of scientific and practical outputs for society and development for Sustainable Development.**
- **2-providing an excellent learning environment in order to graduate a distinguished cadre in terms of Science and performance.**
- **3-introducing the student to modern and advanced devices to master the profession professionally and excellently.**
- **4-urging students to develop this scientific field and continue to develop new methods in this specialty and promote the development of sustainable development in it.**

4. The Program Accreditation

N/A

5. Other External Influences

N/A

6. Program Structure

Course Structure	Number of Courses	Credit Units	(%)	Reviews
Institutional Requirements	5	11	12.35	
College Requirements	9	34	38.2	
Department Requirements	10	44	49.43	
Summer Training				satisfied
Other				

7. Program Description

Year / Level	Course Code	Course Name	Credit Hours	
			Theoretical	Practical
1 st	02031101	Human Biology 1	2	2
	02031102	General chemistry	2	2
	02031103	Medical physics	2	2
	02031104	Medical Terminology1	2	-
	02031105	Human Rights and Democracy	2	-
	02031106	Computer and Artificial intelligence	2	2
	02031201	Biology of hair and skin	2	2
	02031202	Anatomy and histology	2	2
	02031203	Organic chemistry	2	2
	02031204	Laser physics	2	2
	02031205	Medical Terminology2	2	-
	02031206	Arabic language	2	-
2 nd 1 st	02032101	physiology	2	2

2nd

02032102	Pathology	2	2
02032103	Laser-physics and application	2	2
02032104	Baath regime Crimes in Iraq	2	-
02032105	Skin care basics and techniques	2	2
02032106	pharmacology	2	2
02032107	Nutrition(1)	2	-
02032201	Skin care pharmaceuticals	2	2
02032202	Skin ,hair and nail disorders	2	2
02032203	Nutrition (2)	2	2
02032204	Systemic pathology	2	2
02032205	Laser and light based aesthetic technologies	2	2
02032206	Microbiology	2	2
02032207	First aid	2	2
02032208	Arabic language	2	-
02032209	Computer and Artificial intelligence	2	2

3rd

4th

8. Expected learning outcomes of the program

→ Knowledge

Outcome Learning 1

The student will be able to learn about the impact of the department and its importance in society

Outcome Learning 2

The student will be able to know the scientific and practical basics of the Department

Outcome Learning 3

The student will be able to master the applications of the program and the professionalism of the profession

Outcome Learning 4

The student will be able to learn about the causes of skin diseases and how to treat them with modern techniques

→ Skills

Outcome Learning 1

The student will be able to acquire the skill of dealing with cosmetic devices and lasers

Outcome Learning 2

The student will be able to diagnose conditions that affect the skin and the skin with the correct handling technique

Outcome Learning 3

The student will be able to master the pattern of laboratory devices in the field of Cosmetology and laser

Outcome Learning 4

The student will be able to gain the skill of dealing with the patient and mastering the use of cosmetic devices and lasers during treatment sessions

→ Values

Outcome Learning 1

The student will get acquainted with the work ethics in this specialty

Outcome Learning 2

The student will learn about the importance of dealing with the patient in this area

Outcome Learning 3

The student will be able to understand the basic principles of specialization and how to carefully contain the patient

Outcome Learning 4

The student will be able to understand the importance and method of dealing with the patient in a humane and ethical manner in accordance with the ethics of Health and medical professions

9. Teaching and Learning Strategies

<i>Theoretical Lessons</i>	<i>Laboratory training</i>	<i>Conduct laboratory experiments</i>
<i>Practical Lessons</i>	<i>Conduct scientific discussions with students</i>	<i>Show video clips of laboratory experiments</i>
<i>Sending students to hospitals for training</i>	<i>Holding seminars and conferences</i>	<i>Assistance in supervising graduation research</i>

10. Evaluation Methods

<i>Oral exams</i>	<i>Weekly exams</i>	<i>Monthly exams</i>
<i>Quick quiz</i>	<i>Presenting Seminars</i>	<i>Midterm exam</i>
<i>Making scientific reports and essays</i>	<i>Practical exams</i>	<i>Final exam</i>

11. Faculty Members

Titles	Specialization		Staff	Numbers
	General	Special		
Prof	Pharmacology	Pharmacology	7	3
Prof	Biological Sciences	Biophysics		
Prof	Anatomy and histology	Tissue engineering and stem cells		

Lecturer	General chemistry	Biochemistry
Asst. Lecturer	Engineering of materials technologies	Engineering of materials technologies
Asst. Lecturer	Language education	English
Asst. Lecturer	General physics	Laser Physics
Asst. Lecturer	Clinical Biochemistry	Clinical Biochemistry
Asst. Lecturer	Life science	<i>Environmental science</i>
Asst. Lecturer	Veterinary Medicine	<i>Physiology</i>

Professional Development

Mentoring New Faculty Members

Guidance and directing are provided to new recruits in the Department of Industrial Kidney Techniques by engaging those concerned in training workshops and holding specialized seminars in their work, as well as development courses.

Professional Development for Faculty Members

Creating developmental sessions by involving them in teaching and then making an evaluation through a referendum by the stages they taught.

10. Admission Criteria

The target group for admission to the department of industrial kidney techniques is graduates of secondary school in the scientific section only with a grade point average of no less than 70 present.

The application mechanism to study in the department will be after the announcement of the high school results and the opening of the gate for admission by the registration department at the presidency of Al Bayan university.

11. Key Sources of Information about the Program

- 1- The university's website and other websites
- 2- Prescribed scientific references, including books and magazines related to the academic curriculum
- 3- Lectures presented by faculty members in the department

14. Program Development Plan

Based on the positive outputs and outstanding results achieved by the teaching staff of the Department of Aesthetic and laser Techniques, and as a promising and newly established scientific department at the College of Health and Medical Techniques, a strategic academic plan was formulated to develop the educational program and upgrade it to leadership levels. The plan is based on the following development axes:

Modernization of infrastructure and laboratories: accelerating the pace of opening and equipping additional specialized laboratories, and the development of advanced treatment and training centers subject to the latest international standards in the fields of lasers and skin care technologies.

Enhancing scientific and practical outputs: pushing the wheel of scientific production for students, and intensifying clinical training programs to ensure that they acquire solid and advanced practical experiences that meet the requirements of this delicate specialization.

Upgrading the skills of medical care: establishing academic awareness of the importance of the field, and training students to the highest levels of accuracy and professionalism in dealing with patients, taking into account the extreme medical sensitivity required by cosmetic and therapeutic procedures.

Keeping pace with technological development and professional capabilities development: continuous support for modern and innovative applications in aesthetic and Laser Medicine, and developing the professional potential of students to ensure the provision of safe and effective therapeutic interventions that keep pace with global updates.

This comprehensive plan aims to prepare specialized medical cadres with high academic and professional competence, capable of upgrading the reality of Health and aesthetic services and providing safe care that meets international standards.

Program Skills															
Year/Level	Course Code	Course Title	Primary or Optional	Learning Outcomes Required from the Program											
				Knowledge				Skills				Values			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
1 st	02031101	Human Biology 1	Primary	✓	✓	✓		✓	✓	✓		✓	✓	✓	
	02031102	General chemistry	Primary	✓	✓	✓		✓	✓	✓		✓	✓	✓	
	02031103	Medical physics	Primary	✓	✓	✓		✓	✓	✓		✓	✓	✓	
	02031104	Medical Terminology1	Primary	✓	✓			✓	✓			✓	✓		
	02031105	Human Rights and Democracy	Optional	✓	✓			✓	✓			✓	✓	✓	
	02031106	Computer and Artificial intelligence	Primary	✓	✓	✓		✓	✓	✓		✓	✓	✓	
	02031201	Biology of hair and skin	Primary	✓	✓	✓		✓	✓	✓		✓	✓	✓	
	02031202	Anatomy and histology	Primary	✓	✓	✓		✓	✓	✓		✓	✓	✓	
	02031203	Organic chemistry	Primary	✓	✓	✓		✓	✓	✓		✓	✓	✓	
	02031204	Laser physics	Primary	✓	✓	✓		✓	✓	✓		✓	✓	✓	
	02031205	Medical Terminology2	Primary	✓	✓	✓		✓	✓	✓		✓	✓	✓	
	02031206	Arabic language	Optional	✓	✓			✓	✓			✓	✓	✓	
2 nd	1 st	02032101	physiology	Primary	✓	✓	✓	✓	✓	✓		✓	✓	✓	
		02032102	Pathology	Primary	✓	✓	✓	✓	✓	✓		✓	✓	✓	

2nd

02032103	Laser-physics and application	Primary	✓	✓	✓	✓	✓	✓	✓	✓	✓
02032104	Baath regime Crimes in Iraq	Primary	✓	✓	✓	✓	✓	✓	✓	✓	✓
02032105	Skin care basics and techniques	Primary	✓	✓	✓	✓	✓	✓	✓	✓	✓
02032106	pharmacology	Primary	✓	✓	✓	✓	✓	✓	✓	✓	✓
02032107	Nutrition(1)	Primary	✓	✓		✓	✓		✓	✓	
02032201	Skin care pharmaceuticals	Primary	✓	✓	✓	✓	✓	✓	✓	✓	✓
02032202	Skin ,hair and nail disorders	Primary	✓	✓	✓	✓	✓	✓	✓	✓	✓
02032203	Nutrition (2)	Primary	✓	✓	✓	✓	✓	✓	✓	✓	✓
02032204	Systemic pathology	Primary	✓	✓	✓	✓	✓	✓	✓	✓	✓
02032205	Laser and light based aesthetic technologies	Primary	✓	✓	✓	✓	✓	✓	✓	✓	✓
02032206	Microbiology	Primary	✓	✓	✓	✓	✓	✓	✓	✓	✓
02032207	First aid	Primary	✓	✓	✓	✓	✓	✓	✓	✓	✓
02032208	Arabic language	optional	✓	✓	✓	✓	✓	✓	✓	✓	✓
02032209	Computer and Artificial intelligence	Primary	✓	✓	✓	✓	✓	✓	✓	✓	✓

3rd

4th



Course Description (General Chemistry)

1. Course Title		General Chemistry
2. Course Code		02031102
3. Semester/Year		First semester/2026-2027
4. Description Preparation Date		2026/09/30
5. Available Attendance Form		Attendance in the classroom in addition to e-learning
6. No. of Hours (Total)		4
7. No. of Credits (Total)		4
8. Course Administrator Name		Prof.Dr.Muzahim Alkabban
9. E-mail		-
10. Course Objectives		
Knowledge	A1	Knowing the basics of atoms, elements, and compounds, and studying the states matter (solid, liquid, and gaseous)
	A2	The student should be familiar with how to prepare solutions of different concentrations, in addition to identifying ions and organic materials
	A3	The student learns about acids and bases that are important in detecting different chemical elements
	A4	The practical general chemistry course is concerned with security and safe procedures within the laboratory and how to deal with hazardous materials, acids and bases
Skills	B1	The student should be able to acquire basic knowledge and skills in chemistry
	B2	Teaching the student how to become able to think logically, analyze, and employ the prescribed curriculum vocabulary.
	B3	Developing the student's mental and personal ability in the specialty is an important part of his field of specialization
	B4	Providing the student with communication skills and using modern educational technologies effectively.
Values	C1	The student should be able to work collectively and work individually to solve chemical analysis problems
	C2	The student should be able to use information technology to search for information
	C3	The student should be able to communicate with the professor and colleagues
	C4	The student must be able to rely on himself
11. Teaching and Learning Strategies		

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1.	Providing an appropriate educational climate for logical thinking through continuous guidance of students during lectures	4.	Use the display screen to lecture and the blackboard.
2.	Opening the door for open and direct discussions with students	5.	Visit the library
3.	Follow a cooperative learning strategy	6.	Directing the student to websites to benefit from them

12. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	2	A1, B1	Introduction to analytical chemistry (main structure of atom, periodic table , bonds)	Acquiring information for electronics structure of the atom	Oral questions
2	2	A2, B2, B3, B4, C1, C2, C3, C4	Methods of analysis Solution (preparation of standard solution , concentration, percentage, formal. Sol.	Know the difference between qualitative and quantitative analysis	solving equations
3	2	A2, B2, B3, B4, C1, C2, C3, C4	Molar solution, Normal solution	How to calculate concentration	solving equations
4	2	B2, B3, B4, C1, C2, C3, C4	Statistical treatment of analytical (accuracy, Mean value, deviation, standard deviation mean, value systematic error, relative error , random and absolute error)	Knowledge of some statistical treatments for laboratory results	solving equations
5	2	A2, A3, B2, B3, B4, C1, C2, C3, C4	Chemical reaction (equilibrium constant, reaction rate, catalyst solubility, ionization)	Learn about the types of chemical reactions and how to calculate the equilibrium constant	Written exam
6	2	A2, A3, B2, B3, B4, C1, C2, C3	Neutralization (acid base theory, PH, Buffers end point) Oxidation reduction Equilibria	Identify bases, acids, and buffer solutions	solving equations
7	2	A2, A3, B2, B3, B4, C1, C2, C3, C4	Precipitation methods (gravimetry) formation of ppt., type of agent titration, calculations	Knowledge of sedimentation methods and gravimetric analysis of the sediment	solving equations
8	2	B2, B3, B4, C1, C2, C3, C4	Spectroscopy (Optical spectroscopy, Beer's law)	Know the basics of how to use a spectrophotometer	Discussions
9	2	A2, B2, B3, B4, C1, C2, C3, C4	Structure of carbon compounds (alkanes, alkenes, alkynes, halogen compound)	Identify organic chemistry hydrocarbon compounds	Oral questions and discussions
10	2	A2, B2, B3, B4, C1, C2, C3, C4	Alcohols, classification, properties reaction	Identify alcohols, their preparation methods, and their interactions	Oral questions and discussions

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11, 12	4	A2, B2, B3, B4, C1, C2, C3, C4	Aldehydes and ketones properties reaction	Identify aldehydes and ketones, their preparation methods, their reactions	Oral questions and discussions
13, 14,	6	A2, B2, B3, B4, C1, C2, C3, C4	Carboxyl acid, amines	Identify carboxylic acids, amines, methods of their preparation and reactions	Oral questions and discussions

13. Course Evaluation

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

14. Learning & Teaching Resources

Required textbooks (curricular if any)	
Main References (sources)	Katherine J. Denniston, Danaè R. Quirk, Joseph J. Topping, Robert L. Caret - General, Organic, and Biochemistry- McGraw-Hill(2023)
Recommended Books & References (Scientific Journals, Reports ...)	Spencer L. Seager, Michael R. Slabaugh, Maren S. Hansen - Chemistry for Today_ General, Organic, and Biochemistry- Cengage Learning(2021)
Websites or Electronic References	https://www.sciencedirect.com/ https://pubmed.ncbi.nlm.nih.gov/

Course Description (Medical Terminology1)

1. Course Title		Medical Terminology 1	
2. Course Code		02031104	
3. Semester/Year		2026-2027	
4. Description Preparation Date		27/9/2026	
5. Available Attendance Form		Students' attendance	
6. No. of Hours (Total)		30 Hours	
7. No. of Credits (Total)		2	
8. Course Administrator Name		Prof. Dr. Ghaith Ali Jasem	
9. E-mail		ghaith.a@albayan.edu.iq	
10. Course Objectives			
Knowledge	A1	Introducing medical terminology concept to students	
	A2	Knowing how medical terms is formed	
	A3	Understanding of the formulation of medical terms	
	A4	Fluency in describing patient's conditions	
Skills	B1	build medical linguistic skills	
	B2	Standardize documentation	
	B3	Improve communication skills with medical staff	
	B4	Ability to describe health status with patient in the common language	
Values	C1	Promoting accuracy, safety, and efficacy in patient's care	
	C2	Providing patient's with treatment plan with same common goals	
	C3		
	C4		
11. Teaching and Learning Strategies			
1.	Lecture based instructions	4.	Inquiry based instruction
2.	Technology based learning	5.	Summative learning
3.	Cooperative learning	6.	Differentiation

12. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	2		Introduction to anatomy, body	Student attendance	quiz
2	2		organizations, & anatomical positions	Student attendance	quiz
3	2		Body regions, cavities, planes	Student attendance	Quiz
4	2		Directional terms, tissues, a membranes	Student attendance	Quiz
5	2		Cardiovascular system	Student attendance	Quiz
6	2		Digestive system	Student attendance	Quiz
7	2		Musculo-skeletal system	Student attendance	Quiz
8	2		Endocrine system	Student attendance	quiz
9	2		Respiratory system	Student attendance	Quiz
10	2		Urinary system	Student attendance	Quiz
11	2		Abdomen	Student attendance	Quiz
12	2		Blood	Student attendance	Quiz
13	2		Immune system	Student attendance	Quiz
14	2		Head & Neck	Student attendance	Quiz
15	2		Reproductive system	Student attendance	Quiz

13. Course Evaluation

توزيع الدرجة من 100 على وفق المهام المكلف بها الطالب مثل التحضير اليومي والامتحانات اليومية والشفوية والشهرية والتحريرية والتقارير الخ

14. Learning & Teaching Resources

Required textbooks (curricular if any)	Collins, C. Edward: A Short Course in Medical
Main References (sources)	Collins, C. Edward: A Short Course in Medical
Recommended Books & References (Scientific Journals, Reports ...)	Collins, C. Edward: A Short Course in Medical
Websites or Electronic References	

Course Description (Computer and Artificial intelligence)

1. Course Title			Computer and Artificial intelligence		
2. Course Code			02031106		
3. Semester/Year			1 st semester / 2026-2027		
4. Description Preparation Date			29/9/2026		
5. Available Attendance Form			On-Site		
6. No. of Hours (Total)			60 hours		
7. No. of Credits (Total)			3		
8. Course Administrator Name			Asst. Lect. Mustafa Mohammed Hammoodi		
9. E-mail			tuhafi.1989@gmail.com		
10. Course Objectives					
Knowledge	A1	Computer System Operation			
	A2	Windows Operating System			
	A3				
	A4				
Skills	B1	Working on Windows Operating System			
	B2				
	B3				
	B4				
Values	C1	Computer System Importance			
	C2				
	C3				
	C4				
11. Teaching and Learning Strategies					
1.	Interactive Lecture			4.	Documented Lecture
2.	Practical Demonstration			5.	Questionnaire Bank
3.	Practical Practice			6.	

12. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	4	Projector Slides	Computer System Basics	Visual, Auditory, and Kinesthetic	Summative
2	4	Projector Slides	Starting Windows	Visual, Auditory, and Kinesthetic	Summative
3	4	Projector Slides	Applications Windows	Visual, Auditory, and Kinesthetic	Summative
4	4	Projector Slides	Desktop and Taskbar	Visual, Auditory, and Kinesthetic	Summative
5	4	Projector Slides	Computing Sessions	Visual, Auditory, and Kinesthetic	Summative
6	4	Projector Slides	Applications Shortcuts	Visual, Auditory, and Kinesthetic	Summative
7	4	Projector Slides	Desktop Icons	Visual, Auditory, and Kinesthetic	Summative
8	4	Projector Slides	File System	Visual, Auditory, and Kinesthetic	Summative
9	4	Projector Slides	Files and Folders	Visual, Auditory, and Kinesthetic	Summative
10	4	Projector Slides	File Explorer	Visual, Auditory, and Kinesthetic	Summative
11	4	Projector Slides	Accounts and Permissions	Visual, Auditory, and Kinesthetic	Summative
12	4	Projector Slides	Date and Time	Visual, Auditory, and Kinesthetic	Summative
13	4	Projector Slides	Region and Language	Visual, Auditory, and Kinesthetic	Summative
14	4	Projector Slides	System Restore	Visual, Auditory, and Kinesthetic	Summative
15	4	Projector Slides	System Backup	Visual, Auditory, and Kinesthetic	Summative

13. Course Evaluation

60% Theoretical
40% Practical (Lab.)

14. Learning & Teaching Resources

Required textbooks (curricular if any)	
Main References (sources)	Joan Lambert, Windows 10 Step by Step, 2 nd edition, Microsoft Corp.
Recommended Books & References (Scientific Journals, Reports ...)	Andy Rathbone, Windows 10 For Dummies
Websites or Electronic References	www.microsoft.com

Course Description (Biology of hair and skin)

1. Course Title		Biology of hair and skin	
2. Course Code		02031201	
3. Semester/Year		2026-2027	
4. Description Preparation Date		27/9/2026	
5. Available Attendance Form		Students' attendance	
6. No. of Hours (Total)		60+45	
7. No. of Credits (Total)		4	
8. Course Administrator Name		Prof.Dr.Abdul Sattar Jabbar Taha	
9. E-mail		Abdulsattar.j@albayan.edu.iq	
10. Course Objectives			
Knowledge	A1	Develop a Strong Foundation in Skin and Hair Biology	
	A2	Enhance Patient Care and Professional Competency	
	A3	Ensure Safety and Efficacy in Laser and Cosmetic Procedures	
	A4	Prepare for a Successful Career in Cosmetic and Laser Technology	
Skills	B1	Master Skin and Hair Anatomy and Physiology	
	B2	Identify and Manage Common Skin and Hair Disorders	
	B3	Apply Knowledge of Cosmetic Ingredients and Their Effects	
	B4	Safely Perform Microdermabrasion, Chemical Peels, and Laser Treatments	
Values	C1	Develop Proficiency in Laser and Light-Based Hair Removal Techniques	
	C2	Implement Safety Standards and Professional Protocols	
	C3	Conduct Effective Patient Consultations and Treatment Planning	
	C4		
11. Teaching and Learning Strategies			
1.	Lecture based instructions	4.	Inquiry based instruction
2.	Technology based learning	5.	Summative learning
3.	Cooperative learning	6.	Differentiation

12. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	2		Week 1: Layers of the Skin	Student attendance	quiz
2	2		Week 2: Skin Cells and Their Functions	Student attendance	quiz
3	2		Week 3: Skin Proteins and Molecules	Student attendance	Quiz
4	2		Week 4: Introduction to Hair Structure	Student attendance	Quiz
5	2		Week 5: Components of the Hair Shaft	Student attendance	Quiz
6	2		Week 6: Hair Growth Cycle	Student attendance	Quiz
7	2		Week 7: Skin Barrier Function	Student attendance	Quiz
8	2		Week 8: Skin Hydration Transepidermal Water Loss	Student attendance	quiz
9	2		Week 9: Aging in Skin and Hair	Student attendance	Quiz
10	2		Week 10: Chronological Aging Hormonal Effects on Hair	Student attendance	Quiz
11	2		Week 11: Skin Types	Student attendance	Quiz
12	2		Week 12: Common Skin Conditions	Student attendance	Quiz
13	2		Week 13: Hair Conditions	Student attendance	Quiz
14	2		14: Hair Disorders and Irregularities	Student attendance	Quiz
15	2		Week 15: Nutrition and Skin/Hair Heal	Student attendance	Quiz

13. Course Evaluation

توزيع الدرجة من 100 على وفق المهام المكلف بها الطالب مثل التحضير اليومي والامتحانات اليومية والشفوية والشهرية والتحريرية والتقارير الخ

14. Learning & Teaching Resources

Required textbooks (curricular if any)	Collins, C. Edward: A Short Course in Medical
Main References (sources)	Collins, C. Edward: A Short Course in Medical
Recommended Books & References (Scientific Journals, Reports ...)	Collins, C. Edward: A Short Course in Medical
Websites or Electronic References	

Course Description (Anatomy and Histology)

Course Title .1			Anatomy and Histology		
Course Code .2			02031202		
Semester/Year .3			2026-2027		
Description Preparation Date .4			27/9/2026		
Available Attendance Form .5			Students' attendance system		
No. of Hours (Total) .6			60		
No. of Credits (Total) .7			4		
Course Administrator Name .8			Prof.Dr.Bahaa Faghre Hussien		
E-mail .9			=		
Course Objectives .10					
Knowledge	A1	understanding of human anatomy at the macroscopic level			
	A2	Acquire knowledge of systems-based and regional anatomy			
	A3	Explain structures of body organs			
	A4	Define the basic anatomical characteristics of the kidney and renal system			
Skills	B1	Gain familiarity to human body and organs			
	B2	Apply medical terminology knowledge			
	B3	Train the eye on surface anatomy			
	B4	Build a base for clinical examination and basic interventions skills			
Values	C1	Pave the way for students to involve with patients			
	C2	Appreciate human live, health and wellbeing in a scientific way			
	C3	Provide the bases for future dialysis therapeutic practices			
	C4	Professional interaction with staff and colleges			
Teaching and Learning Strategies .11					
1.	Lecture based instructions		4.	Differentiation	
2.	Technology based learning		5.	Inquiry based instruction	
3.	Cooperative learning		6.	Summative learning	

The Structure of the Course .12

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	2		Introduction to anatomy, body organizations, & anatomical positions	Students attendance	Quiz
2	2		body regions, cavities, planes and sections	Students attendance	Quiz
3	2		Directional terms, tissues and membranes	Students attendance	Quiz
4	2		Upper limb	Students attendance	Group task
5	2		Lower limb	Students attendance	Quiz
6	2		Thorax	Students attendance	Quiz
7	2		Abdomen	Students attendance	Quiz
8	2		Pelvis	Students attendance	Group task
9	2		Head & Neck	Students attendance	Quiz
10	2		Musculo-skeletal system	Students attendance	Quiz
11	2		Digestive system	Students attendance	Quiz
12	2		Cardiovascular system	Students attendance	Group task
13	2		Respiratory system	Students attendance	Quiz
14	2		Urinary system	Students attendance	Quiz
15	2		Reproductive system	Students attendance	Quiz

Course Evaluation 13

توزيع الدرجة من 100 على وفق المهام المكلف بها الطالب مثل التحضير اليومي والامتحانات اليومية والشفوية والشهرية والتحريرية والتقارير الخ

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Required textbooks (curricular if any)	Snell's clinical anatomy
Main References (sources)	Snell's clinical anatomy, Gray's Anatomy
Recommended Books & References (Scientific Journals, Reports ...)	Snell's clinical anatomy, Moor's essential clinical anatomy
Websites or Electronic References	http://teachmeanatomy.info

Course Description (Organic Chemistry)

1. Course Title		Organic Chemistry
2. Course Code		02031203
3. Semester/Year		Semester
4. Description Preparation Date		2026\9\30
5. Available Attendance Form		Official attendance time (morning and Evening).
6. No. of Hours (Total)		30 hours for the theoretical aspect and 30 hours for the practical aspect
7. No. of Credits (Total)		4 units
8. Course Administrator Name		Prof.Dr.Muzahim Alkabban
9. E-mail		
10. Course Objectives		
Knowledge	A1	Teaching students basic scientific concepts of Biochemistry topics with focus on clinical chemistry and metabolisms.
	A2	Studying biochemistry, metabolisms in illness and recovery
	A3	Teaching metabolisms and obesity and stress and exercises.
	A4	Teaching biochemistry of nutrition's and dietary.
Skills	B1	Scientific discussion
	B2	Weekly exams
	B3	Monthly tests
	B4	Practical examinations
Values	C1	Participation in the classroom
	C2	Provide activities

	C3	Semester and final tests and activities	
	C4	Self-learning, discussion panels	
11. Teaching and Learning Strategies			
1.	Active participation in the classroom is evidence of the student's commitment and responsibility		4. Developing the student's ability to deal with multiple tasks.
2.	Adherence to the specified deadline for submitting assignments and research.		5. Active participation in the classroom is evidence of the student's commitment and responsibility
3.	Semester and final exams express commitment and cognitive and theoretical understanding.		6. Developing the student's ability to deal with technical means

12. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	2 theory 2 practi.	The way out in theory The way out in practice	-Introduction to Biochemistry -Specimen Collection [blood, urine, CSF]	Presence presence	Daily, monthly and annual written exam
2	2 theory 2 practi.	The way out in theory The way out in practice	-General Metabolisms -Specimen Collection [blood, urine, CSF]	presence	Daily, monthly and annual written exam
3	2 theory 2 practi.	The way out in theory The way out in practice	-Metabolisms in illness, recovery -Specimen Transport and Specimen Processing	presence	Daily, monthly and annual written exam
4	2 theory 2 practi.	The way out in theory The way out in practice	-Nutrition biochemistry, dietary -Specimen Transport and Specimen Processing	presence	Daily, monthly and annual written exam
5	2 theory 2 practi.	The way out in theory The way out in practice	-Biochemistry, prevention medicine -Blood collection techniques, Anticoagulant, Separation of serum	presence	Daily, monthly and annual written exam
6	2 theory 2 practi.	The way out in theory The way out in practice	-Biochemical bases in disease -Principle of instrumentation [photometer, colorimetry and spectrophotometry]	presence	Daily, monthly and annual written exam
7	2	The way out in theory	-Biochemistry at water pH	presence	Daily, monthly and

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	theory 2 practi.	The way out in practice	-Carbohydrates tests		annual written exam
8	2 theory 2 practi.	The way out in theory The way out in practice	-Review and exam -Molish test, Iodin test, Benedicts test and Barfoed test	presence	Daily, monthly and annual written exam
9	2 theory 2 practi.	The way out in theory The way out in practice	-Biochemistry and electrolytes -Seliwanoffs test, Osazone test, Athrone and Dinitrosalicylic acid method	presence	Daily, monthly and annual written exam
10	2 theory 2 practi.	The way out in theory The way out in practice	-Metabolism of carbohydrates -Roes method, Fehling test, Somogyi-Nelson method and Mucic acid test	presence	Daily, monthly and annual written exam
11	2 theory 2 practi.	The way out in theory The way out in practice	-Metabolisms pathways -Amino acid tests	presence	Daily, monthly and annual written exam
12	2 theory 2 practi.	The way out in theory The way out in practice	-ATP synthesis -Ninhydrin test, Isatin test and Xanthoprotic test	presence	Daily, monthly and annual written exam
13	2 theory 2 practi.	The way out in theory The way out in practice	-Lipids biosynthesis -Paulys diazo test, Sakaguchi test Millon test	presence	Daily, monthly and annual written exam
14	2 theory 2 practi.	The way out in theory The way out in practice	-Lipids oxidations -Paulys diazo test, Sakaguchi test Millon test	presence	Daily, monthly and annual written exam
15	2 theory 2 practi.	The way out in theory The way out in practice	-Metabolisms of glycerol -Hopkins-Cole test, Lead acetate test	presence	Daily, monthly and annual written exam

13. Course Evaluation

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

14. Learning & Teaching Resources

Required textbooks (curricular if any)	General biochemistry Geoffrey Beckett Text book of biochemistry, 2016
Main References (sources)	Articles
Recommended Books & References (Scientific Journals, Reports ...)	Hepers illustrated. Biochemistry, medical book.
Websites or Electronic References	Wikipedia, research gate, google scholar, and many

Course Description (Laser Physics)

1. Course Title		Laser Physics	
2. Course Code		02031204	
3. Semester/Year		2026-2027	
4. Description Preparation Date		27/9/2026	
5. Available Attendance Form		Students' attendance	
6. No. of Hours (Total)		60h+45h	
7. No. of Credits (Total)		4	
8. Course Administrator Name		Asiss.Lec.Ali Aqel	
9. E-mail		-	
10. Course Objectives			
Knowledge	A1	The student will be able to learn about the importance of lasers in physics	
	A2	The student will be able to apply laser-based devices	
	A3	The student will be able to learn the mechanics of working on lasers in physics	
	A4	The student will be able to identify the importance and sensitivity of the tools used in these techniques	
Skills	B1	Work on different devices	
	B2	Mastering the laser profession after recognizing the physical importance of it	
	B3	Identify the contents of laser devices	
	B4	Getting to know the applications of laser devices	
Values	C1	Studying on the device itself	
	C2	The study on the body	
	C3	Study of the physical relationship with lasers	
	C4	The study of cell divisions	
11. Teaching and Learning Strategies			
1.	Lecture based instructions	4.	Inquiry based instruction
2.	Technology based learning	5.	Summative learning
3.	Cooperative learning	6.	Differentiation

12. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	2		Electromagnetic Radiation, Electromagnetic Radiation in Matter. Electromagnetic Radiation in vacuum	Student attendance	quiz
2	2		Refraction of Light Beam - Snell Law:	Student attendance	quiz
3	2		Properties of Laser Radiation, Monochromaticity. Directionality Coherence,.	Student attendance	Quiz
4	2		low divergent angle ,brightness	Student attendance	Quiz
5	2		Lasing processes, Bohr model of atom, Photons and the energy diagrams,	Student attendance	Quiz
6	2		Absorption of electromagnetic Radiation Spontaneous emission electromagnetic Radiation,	Student attendance	Quiz
7	2		Decay Rate, Population Thermodynamic Equilibrium Population Inversion, Stimulated Emission , Amplification	Student attendance	Quiz
8	2		Three Level Laser, Four Level Laser	Student attendance	quiz
9	2			Student attendance	Quiz

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			The Laser System, The laser act medium: The excitation mechanism Collisions with atoms, Feedback Mechanism, Output Coupler		
10	2		Operation of a Laser System Interactive Applets: Laser G Fluorescence line shape of the las Fluorescence Linewidth,	Student attendance	Quiz
11	2		Laser Gain Curve Broadening Fluorescence line, Loop G Calculating Loop Gain (G_L) With Losses, Calculating Loop Gain (G_L) With Losses,	Student attendance	Quiz
12	2		Calculating Gain Threshold (G_L) Saturation Gain in a Continu Wave Laser, Pulsed Laser	Student attendance	Quiz
13	2		Different Laser Types and th Characteristics, Gas Lasers, Excitat of a gas laser , Groups of Gas Las Controlling the laser radiat properties, Some Common La Resonators. Selective coating the cavity mirrors	Student attendance	Quiz
14	2		Controlling the laser radiation properties, Some Common Laser Resonators. Selective coating on the cav mirrors	Student attendance	Quiz
15	2		The second course exam	Student attendance	Quiz

13. Course Evaluation

توزيع الدرجة من 100 على وفق المهام المكلف بها الطالب مثل التحضير اليومي والامتحانات اليومية والشفوية والشهرية والتحريرية والتقارير الخ

14. Learning & Teaching Resources

Required textbooks (curricular if any)	Collins, C. Edward: A Short Course in Medical
Main References (sources)	Collins, C. Edward: A Short Course in Medical
Recommended Books & References (Scientific Journals, Reports ...)	Collins, C. Edward: A Short Course in Medical
Websites or Electronic References	