

**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

2025– 2026

Introduction:

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

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

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

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

Concepts and terminology:

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

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

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

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

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

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

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

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

Academic Program Description Form

Institute name: Al-Turath University

Scientific Department: Department of Aesthetic and Laser Techniques

Academic or Professional Program Name: Bachelor in Aesthetic and Laser Techniques

Final Certificate Name: Bachelor in Aesthetic and Laser Techniques

Academic System: Course- Based

Description Preparation Date: 1\10\2025

File Completion Date: 12\2\2026

Signature: 

Head of Department

Name: Dr. Shahad Abdul Wahhab

Date: 1/3/2026

Signature: 

Scientific Associate

Name: Dr. Sanan Thaer

Date: 1/3/2026

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date: 22/8/2026 Dr. Mohammed Anwar Abbod

Signature: 



Approval of the Dean

1. Program Vision

The Department of Aesthetic and Laser Technologies aims to qualify and prepare specialized technical personnel equipped with solid scientific knowledge and advanced practical skills in the field of Aesthetic and laser technologies. These professionals are capable of keeping pace with modern scientific and technological advancements, while enhancing their analytical and precise diagnostic capabilities.

Furthermore, the department is committed to instilling professional values and work ethics, as well as fostering scientific research skills in cosmetic and laser technologies. This ensures supplying the local and regional labor markets with experts capable of providing safe, high-quality healthcare and cosmetic services, while staying aligned with global developments in non-surgical Aesthetic.

2. Program Mission

The mission of the academic program in the Department of Aesthetic and Laser Technologies aims to prepare highly qualified laser cosmetic specialists who possess the competence, knowledge, and skills required to work in various healthcare institutions across both the public and private sectors. Furthermore, the program strives to develop students' abilities in enhancing the safe and effective use of laser technologies in cosmetic applications, support scientific research in the field of cosmetic and laser technologies and their applications, and serve the community by delivering educational and training programs that contribute to improving the competence of healthcare personnel and meeting the needs of the labor market.

3. Program Objectives

1. Providing students with comprehensive, high-quality scientific knowledge in

the field of laser cosmetic technologies.

2. Enabling students to understand the nature of light and lasers, their hazards, and their mechanisms of action on human tissue.
3. Introducing students to the fundamentals of anatomy, histology, biochemistry, and dermatology relevant to cosmetic laser applications.
4. Training students on the optimal use of advanced laser techniques and devices in the cosmetic field.
5. Enabling students to accurately and safely select the appropriate type of laser for each cosmetic case.
6. Developing students' skills in handling examinations, modern technologies, documentation, and professional communication.
7. Instilling awareness in students that working in laser cosmetics is primarily a humanitarian endeavor, rather than a purely commercial profession.
8. Fostering a spirit of social responsibility and commitment to professional ethics and patient safety.
9. Encouraging student creativity, innovation, lifelong learning, and participation in scientific conferences and seminars.
10. Preparing technical personnel capable of working in public and private healthcare institutions, as well as specialized cosmetic centers.

4. Program Accreditation

Not Available

5. Other external influences

1. Ministry of Higher Education regulations, academic accreditation standards,

and National Qualifications Framework requirements.

2. Programmatic alignment requirements with peer colleges, as well as scientific and academic exchange.
3. Actual needs of cosmetic centers and hospitals, and the required professional competencies for graduates.
4. Continuous updates in laser devices, non-surgical cosmetic techniques, and modern calibration systems.
5. Ministry of Health limitations for professional practice, and safety protocols against radiation and optical hazards.

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	8	17	16.33%	
College Requirements	8	17	16.33%	
Department Requirements	49	158	100%	
Summer Training				Two months
Other				

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

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
First Year-Cours1			theoretical	practical
	UT-ALT-111	General Chemistry	2	4
	UT-ALT-112	Human Biology	2	4
	UT-ALT-113	Medical Physics	2	4

	UT-ALT-114	Medical Terminology I	2	–
	UT-ALT-115	Human Rights and Democracy	2	–
	UT-ALT-116	Computer Principles and Artificial Intelligence	2	2
First Year-Cours2				
	UT-ALT-121	Organic Chemistry	2	4
	UT-ALT-122	Anatomy and Histology	2	4
	UT-ALT-123	Biology of Skin and Hair	2	4
	UT-ALT-124	Laser Physics	2	4
	UT-ALT-125	Medical Terminology II	2	–
	UT-ALT126	Arabic Language	2	–

8. Expected learning outcomes of the program

Knowledge

1. Equip students with comprehensive scientific knowledge in the field of cosmetic and laser technologies, delivered with high quality to meet the demands of modernity and contemporary advancements.
2. Develop the ability to apply acquired scientific knowledge in laser Aesthetic, ensuring ongoing intellectual engagement and benefiting from emerging innovations.
3. Prepare highly competent professionals specialized in laser Aesthetic who can actively contribute to building a knowledge-based society and achieving national development goals by fostering an optimal academic environment that promotes knowledge, research, innovation, and development.
4. Enable interaction with real-world applications within public and private educational institutions through the integration of required technologies, skills, seminars, and modern tools necessary for professional practice.

Skills

1. Training on the optimal use of modern technologies.
2. Ability to properly handle various types of examinations.
3. Thorough comprehension of course contents and curricula

Ethics

1. The student should actively engage during lectures.
2. The student should listen attentively to explanations.
3. The student should participate and contribute to extracurricular activities.

- | | |
|--|--|
| | <ol style="list-style-type: none"> 4. The student should learn to act professionally. 5. The student should develop human communication skills |
|--|--|

9. Teaching and Learning Strategies

1. Theoretical lectures that include the fundamental principles and intended learning objectives for each part of the curriculum.
2. Formation of small study groups to facilitate comprehensive and in-depth discussions.
3. Administration of daily quizzes and provision of comprehensive sets of questions for each section of the curriculum.

10. Evaluation methods

- 1– Preparation of a seminar research project (graduation thesis).
- 2– Adoption of a grading-based system as a foundation for assessment.
- 3– Use of written examinations as an evaluation method.
- 4– Implementation of discussions and dialogues between students and the instructor as part of the assessment.
- 5– Creation of testing activities within virtual classrooms.

Professional Development

Mentoring new faculty members

1. Empowering and motivating new teaching staff to build the academic and professional identity of the Department of Laser and Aesthetic Technologies, as a promising and newly established specialty that bridges medical sciences with modern aesthetic technology.
2. Guided mentorship by experienced faculty members to seamlessly transfer

expertise and provide direct support, facilitating the integration of new staff into the academic and research environment.

3. Organizing interactive workshops and advanced training courses focused on refining teaching skills and managing modern educational environments.
4. Adopting periodic meetings and follow-ups by the department head as a tool for support, recognizing achievements, and overcoming obstacles, while monitoring completion rates as a metric to measure continuous success and academic excellence.

Professional development of faculty members

1. Providing full opportunity for faculty members to lead and organize specialized seminars, training courses, and panel discussions on the latest laser and skincare applications, highlighting their scientific contributions.
2. Activating partnership and twinning agreements with corresponding departments in public universities and research institutions, providing faculty members with opportunities to participate in joint research, exchange academic expertise, and update curricula.
3. Motivating faculty members to periodically update course syllabi by integrating the latest research published in accredited international journals and modern reference books, fulfilling the academic program specifications and keeping pace with the evolving demands of the labor market.

11. Acceptance Criterion

Students are admitted to the college through centralized admission, in accordance with the requirements of the Ministry of Higher Education and Scientific Research.

12. The most important sources of information about the program

1. Approved curricula and textbooks
2. Specialized scientific periodicals and journals
3. Graduate feedback and surveys
4. Employer surveys, reports, and evaluations from hospitals, cosmetic medical centers, and dermatology clinics regarding graduate performance
5. Higher education regulations, quality standards, and program academic accreditation
6. Ministry of Health and occupational safety guidelines, including radiation and optical safety requirements
7. Field observations from teaching staff and trainers within laboratories and hospitals
8. Standards and international supplier companies for modern technologies

13. Program Development Plan

- Periodically distributing performance measurement questionnaires (mid-term and end-of-semester) to measure the level of acquired cognitive and practical skills in the safe handling of laser devices, skin care techniques, and the adjustment of safety standards and optical/thermal dosage parameters.
- Linking and evaluating questionnaire results against the program's intended Learning Outcomes matrix (PLOs) to identify areas requiring enhancement or development compared to the minimum required academic quality standards.
- Measuring student satisfaction levels regarding the educational environment, equipment in aesthetic and laser laboratories, and the clarity of theoretical and practical assessment criteria.
- Coordinating and benchmarking with corresponding departments in prestigious and public universities to review course content and curricula, keeping pace with modern developments (such as the latest aesthetic laser applications, phototherapy, and artificial intelligence in skin problem analysis and classification).
- Holding periodic sessions (in-person and remotely) with academic staff at partner universities to exchange expertise in modern teaching and evaluation strategies (such as direct practical and skill-based examinations).
- Leveraging the experiences of corresponding departments to prepare and update the academic program specification file in line with national and international program accreditation standards.
- Enhancing the practical aspect by increasing the proportion of training and field hours, in

cooperation with specialized aesthetic centers and hospitals, to train on various techniques (laser devices of all types, skin peeling and treatment equipment, non-surgical cosmetic injections, and comprehensive care).

- Engaging students in direct practical and field applications from early academic stages to enhance professional readiness and integration into the labor market.
- Utilizing digital simulation software and interactive applications to train students on adjusting laser device parameters and settings, analyzing skin types, and managing various cases accurately without direct practical risks to patients/clients.
- Adopting a continuous professional and clinical evaluation system within an environment simulating real-world working conditions (such as Objective Structured Clinical/Practical Examinations - OSCE), ensuring the efficiency and readiness of graduates before graduation and entry into the labor market.

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First Year-Cours1															
	UT-ALT-111	General Chemistry		/	/	/	/	/	/	/	/	/	/	/	/
	UT-ALT-112	Human Biology		/	/	/	/	/	/	/	/	/	/	/	/
	UT-ALT-113	Medical Physics		/	/	/	/	/	/	/	/	/	/	/	/
	UT-ALT-114	Medical Terminology I		/	/	/	/	/	/	/	/	/	/	/	/
	UT-ALT-115	Human Rights and Democracy		/	/	/	/	/	/	/	/	/	/	/	/
	UT-ALT-116	Computer Principles and Artificial Intelligence		/	/	/	/	/	/	/	/	/	/	/	/
First Year-Cours2															

	UT-ALT-121	Organic Chemistry		/	/	/	/	/	/	/	/	/	/	/	/
	UT-ALT-122	Anatomy and Histology		/	/	/	/	/	/	/	/	/	/	/	/
	UT-ALT-123	Biology of Skin and Hair		/	/	/	/	/	/	/	/	/	/	/	/
	UT-ALT-124	Laser Physics		/	/	/	/	/	/	/	/	/	/	/	/
	UT-ALT-125	Medical Terminology II		/	/	/	/	/	/	/	/	/	/	/	/
	UT-ALT126	Arabic Language		/	/	/	/	/	/	/	/	/	/	/	/

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

1. Course Name:	
General Chemistry	
2. Course Code:	
UT-ALT-111	
3. Semester / Year:	
first year – first semester– 2025–2026	
4. Description Preparation Date:	
25-12-2025	
5. Available Attendance Forms:	
Attendance of classrooms and laboratories	
6. Number of Credit Hours (Total) / Number of Units (Total)	
6hours weekly\4units	
7. Course administrator's name (mention all, if more than one name)	
Name: Dina Aaid Ahmed Email: Dr.Dina@ yahoo.com	
8. Course Objectives	
Course Objectives:	–Understanding the components of the atom (protons, neutrons, and electrons). –Studying the periodic table and understanding electron configuration and how elements are arranged based on their physical and chemical properties. –Learning about chemical bonds (ionic, covalent, and metallic) and how molecules are formed. –Being able to write and balance chemical equations. –Calculating the number of moles, molar mass, and percentages of components in a compound. –Identifying the limiting reactant and calculating the percentage yield of reactions
9. Teaching and Learning Strategies	
Strategy	• Peer teaching: Dividing students into groups to solve complex chemical calculation problems, with each student explaining to their peer, thus enhancing mutual understanding. • Concept mapping: Connecting concepts, such as linking electron configuration to element's position in the periodic table and then to the type of bonds it forms. • Computer simulations: Using interactive software to visualize the movement of

	gas molecules under changes in pressure or temperature, which is difficult to observe in a traditional laboratory setting.				
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6	Knowledge, understanding, and skills	Introduction Measurement and Units	Theoretical. Practical. Lecture. Lab.	Written test Oral test Assignment Report Laboratory test
2	6	Atoms and molecules	Introduction Measurement and Units	Theoretical. Practical. Lecture. Lab.	Written test Oral test Assignment Report Laboratory test
3	6	Chemical calculations	Introduction Measurement and Units	Theoretical. Practical. Lecture. Lab.	Written test Oral test Assignment Report Laboratory test
4	6	Chemical calculations	Introduction Measurement and Units	Theoretical. Practical. Lecture. Lab.	Written test Oral test Assignment Report Laboratory test
5	6	Reactions solutions	Introduction Measurement and Units	Theoretical. Practical. Lecture. Lab.	Written test Oral test Assignment Report Laboratory test
6	6	Oxidation–reducti	Introduction	Theoretical.	Written test

		reactions	Measurement and Units	Practical. Lecture. Lab.	Oral test Assignment Report Laboratory test
7	6	Ggases	Introduction Measurement and Units	Theoretical. Practical. Lecture. Lab.	Written test Oral test Assignment Report Laboratory test
8	6	Thermochemistry	Introduction Measurement and Units	Theoretical. Practical. Lecture. Lab.	Written test Oral test Assignment Report Laboratory test
9	6	The electro structure of atoms	Introduction Measurement and Units	Theoretical. Practical. Lecture. Lab.	Written test Oral test Assignment Report Laboratory test
10	6	Periodicity in ato properties	Introduction Measurement and Units	Theoretical. Practical. Lecture. Lab.	Written test Oral test Assignment Report Laboratory test
11	6	Chemical bonds	Introduction Measurement and Units	Theoretical. Practical. Lecture. Lab.	Written test Oral test Assignment Report Laboratory test
12	6	Chemical bonds	Introduction Measurement and Units	Theoretical. Practical. Lecture. Lab.	Written test Oral test Assignment Report

					Laboratory test
13	6	Interstitial forces and conditions	Introduction Measurement and Units	Theoretical. Practical. Lecture. Lab.	Written test Oral test Assignment Report Laboratory test
14	6	Rate of reaction and chemical equilibrium (Introduction)	Introduction Measurement and Units	Theoretical. Practical. Lecture. Lab.	Written test Oral test Assignment Report Laboratory test
15	6	Comprehensive review and evaluation	Introduction Measurement and Units	Theoretical. Practical. Lecture. Lab.	Written test Oral test Assignment Report Laboratory test

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

Type of assessment	Assessment details	Degree
Annual effort 40 degrees	Theoretical midterm exam: 15 Practical midterm exam: 15 Quizzes: 5 Attendance and reports: 5	40
Final exam	Theoretical exam 35 Practical exam 25	60
Total	The Quest + Final	100

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Lehninger Principles of Biochemistry
Main references (sources)	Fundamentals of Analytical Chemistry

Recommended books and references (scientific journals, reports...)	Scientific journals
Electronic References, Websites	Internet sites

1. Course Name:	
Human Biology	
2. Course Code:	
UT-ALT-111	
3. Semester / Year:	
first year – first semester– 2025–2026	
4. Description Preparation Date:	
28\3\2026	
5. Available Attendance Forms:	
Attendance of classrooms and laboratories	
6. Number of Credit Hours (Total) / Number of Units	
6hours weekly\4units	
7. Course administrator's name (mention all, if more than one name)	
Name: dr.sabreen O. jabr Email:sosdr90@gmail.com	
8. Course Objectives	
Course Objectives	1. Studying cells, their components, and living tissues helps in understanding how organisms' function, starting from the simplest forms of life to complex beings such as humans. 2. The study of biology enhances students' ability to think critically and analyze scientifically through exploring natural phenomena, observation, and experimentation. 3. Understanding the vast diversity among living organisms in terms of cells, tissues, and vital systems, and recognizing the distinctions between animals and plants, increases students' appreciation of nature and the environment. 4. Learning about cells, tissues, blood, and the immune system (white blood cells and lymph) helps students understand how the human body functions in health and disease, contributing to medical and therapeutic applications. 5. The knowledge gained from studying biology can be applied in fields such as medicine, agriculture, environmental science, and biotechnology.
9. Teaching and Learning Strategies	
Strategy	1–Engaging students in practical activities such as analyzing samples or studying medical cases. 2–Dividing students into small groups to solve problems or prepare reports.

3–Presenting a real-life problem (such as a medical case) for students to analyze and propose solutions.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Understand the lecture	Introduction to biology, the cell, Prokaryotic and Eukaryotic cells Animal and Plant cell	Lecture	Quiz presence
2–3	2	Understand the lecture	The structure of cells, types, shape & size	Lecture	Quiz presence
4–5	2	Understand the lecture	Movement in & out of cells	Lecture	Quiz presence
6	2	Understand the lecture	Cell division	Lecture	Quiz presence
7–8	2	Understand the lecture	Nucleic acid, DNA & RNA DNA replication	Lecture	Quiz presence
9	2	Understand the lecture	Protein biosynthesis	Lecture	Quiz presence
10–11	2	Understand the lecture	Human body tissues Epithelial tissues	Lecture	Quiz presence
12	2	Understand the lecture	Muscular & nervous tissues	Lecture	Quiz presence
13	2	Understand the lecture	Connective tissues	Lecture	Quiz presence
14	2	Understand the lecture	Bone & cartilage	Lecture	Quiz presence
15	2	Understand the lecture	Blood & lymph	Lecture	Quiz presence

11. Course Evaluation

Activity and attendance: 10 marks

Midterm Practical: 10 marks

Midterm Theoretical: 20 marks

Coursework (Continuous Assessment): 40 marks

Final Theoretical Exam: 35 marks

Final Practical Exam: 25 marks

Final Exam (Total): 60 marks

Overall Final Grade: 100 marks

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Human biology by Martin B. Ziegler
Main references (sources)	Human Biology by Michael D. Johnso
Recommended books and references (scientific journals, reports...)	Human Biology by Sylvia S. Mader Netter's Atlas of Human Anatomy Journal of Human Biology
Electronic References, Websites	Wikipedia, PubMed

1. Course Name:					
Medical and Biophysics					
2. Course Code:					
UT-ALT-113					
3. Semester / Year:					
first year – first semester– 2025–2026					
4. Description Preparation Date:					
28\3\2026					
5. Available Attendance Forms:					
Attendance of classrooms and laboratories					
6. Number of Credit Hours (Total) / Number of Units (Total)					
6hours weekly\4units					
7. Course administrator's name (mention all, if more than one name)					
Name: Dr. Wojdan Ihsan Ali Email: Dr.wojdan@gmail.com					
8. Course Objectives					
Course Objectives		1. To provide a comprehensive understanding of the fundamental principles of medical and biophysics. 2. To explain the physical mechanisms underlying biological systems and human body functions. 3. To apply physics concepts such as energy, heat, and electromagnetism in medical contexts. 4. To develop analytical and problem-solving skills relevant to clinical and biomedical applications. 5. To introduce modern technologies including lasers and their applications in medicine.			
9. Teaching and Learning Strategies					
Strategy		• Theoretical lectures supported by visual presentations • Interactive discussions to enhance critical thinking • Problem-solving and numerical exercises • Demonstrations of medical devices and physical phenomena • Case-based learning related to clinical applications			
10. Course Structure					
Week	Hours	Required Learning	Unit or subject name	Learning	Evaluation

		Outcomes		method	method
1	6	Understand, analyze, and apply concepts in medical context	Introduction to Biophysics and Medical Physics	Lecture Discussion	Quiz Assignment Exam
2	6	Understand, analyze, and apply concepts in medical context	Physical Quantities and Units	Lecture Discussion	Quiz Assignment Exam
3	6	Understand, analyze, and apply concepts in medical context	Mechanics in the Human Body (Forces and Motion)	Lecture Discussion	Quiz Assignment Exam
4	6	Understand, analyze, and apply concepts in medical context	Work, Energy, and Power in Biological Systems	Lecture Discussion	Quiz Assignment Exam
5	6	Understand, analyze, and apply concepts in medical context	Heat, Temperature, and Heat Transfer	Lecture Discussion	Quiz Assignment Exam
6	6	Understand, analyze, and apply concepts in medical context	Thermodynamics and Human Body Regulation	Lecture Discussion	Quiz Assignment Exam
7	6	Understand, analyze, and apply concepts in medical context	Electric Charges and Coulomb's Law	Lecture Discussion	Quiz Assignment Exam
8	6	Understand, analyze, and apply concepts in medical context	Electric Fields and Potential in Biology	Lecture Discussion	Quiz Assignment Exam
9	6	Understand, analyze, and apply concepts in medical context	Bioelectricity and Nerve Conduction	Lecture Discussion	Quiz Assignment Exam
10	6	Understand, analyze, and apply concepts in medical context	Magnetic Fields and Their Medical Applications	Lecture Discussion	Quiz Assignment Exam
11	6	Understand, analyze, and apply concepts in medical context	Laser Physics and Medical Applications	Lecture Discussion	Quiz Assignment Exam
11. Course Evaluation					

Activity and attendance: 10 marks

Midterm Practical: 10 marks

Midterm Theoretical: 20 marks

Coursework (Continuous Assessment): 40 marks

Final Theoretical Exam: 35 marks

Final Practical Exam: 25 marks

Final Exam (Total): 60 marks

Overall Final Grade: 100 marks

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	• Scientific journals and research articles in medical physics
Main references (sources)	• Medical Physics by John R. Cameron
Recommended books and references (scientific journals, reports...)	Biophysics by Roland Glaser Introduction to Biomedical Engineering
Electronic References, Websites	Wikipedia, PubMed

1. Course Name:	
Medical Terminology I	
2. Course Code:	
UT-ALT-114	
3. Semester / Year:	
First Year-First Semester/2025-2026	
4. Description Preparation Date:	
28\3\2026	
5. Available Attendance Forms:	
Attendance of classrooms	
6. Number of Credit Hours (Total) / Number of Units (Total)	
2hours weekly\2units	
7. Course administrator's name (mention all, if more than one name)	
Name: dr.sabreen O. jabr Email:sosdr90@gmail.com	
8. Course Objectives	
Course Objectives	-To introduce students to the structure and components of medical terminology. - To develop students' ability to analyze, interpret, and use medical terms accurately. - To enhance understanding of terms related to the human body systems and cosmetic medicine. - To enable students to communicate effectively using medical language in professional contexts.
9. Teaching and Learning Strategies	
Strategy	1- Engaging students in practical activities such as analyzing samples or studying medical cases. 2- Dividing students into small groups to solve problems or prepare reports. 3- Presenting a real-life problem (such as a medical case) for students to analyze and propose solutions.
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Definition and importance of medical terminology Components of medical terms (root, prefix, suffix) Practical examples	Introduction to Medical Terminology	Lectures	Quiz Reports Test
2	2	Anatomical directions (anterior, posterior, superior, inferior) Anatomical planes (sagittal, coronal, transvers)	Anatomical Directions and Planes	Lectures	Quiz Reports Test
3	2	Main layers of the skin (epidermis, dermis, hypodermis) Common terms: (derm, cutane)	Terminology of Skin and Dermatology	Lectures	Quiz Reports Test
4	2	Types and functions of muscles Key terms: (myo-, fascio-, tono)	Terminology of the Muscular System	Lectures	Quiz Reports Test
5	2	Main components of the skeletal system Key terms: (osteo-, arthro)	Terminology of the Skeletal System	Lectures	Quiz Reports Test
6	2	Major parts and functions of the	Nervous System Terminology	Lectures	Quiz Reports

		nervous system Key terms: (neuro–, cerebro–, encephalo–)			Test
7	2	Heart and blood vessels overview Key terms: (cardio–, angio–, veno–)	Cardiovascular System Terminology	Lectures	Quiz Reports Test
8	2	Key organs of the respiratory system Common terms: (pulmo–, broncho–, tracheo–)	Respiratory System Terminology	Lectures	Quiz Reports Test
9	2	Major organs of the digestive system Key terms: (gastro–, entero–, hepat–)	Digestive System Terminology	Lectures	Quiz Reports Test
10	2	Main organs and functions of the urinary system) Key terms: (nephro–, cysto–, uro–)	Urinary System Terminology	Lectures	Quiz Reports Test
11	2	Male and female reproductive systems) Common terms: (gyneco–, andro–, utero –)	Reproductive System Terminology	Lectures	Quiz Reports Test
12	2	Functions of the lymphatic system and immunity	Lymphatic and Immune Systems Terminology	Lectures	Quiz Reports Test

		Key terms: (lymph-, immun -)			
13	2	Terminology related to cosmetic and skincare applications Examples of laser-related terms	Dermatology and Cosmetic Terminology	Lectures	Quiz Reports Test
14	2	Functions of the Nervous system	Nervous system and special senses	Lectures	Quiz Reports Test
15	2	Terminology related Medical terms	Medical record activity and write a diagnostic report	Lectures	Quiz Reports Test

11. Course Evaluation

Activity and attendance: 5marks

Midterm Theoretical: 25 marks

Coursework (Continuous Assessment): 30

Final Theoretical Exam: 70

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Chabner, D.A. The Language of Medicine, 12th Edition, 2021
Main references (sources)	Gyls & Wedding, Medical Terminology Systems, 9th Edition, 2020
Recommended books and references (scientific journals, reports...)	– Chabner, D.–A. The Language of Medicine, 12th Edition, Elsevier, 2021. – Gyls, B. A. & Wedding, M. E. Medical Terminology Systems: A Body Systems Approach, 9th Edition, F.A. Davis, 2020. – Stein, J. Medical Terminology for Health Professions, 9th Edition, Cengage

	Learning, 2021. – Supplementary dermatology and laser medicine glossaries.
Electronic References, Websites	Wikipedia, PubMed

1. Course Name:	
Democracy and Human Rights	
2. Course Code:	
UT-ALT-115	
3. Semester / Year:	
First year – First semester 2025–2026	
4. Description Preparation Date: 10/9/2025	
18/09/2025	
5. Available Attendance Forms: classes and laboratory	
In-person (Classroom)	
6. Number of Credit Hours (Total) / Number of Units (Total): 6hr/ 4 units	
2 hours / 2 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Asso. Prof. Dr. Alaa Fahim Email: alaafahem127@gmail.com	
8. Course Objectives	
Course Objectives	• Introduce students to the fundamental concepts and principles of democracy and human rights. • Analyze the historical and intellectual development of both concepts in modern and contemporary political thought. • Clarify the relationship between democracy, citizenship, and the rule of law. • Familiarize students with international organizations and conventions concerned with human rights. • Enhance awareness of the role of individuals and institutions in protecting rights and public freedoms. • Develop students' critical thinking and democratic dialogue skills.
9. Teaching and Learning Strategies	
Strategy	• Interactive lectures: Presenting basic concepts, theories, and intellectual frameworks related to democracy and human rights. • Structured classroom discussions: Encouraging dialogue, respect for different opinions, and critical thinking. • Project-Based Learning: Conducting research or case studies on real-world issues related to democracy and human rights. • Analysis of legal and documentary texts: Studying international charters

	and declarations to enhance applied understanding. • Individual and group presentations: Developing communication and persuasion skills in defending academic viewpoints. • Simulation: Practicing parliamentary sessions or activities of international human rights organizations. • Collaborative learning: Working in small groups to analyze specific human rights issues. • E-learning and open sources: Using digital platforms and international resources to promote independent learning.
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10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	– Knowledge and understanding. – Intellectual skills. – Practical and applied skills. – Values and attitudes.	– The Concept of Human Rights	– Interactive Classroom lectures – Group discussions and workshops – Simulations and practical applications – Self-paced learning	Written exams (monthly, midterm, and final). Individual reports or research. Class participation And presentations.
2	2	– Knowledge and understanding. – Intellectual skills. – Practical and applied skills. – Values and attitudes.	The Fundamental Characteristics of Human Rights	– Interactive Classroom lectures – Group discussions and workshops – Simulations and practical applications – Self-paced learning	Written exams (monthly, midterm, and final). Individual reports or research. Class participation And presentations.
3	2		Types of Human Rights	– Interactive Classroom lectures – Group discussions and workshops	Written exams (monthly, midterm, and final). Individual reports or

				– Simulations and practical applications – Self-paced learning	research. Class participation And presentations.
4	2	– Knowledge and understanding. – Intellectual skills. – Practical and applied skills. – Values and attitudes.	Categories (or Groups) of Human Rights	– Interactive Classroom lectures – Group discussions and workshops – Simulations and practical applications – Self-paced learning	Written exams (monthly, midterm, and final). Individual reports or research. Class participating And presentations.
5	2	– Knowledge and understanding. – Intellectual skills. – Practical and applied skills. – Values and attitudes.	Human Rights in Ancient Civilizations Human Rights in the Middle Ages	– Interactive Classroom lectures – Group discussions and workshops – Simulations and practical applications – Self-paced learning	Written exams (monthly, midterm, and final). Individual reports or research. Class participation And presentations.
6	2	– Knowledge and understanding. – Intellectual skills. – Practical and applied skills. – Values and attitudes.	Human Rights in Islam and Other Divine Religions	– Interactive Classroom lectures – Group discussions and workshops – Simulations and practical applications – Self-paced learning	Written exams (monthly, midterm, and final). Individual reports or research. Class participating And presentations.
7	2	– Knowledge and understanding. – Intellectual skills.	Human Rights in Renaissance Societies	– Interactive Classroom lectures – Group discussions and workshops – Simulations and	Written exams (monthly, midterm, and final). Individual reports or research.

		– Practical and applied skills. – Values and attitudes.		practical applications – Self-paced learning	Class participating And presentations.
8	2	– Knowledge and understanding. – Intellectual skills. – Practical and applied skills. – Values and attitudes.	Human Rights in Modern Times	– Interactive Classroom lectures – Group discussions and workshops – Simulations and practical applications – Self-paced learning	Written exams (monthly, midterm, and final). Individual reports or research. Class participating And presentations.
9	2	– Knowledge and understanding. – Intellectual skills. – Practical and applied skills. – Values and attitudes.	Non-Governmental Organizations and Human Rights	– Interactive Classroom lectures – Group discussions and workshops – Simulations and practical applications – Self-paced learning	Written exams (monthly, midterm, and final). Individual reports or research. Class participating And presentations.
10–11	2	– Knowledge and understanding. – Intellectual skills. – Practical and applied skills. – Values and attitudes.	Guarantees of Respect and Protection of Human Rights	– Interactive Classroom lectures – Group discussions and workshops – Simulations and practical applications – Self-paced learning	Written exams (monthly, midterm, and final). Individual reports or research. Class participating And presentations.
12–13	2	– Knowledge and understanding. – Intellectual	Water and Environmental Awareness in Iraq 1	– Interactive Classroom lectures – Group discussions and workshops	Written exams (monthly, midterm, and final). Individual reports or

		skills. – Practical and applied skills. – Values and attitudes.		– Simulations and practical applications – Self-paced learning	research. Class participatin And presentations.
14	2	–Knowledge and understanding. –Intellectual skills. – Practical and applied skills. – Values and attitudes.	Water and Environmental Awareness in Iraq 1	– Interactive Classroom lectures – Group discussions and workshops – Simulations and practical applications – Self-paced learning	Written exams (monthly, midterm, and final). Individual reports or research. Class participatin And presentations.
15	2	–Knowledge and understanding. –Intellectual skills. – Practical and applied skills. – Values and attitudes.	The Concept of Equality	– Interactive Classroom lectures – Group discussions and workshops – Simulations and practical applications – Self-paced learning	Written exams (monthly, midterm, and final). Individual reports or research. Class participatin And presentations.

11. Section Course Evaluation

- The grade is distributed out of 100 based on the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Lectures
Main references (sources)	– United Nations. Universal Declaration of Human Rights – Dr. Abdelilah Belkeziz. The State in Contemporary Arab Thought. – Dr. Ali Khalifa Al Kuwari. Democracy in Thought and Practice. – International Human Rights Organizations – Selected Annual Reports.

Recommended books and references (scientific journals, reports...)	– Book: Democracy, Freedom, and Human Rights (A Study in Political Sociology) by Hussein Abdel Hamid Ahmed Rashwan, Alexandria, Modern University Office, 2006. Al-Quds Library – Book: Democracy and Human Rights: For the Professional Diploma Program in Security Sciences (Arab University/Academy) – Group of authors: Muhammad Al-Jabri, Johnny Assi, Amir Musa, Osama Halabi, Jamil Hilal, Kamal Qabaa, Jericho, 2009. Al-Quds Library+1 – Research article: Difficulties and Challenges Facing the Teaching of Human Rights and Democracy in Iraqi Universities by Abbas Fadhil Mahmoud (University of Baghdad), which highlights the shortage of "required textbooks" and the absence of clear standards.
Electronic References, Websites	• The United Nations, Democracy and Human Rights — An analytical paper linking the United Nations, democracy, and human rights (SSRN) • Artificial intelligence, human rights, democracy, and the rule of law: a primer — Addresses contemporary challenges between artificial intelligence, human rights, and democracy

1. Course Name:					
Computer Principles and Artificial Intelligence					
2. Course Code:					
UT-ALT-116					
3. Semester / Year:					
First Year / First Semester 2025-2026					
4. Description Preparation Date:					
21-12-2025					
5. Available Attendance Forms:					
Attendance & Lab.					
6. Number of Credit Hours (Total) / Number of Units (Total):					
3 hours 2 units					
7. Course administrator's name (mention all, if more than one name)					
Name: Ass. Prof. Nathier Abas Ibrahim					
Email: nazir.abass@uoturath.edu.iq					
8. Course Objectives					
Course Objectives		– Providing the student with the skills of dealing with basic office applications and creating Office files and documents. – Using the operating system as well as the basics of working within the digital environment – Providing the student with knowledge in the management and use of various computer applications			
9. Teaching and Learning Strategies					
Strategy		At the end of the course, the student will have learned additional information in his specialty regarding how to use a computer in his daily life and in his field of specialization by realizing the importance of storing information to be consulted when needed, as well as using some ready-made software such as Microsoft Office programs			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	3	Learn computer basic	computer Fundamentals the		

			concept of a computer, the phases of the computer life cycle the development of computer generations	Lab.	Quiz
2	3	Practical examples about customization dealing with icons and changing the screen resolution	Computer advantages and areas of use computer classification in terms of purpose, size and data type	Lab.	Quiz
3	3	Training the student create a new user, enlarge windows, show the keyboard, identify the physical components of the computer	Computer components, the physical parts of a computer	Lab.	Quiz
4	3	The concept of computer security and software licenses	The concept of computer security and software licenses	Lab.	Quiz
5	3	Training the student to deal with computer security	Computer security and software licenses	Lab.	Quiz
6	3	Training the student to deal with computer privacy	Ethics of the electronic world, forms of abuse, computer security, computer privacy	Lab.	Quiz
7	3	Training the student deal with electronic penetration and its types, types and recipes of viruses, how to make a	Licenses of computer programs and their types, intellectual property, electro penetration, malicious software, the most important The necessary steps to	Lab.	Quiz

		Backup image of the computer for protection	protect against hacks, computer damage to health		
8	3	Train the student to deal with operating systems	Operating systems definition. Operating system, functions, objective classification examples of some operating systems	Lab.	Quiz
9	3	Training the student for the inauguration	Operating systems	Lab.	Quiz
10	3	Training the student the lists	Desktop components Taskbar Start menu	Lab.	Quiz
11	3	Create a folder with specific name and train about changing the name, hiding, retrieving, deleting and the path to it.	Folders, files, icons	Lab.	Quiz
12	3	Training the student perform operations on Windows desktop backgrounds	Perform operations Windows desktop wallpapers	Lab.	Quiz
13	3	Training the student use the control panel	Control panel Windows Control Panel	Lab.	Quiz
14	3	Train the student delete a specific program and install again	Organizing files inside computer, installing and deleting programs	Lab.	Quiz
15	3	Training the student common computer settings	Some common computer situations and settings	Lab.	Quiz
11. Course Evaluation					
Activity and attendance: 5marks					

Midterm Theoretical: 25 marks

Coursework (Continuous Assessment): 30

Final Theoretical Exam: 70

12. Learning and Teaching Resources

Required textbooks (curricular books any)	Hilal Al-qabati (2019): computer and internet bas Al-Amin for printing and publishing, Sana'a.
Main references (sources)	Computer literacy BASICS 2012, LeBlanc, Brandon closer look at the, windows 7. 2009
Recommended books and references (scientific journals, reports...)	Computing Fundamentals, Innovative training wo USA, Inc, 2006
Electronic References, Websites	https://www.agitraining.com/books/microsoft-officebooks/word-2010-digital-classroom-book

1. Course Name:					
Organic Chemistry					
2. Course Code:					
UT-ALT-121					
3. Semester / Year:					
First Year- Second semester 2025-2026					
4. Description Preparation Date:					
22/2/2026					
5. Available Attendance Forms:					
6. Number of Credit Hours (Total) / Number of Units (Total)					
6 hours weekly /4 units					
7. Course administrator's name (mention all, if more than one name)					
Name: Dr. Dina Ayed			Email: Dr.Dina@ yahoo.com		
8. Course Objectives					
Course Objectives		- Understanding reaction mechanisms such as addition, substitution, and elimination and the ability to deduce the resulting compound when specific substances are combined. - Acquiring the skill to plan a sequence of steps for synthesizing complex, useful organic compounds from simple starting materials. - Familiarity with methods for detecting and identifying organic compounds using modern instrumentation (such as mass spectrometry, infrared (IR) spectroscopy, and nuclear magnetic resonance (NMR) spectroscopy)			
9. Teaching and Learning Strategies					
Strategy		1- Discussion, dialogue, and presenting examples 2- Student groups 3- Demonstration experiments			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6	Understand the	Introduction to organic	Lecture	Quiz +

		Lecture	chemistry(hydrocarbon		presence
2	6	Understand the Lecture	Alkanes, alkenes, alkynes	Lecture	Quiz + presence
3	6	Understand the Lecture	Alcohols, classificati properties and their reactions	Lecture	Quiz + presence
4	6	Understand the Lecture	Aldehydes and keton properties and their reactions	Lecture	Quiz + presence
5	6	Understand the Lecture	Carboxylic acids, properties and their reactions	Lecture	Quiz + presence
6	6	Understand the Lecture	Amines, aromatic hydrocarbons and polynuclear aromatic compounds.	Lecture	Quiz + presence
7	6	Understand the Lecture	Introduction to biochemistry (carbohydrates).	Lecture	Quiz + presence
8	6	Understand the Lecture	Amino acids and proteins	Lecture	Quiz + presence
9	6	Understand the Lecture	Introduction to polymer chemistry	Lecture	Quiz + presence
10	6	Understand the Lecture	Polymers, classifica and their properties.	Lecture	Quiz + presence
11	6	Understand the Lecture	Reactions of polymer	Lecture	Quiz + presence
12	6	Understand the Lecture	Natural polymers and their uses	Lecture	Quiz + presence
13	6	Understand the Lecture	The mechanics of elastic solids	Lecture	Quiz + presence
14	6	Understand the Lecture	Mechanics of elastic solids Stress– Strain curve.	Lecture	Quiz + presence

15	6	Understand the Lecture	Green Chemistry	Lecture	Quiz + presence
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)			Organic Chemistry		
Main references (sources)			Introduction to Polymers		
Recommended books and references (scientific journals, reports...)			Scientific journals		
Electronic References, Websites			Internet sites		

1. Course Name:	
Anatomy and Histology	
2. Course Code:	
UT-ALT-122	
3. Semester / Year:	
First year– second semester 2025–2026	
4. Description Preparation Date:	
2025/9/10	
5. Available Attendance Forms:	
Attendance in classrooms and laboratory	
6. Number of Credit Hours (Total) / Number of Units (Total):	
6 hours/4 unities	
7. Course administrator's name (mention all, if more than one name)	
Name: Ruqaya Imad	
Email: ruqaya.abdulwahab@uoturath.edu.iq	
8. Course Objectives	
Course Objectives	• Identify the basic structure of the skin and its layers. • Understanding the anatomy of the face and neck and the areas most commonly used in cosmetic surgery. • Identify the locations of important muscles, nerves and blood vessels. • Linking anatomical knowledge to laser and cosmetic procedures. • Apply safety standards to avoid errors and complications.
9. Teaching and Learning Strategies	
Strategy	• Presenting theoretical concepts of human anatomy with active student participation. a. Multiple illustrative methods – drawings, diagrams and educational videos to illustrate anatomical structures, organs and parts of the human body b. Practical laboratory sessions – hands–on exercises on dissection and identifying anatomical landmarks.
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6	The student gets acquainted with the anatomy terminology of the parts of the human body	Anatomy terminology	Theoretical lecture	Short concluding questions for the lecturer
2	6	The student identifies the cavities in the organism's body and its organs	Body cavities and organs	Lecture + presentation of parts with pictures	Short test (quiz)
3	6	Recognizes the surface structure of the body	Superficial anatomy of the human body	Lecture + video and illustrations	A short written report on the concept of surface anatomy
4	6	The student describes the layers and components of the skin and its properties	Skin anatomy, function and color	Lecture + presentation Explanatory video For layers of skin	Oral discussion about the importance of each Component of skin components
5	6	The student distinguishes each tissue's form and function	Tissues in the human body and their characteristics	Lecture with illustrations	Short test (quiz)
6	6	The student learns about the axial structure of the body	General structure (skull, neck, spine)	Lecture + explanatory video of the components of the axial structure	A panel discussion on sequence and connection of the axial structure
7	2	The student	Peripheral skeletal	Lecture +	Individual assignment

		connects the parts of the skeleton	system	illustrative pictures of the terminal structure and its parts	compare axial peripheral structure
8	6	Identify the parts the muscular skeleton	Skeletal muscles (muscles and ribs)	Lecture + explanatory video of the connection between the parts of the muscular skeleton	short test (coz)
9	6	Differentiate between the composition of the abdominal wall and its connection with the diaphragm	Muscular system (abdominal wall and diaphragm)	Lecture illustrations	Oral discussion about importance of component
Mid-term exam					
10	6	The student learns about the components of the upper respiratory system and its function	Upper respiratory tract	Lecture illustrations	Short questions concluding the lecture
11	6	Pitt differentiates the components of the respiratory system (upper and lower)	Lower respiratory tr	Lecture + explanatory video with pictures of the entire device's	Individual assignment to compare the function of the respiratory system (upper with lower)

				components	
12	6	The student determines the function of the alveoli	Alveoli (respiratory cavity)	Lecture + video explaining the work of the alveoli within the respiratory system	short test (coz)
13	6	The student learns the shape the heart, its functions, and its components	Anatomy of the heart, its valves and functions	Lecture illustrations	A short written report summarizing the function of the heart and its components
14	6	Differentiate between the function of blood vessels and arteries	Formation of blood vessels, heart walls and arteries	Lecture + video explanation of process of pumping blood into vessels and arteries	A panel discussion on process of pumping blood to and from components
15	6	The student distinguishes the lymphatic system and its components	Lymphatic system and lymph nodes	Lecture illustrations	Short concluding questions about the lecture

Final exam for the semester

11. Course Evaluation

- Commitment to regular attendance and active participation in discussions and practical sessions.
- Assignments/quizzes – 10–15%
- Short tests to measure ongoing learning, in addition to individual assignments
- Midterm exam – 20–25%
- Includes the theoretical and practical components studied in the first half of the course.

- Practical exam/OSPE (Objective Structured Practical Exam) – 20–25%
- Apply anatomical knowledge to clinical cases.
- Final exam (comprehensive) – 30–35%
- Includes a mixture of multiple choice questions, short answer questions, and picture–based questions.
- Assesses both theoretical knowledge and applied skills in interpretation

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Bound
Main references (sources)	Agur, Anne M. R., B.Sc. (OT), M.Sc , Dalley, Art F. (2017). Clinically Oriented Anatomy
Recommended books and references (scientific journals, reports...)	• Sultan Qaboos Univ Med J. The Science Anatomy • Ann R Coll Surg Engl. Anatomy
Electronic References, Websites	https://pubmed.ncbi.nlm.nih.gov/32021541 https://pubmed.ncbi.nlm.nih.gov/28844209

1. Course Name:	
Biology of Skin and Hair	
2. Course Code:	
UT-ALT-123	
3. Semester / Year:	
First year- second semester 2025-2026	
4. Description Preparation Date:	
4/4/2026	
5. Available Attendance Forms:	
Lectures – Practical Sessions – Laboratory Work	
6. Number of Credit Hours (Total) / Number of Units (Total)	
6 Hours (Theory + Practical)/ 4 unit	
7. Course administrator's name (mention all, if more than one name)	
Name: sabreen oudah jabir Email: sosdr90@gmail.com	
8. Course Objectives	
Course Objectives	• Develop a Strong Foundation in Skin and Hair Biology • Enhance Patient Care and Professional Competency • Ensure Safety and Efficacy in Laser and Cosmetic Procedures • Prepare for a Successful Career in Cosmetic and Laser Technology • Master Skin and Hair Anatomy and Physiology • Identify and Manage Common Skin and Hair Disorders • Apply Knowledge of Cosmetic Ingredients and Their Effects • Safely Perform Microdermabrasion, Chemical Peels, and Laser Treatments • Develop Proficiency in Laser and Light-Based Hair Removal Techniques • Implement Safety Standards and Professional Protocols • Conduct Effective Patient Consultations and Treatment Planning
9. Teaching and Learning Strategies	
Strategy	• Lectures

	• Practical demonstrations • Laboratory training • Case-based learning • Group discussions • Clinical observation
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10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	6	Understand the Lecture	Layers of the Skin	a lecture Theoretical + practical	Quiz+ presence
2	6	Understand the Lecture	Skin Cells	a lecture Theoretical + practical	Quiz+ presence
3	6	Understand the Lecture	Skin Molecules	a lecture Theoretical + practical	Quiz+ presence
4	6	Understand the Lecture	Hair Structure Intro	a lecture Theoretical + practical	Quiz+ presence
5	6	Understand the Lecture	Hair Shaft Components	a lecture Theoretical + practical	Quiz+ presence
6	6	Understand the Lecture	Hair Growth Cycle	a lecture Theoretical + practical	Quiz+ presence
7	6	Understand the Lecture	Skin Barrier	a lecture Theoretical + practical	Quiz+ presence
8	6	Understand the Lecture	Skin Hydration	a lecture Theoretical	Quiz+ presence

				+ practical	
9	6	Understand the Lecture	Aging	a lecture Theoretical + practical	Quiz+ presence
10	6	Understand the Lecture	Hormonal Aging	a lecture Theoretical + practical	Quiz+ presence
11	6	Understand the Lecture	Skin Types	a lecture Theoretical + practical	Quiz+ presence
12	6	Understand the Lecture	Skin Conditions	a lecture Theoretical + practical	Quiz+ presence
13	6	Understand the Lecture	Hair Conditions	a lecture Theoretical + practical	Quiz+ presence
14	6	Understand the Lecture	Hair Disorders	a lecture Theoretical + practical	Quiz+ presence
15	6	Understand the Lecture	Nutrition	a lecture Theoretical + practical	Quiz+ presence
11. Course Evaluation					
- Attendance & Participation: 5 - Assignments & Reports: 5 - Mid semester exam 30 - Final Exam: 60					
12. Learning and Teaching Resources					
Required textbooks (curricular books, if any)			Standard dermatology and skin biology textbooks.		

Main references (sources)	• Cosmetic dermatology references. • Laser and light-based therapy manuals.
Recommended books and references (scientific journals, reports...)	• Dermatology journals • Aesthetic medicine publications
Electronic References, Websites	• PubMed • Dermatology Online Resources • Laser & Aesthetic Medicine Websites

1. Course Name:

Laser Physics	
2. Course Code:	
UT-ALT-124	
3. Semester / Year:	
First year / second semester 2025-2026	
4. Description Preparation Date:	
10/12/2025	
5. Available Attendance Forms:	
classes and laboratory	
6. Number of Credit Hours (Total) / Number of Units (Total):	
6hr/ 4 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Mahdi Zaman Massoud Email: mahdi.zaman@uoturath.edu.iq	
8. Course Objectives	
Course Objectives	• Understand the nature of electromagnetic radiation, refraction, and laser properties. • Learn lasing processes, including photon interactions, population inversion, and amplification. • Differentiate laser types (e.g., gas lasers) and their excitation mechanisms. • Analyze laser system components, operation principles, and radiation control methods. • Apply laser physics to cosmetology and medical treatments while ensuring safe usage
9. Teaching and Learning Strategies	
Strategy	– Presenting the foundational concepts of electromagnetic radiation and laser physics with active student participation, encouraging questions and collaborative problem-solving. – Using diagrams, 3D animations, interactive applets (such as PhET simulations), and videos to visually illustrate abstract atomic structures, population inversion, and lasing processes. – Hands-on training in the optics lab, focusing on the safe operation of

	different laser devices, beam alignment, and measuring physical properties like wavelength, divergence, and output power. – Studying laser–tissue interactions using artificial tissue models, clinical case studies, and practical demonstrations to connect physical laser parameters (like pulse duration and energy threshold) with real–world cosmetic applications, such as laser hair removal and skin treatments.			
10.Course Structure: Theoretical Curriculum (2 hour per lecture)				
Week	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	Understand the nature of EM radiation in different media.	Electromagnetic Radiation, Electromagnetic Radiation in Matter. Electromagnetic Radiation in vacuum.	Theoretical lecture + 3D animations.	Short concluding questions at the end of the lecture.
2	Analyze light refraction and apply Snell’s Law.	Refraction of Light Beam – Snell Law.	Slide presentation and problem–solving.	Open discussion on light behavior.
3	Identify the core properties of laser radiation.	Properties of Laser Radiation, Monochromaticity. Directionality Coherence.	Theoretical lecture with examples.	Short quiz on laser properties.
4	Analyze factors affecting beam divergence and brightness.	Low divergent angle, brightness.	Interactive applets showing beam spread.	Homework assignment on brightness analysis.
5	Understand the Bohr model and interpret energy diagrams.	Lasing processes, Bohr model of the atom, Photons and the energy diagrams.	Use of 3D atomic models.	Peer assessment of energy diagrams.
6	Differentiate between absorption and spontaneous emission.	Absorption of electromagnetic Radiation Spontaneous emission of electromagnetic Radiation.	Animated graphics of electron transitions.	Discussion and diagram analysis.
7	Explain population inversion and its role in	Decay Rate, Population at Thermodynamic Equilibrium Population Inversion,	Detailed theoretical lecture.	Oral discussion on stimulated emission.

	amplification.	Stimulated Emission, Amplification.		
8	Compare efficiency between different laser level systems.	Three Level Laser, Four Level Laser.	Comparative display of energy levels.	Short report comparing both systems.
9	Identify laser components and excitation mechanisms.	The Laser System, The laser active medium: The excitation mechanism, Collisions with atoms, Feedback Mechanism, Output Coupler.	Slide presentation of system anatomy.	Component identification test.
10	Analyze laser gain and fluorescence line shape.	Operation of a Laser System – Interactive Applets: Laser Gain Fluorescence line shape of the laser, Fluorescence Linewidth.	Use of interactive applets.	Task based on applet results.
11	Calculate loop gain (GL) with and without losses.	Laser Gain Curve Broadening the Fluorescence line, Loop Gain, Calculating Loop Gain (GL) Without Losses, Calculating Loop Gain (GL) With Losses.	Mathematical problem-solving session.	Assignment on loop gain calculations.
12	Determine gain threshold and saturation in CW/Pulsed lasers.	Calculating Gain Threshold (GL) _{th} , Saturation Gain in a Continuous Wave Laser, Pulsed Laser.	Lecture with mathematical derivations.	Short quiz on threshold calculations.
13	Classify laser types and understand gas laser excitation.	Different Laser Types and their Characteristics, Gas Lasers, Excitation of a gas laser, Groups of Gas Lasers, Some Common Laser Resonators. Selective coating on the cavity mirrors.	Presentation comparing active media.	Evaluation of student presentations.
14	Evaluate methods for controlling radiation properties.	Controlling the laser radiation properties, Some Common Laser Resonators. Selective	Theoretical lecture.	Written review of control methods.

		coating on the cavity mirrors.		
15	Demonstrate comprehensive theoretical knowledge.	The second course exam.	Comprehensive written exam.	Second Course Exam.

12. Course Evaluation

The total score of 100 marks is distributed between the Yearwork (40 Marks) and the Final Examination (60 Marks) as follows:

- Yearwork (40% of Total Grade):
 - Midterm Examination (20 Marks): A comprehensive written exam covering the theoretical foundations and mathematical principles of laser physics studied in the first half of the semester.
 - Practical Laboratory Assessment (10 Marks): Evaluation of hands-on technical proficiency, accuracy in conducting optical experiments, and the quality of weekly laboratory reports.
 - Quizzes and Continuous Assessment (5 Marks): Frequent unannounced short tests to monitor ongoing comprehension and progress.
 - Attendance and Professionalism (5 Marks): Evaluation of regular attendance in both lectures and labs, as well as strict adherence to laser safety protocols and professional conduct.

13. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Course Theoretical Lectures and Applied Laboratory Manuals (Departmental Publications).
Main references (sources)	• Vogel, M. (2012). Principles of Lasers, 5th edn., by O. Svelto: Scope monograph. Level: advanced undergraduate and above. • Chang, W. S. (2005). <i>Principles of lasers and optics</i>. Cambridge University Press. • Silfvast, W. T. (1996). Laser Fundamentals Cambridge University Press. <i>New York, NY</i>.
Recommended books	• Keiser, G. (2022). Light–Tissue Interactions. In <i>Biophotonics: Concepts to Applications</i> (pp. 169–221). Singapore: Springer

and references (scientific journals, reports...)	Nature Singapore. • <i>Journals of Lasers in Medical Science</i> (For clinical case studies and latest research).
Electronic References, Websites	• RP Photonics Encyclopedia: https://www.rp-photonics.com (Comprehensive database for laser engineering and physics).

1. Course Name:					
Medical Terminology II					
2. Course Code:					
UT-ALT-125					
3. Semester / Year:					
First year / Second Semester 2025-2026					
4. Description Preparation Date:					
22/10/2025					
5. Available Attendance Forms:					
In-class sessions					
6. Number of Credit Hours (Total) / Number of Units (Total)					
2 hours/ 2 units					
7. Course administrator's name (mention all, if more than one name)					
Name: sabreen oudah jabir					
Email: sosdr90@gmail.com					
8. Course Objectives					
Course Objectives		-To introduce students to the structure and components of medical terminology. - To develop students' ability to analyze, interpret, and use medical terms accurately. - To enhance understanding of terms related to the human body systems and cosmetic medicine. - To enable students to communicate effectively using medical language in professional contexts.			
9. Teaching and Learning Strategies					
Strategy		- Engaging students in practical activities such as analyzing samples or studying medical cases. - Dividing students into small groups to solve problems or prepare reports. - Presenting a real-life problem (such as a medical case) for students to analyze and propose solutions.			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	understanding the content	Respiratory System	Lectures	Quiz Reports

			terminology		Test
2	2	understanding the content	Digestive System terminology	Lectures	Quiz Reports Test
3	2	understanding the content	Urinary System terminology	Lectures	Quiz Reports Test
4	2	understanding the content	Reproductive Systems (male and female) terminology	Lectures	Quiz Reports Test
5	2	understanding the content	Endocrine System: glands and hormones terminology	Lectures	Quiz Reports Test
6	2	understanding the content	Nerve system terminology	Lectures	Quiz Reports Test
7	2	understanding the content	Sensory Organs: eye and ear terminology	Lectures	Quiz Reports Test
8	2	understanding the content	Midterm Review and Examination	Lectures	Quiz Reports Test
9	2	understanding the content	Medical terms in dermatology And cosmetology	Lectures	Quiz Reports Test
10	2	understanding the content	Laser therapy and aesthetic procedure terminology	Lectures	Quiz Reports Test
11	2	understanding the content	Pharmacological and prescription terminology	Lectures	Quiz Reports Test

12	2	understanding the content	Diagnostic, surgical, and procedural terms	Lectures	Quiz Reports Test
13	2	understanding the content	Abbreviations, acronyms, and eponyms in medical language	Lectures	Quiz Reports Test
14	2	understanding the content	Review and lecture content integration of Medical terminology in cosmetic practice	Lectures	Quiz Reports Test
15			Final Examination		

11. Course Evaluation

Activity and attendance: 5marks

Midterm Theoretical: 25 marks

Coursework (Continuous Assessment): 30

Final Theoretical Exam: 70

12. Learning and Teaching Resources

Required textbooks (curriculum books, if any)	Chabner, D.A. The Language of Medicine, 12th Edition, 2021
Main references (sources)	Gyls & Wedding, Medical Terminology Systems, 9th Edition, 2020
Recommended books and references (scientific journals, reports...)	– Chabner, D.–A. The Language of Medicine, 12th Edition, Elsevier, 2021. – Gyls, B. A. & Wedding, M. E. Medical Terminology Systems: A Body Systems Approach, 9th Edition, F.A. Davis, 2020. – Stein, J. Medical Terminology for Health Professions, 9th Edition, Cengage Learning, 2021. – Supplementary dermatology and laser medicine glossaries.
Electronic References, Websites	Wikipedia, PubMed

1. Course Name:					
Arabic Language					
2. Course Code:					
UT-ALT126					
3. Semester / Year:					
First year / Second Semester 2025-2026					
4. Description Preparation Date:					
22/10/2025					
5. Available Attendance Forms:					
In-class sessions					
6. Number of Credit Hours (2) / Number of Units (2)					
2 hours/ 2 units					
7. Course administrator's name (mention all, if more than one name)					
Name: Dr. Huda Ali Hashim					
Email: huda.ali@uoturath.edu.iq					
8. Course Objectives					
Course Objectives		- To develop the four basic language skills: listening, speaking, reading, and writing. - To deepen students' understanding of Arabic texts. - To instill pride in the Arabic language as the language of the Holy Qur'an. - To cultivate students' literary and aesthetic appreciation. - To enable learners to express their thoughts and opinions effectively. - To teach grammar, morphology, and spelling rules. - To enhance critical and analytical thinking. - To use the Arabic language confidently and competently in daily life, academic, and professional contexts.			
9. Teaching and Learning Strategies					
Strategy		This course aims to develop students' foundational Arabic language skills in listening, speaking, reading, and writing, while strengthening their ability to comprehend, analyze, and express ideas in a clear and correct manner. It also seeks to foster a genuine love for the Arabic language as a tool for thought, creativity, and as a vessel of Arab identity and culture.			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Identify common linguistic errors and their types	Introduction to linguistic errors – Tied and open T, and long T	Interactive lecture and discussion	Class participation and short quiz
2	2	Mastering the writing of Alif Maqsura and Alif	Writing rules for Alif Maqsura and Alif Mamduda –	Explanation and practical writing	Short written task

		Mamduda, and the solar and lunar letters	Solar and lunar letters	exercises	
3	2	Distinguishing between the letters “ض” (ḍād) and “ظ” (ẓā’)	Ḍād and Ẓā’	Applied reading and discussion	Pronunciation and dictation exercises
4	2	Mastery of hamza writing in different positions	Writing the Hamza	Lecture with examples and exercises	Short dictation test
5	2	Correct use of punctuation marks	Punctuation marks	Practical activities using various texts	Correction of written texts
6	2	Differentiating between noun and verb	The noun and verb and how to distinguish between them	Discussion and practical exercises	Oral question and written exercises
7	2	Identifying the subject in Arabic sentences	The subject (fa‘il)	Sentence explanation and analysis	Short quiz
8	2	Identifying the object in a sentence	the object (maf‘ul bihi)	Examples and group exercises	Written task
10-9	2	Analyzing linguistic errors in written texts	Common linguistic errors applications	Group activity, discussion, and case study	practical evaluation and oral presentation
11	2	Understanding the meanings of nunation and prepositions	Nunation and prepositions	Explanation and language representation	Descriptive short test
12	2	Understanding the fundamentals of administrative correspondence	Formal aspects of administrative correspondence	Lecture and model presentation	Applied assignment
14-13	2	Drafting official administrative correspondence and analyzing samples	Language of administrative correspondence	Practical training and writing workshops; text analysis and discussion	Practical evaluation and written report
15	2	Comprehensive course review	Samples of administrative correspondence	Interactive discussion and review	Final exam

11. Course Evaluation

- Class attendance and participation in discussions and linguistic activities: 10–15%
- Assignments and short quizzes: 10–15% Continuous assessment of students' language skills through weekly assignments in grammar, spelling, and text analysis.
- Midterm exam: 20–25% Covers theoretical and practical topics studied in the first half of the course such as linguistic errors, hamza writing, punctuation, noun and verb identification, and the subject.
- Practical and applied activities: 20–25% Evaluation of students' performance in exercises and classroom activities such as writing, error analysis, and drafting official letters.
- Final comprehensive exam: 30–35% Includes multiple-choice, short essay, and text analysis questions designed to assess theoretical knowledge and practical linguistic skills in writing, analysis, and expression.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	– Fadel Al-Samarrai, <i>Meanings of Grammar</i>, Dar Al-Fikr Al-Arabi, Baghdad. – Ali Jawad Al-Taher, <i>Arabic Grammar and Its Style</i>, Dar Al-Ma'arif, Cairo.
Main references (sources)	– Ahmad Al-Hashemi, <i>Jewels of Rhetoric in Meaning, Expression, and Elegance</i>. – Abd al-Salam Haroun, <i>Comprehensive Grammar</i>. – Linguistic articles from <i>Al-Lisan Al-Arabi Journal</i>, published by the Arabization Coordination Office, Rabat.
Recommended books and references (scientific journals, reports...)	– Ahmad Al-Hashemi, <i>Jewels of Rhetoric in Meaning, Expression, and Elegance</i>. – Abd al-Salam Haroun, <i>Comprehensive Grammar</i>. – Linguistic articles from <i>Al-Lisan Al-Arabi Journal</i>, published by the Arabization Coordination Office, Rabat.
Electronic References, Websites	– Arabic Language Academy website: www.arabacademy.gov.sa – Rwaq Educational Platform: www.rwaq.org – Edraak Online University Courses Platform: www.edraak.org – Arabic Wikipedia – Arabic Language Section: https://ar.wikipedia.org/wiki/اللغة_العربية