



**Ministry of Higher Education and
Scientific Research**

**Scientific Supervision and
Evaluation Authority**

**Diyala University/ College of
dentistry**



Dental Academic Program Description Form

2025

Academic description of the Collage of dentistry

University : Diyala

College : Dentistry

Scientific Department: general

File filling date: 2025

Signature

Department Head



Signature

Associate Dean for Scientific Affairs

The file has already been checked by:

Quality Assurance and University Performance unit

Director of the Division of Quality Assurance and University Performance of the college of dentistry : Assistant Professor Manar Abdul Razzaq Hassan

Date :2025-2026

Signature



Approval of the Dean

Introduction:

The educational program of the Faculty of Dentistry is a coordinated and organized package of academic courses, consisting of organized procedures and experiences from an academic perspective, the basic basis of which is the development and refinement of graduates' skills to qualify them and meet the requirements of working as a dentist. The requirements are reviewed and assessed annually through internal or external audit procedures and programs. The academic program description provides a summary of the program's key points and courses, indicating the skills students are expected to acquire throughout their studies, in accordance with the program's objectives. The importance of this description lies in its definition of the academic program's objectives. It is a cornerstone of program accreditation, which is developed with faculty participation under the supervision of the scientific committee. This first edition of the guide for the College of Dentistry includes a description of the academic program, its content and sections having been finalized in light of the latest developments and advancements in the educational system In Iraq, the academic program description included the traditional (annual system) , as well as the generalized academic program description adopted by the Department of Studies, document number 2906/3, dated May 3, 2023. In this regard, we must emphasize the importance of writing detailed descriptions of the college's academic programs and courses to ensure the smooth operation of the educational process.

General description of the Collage of Dentistry.....

1-Program Vision

Emphasis on the importance of graduating competent dentists capable of performing their duties after graduation in all sectors (public and private) to ensure the accuracy of their medical diagnoses and the precision of their treatment of patients.

2-Program Mission

To graduate highly competent dentists in all aspects, from research and patient care to providing comprehensive community services, particularly in oral and dental health, to elevate the program's output and the college to international standards and strive for international accreditation.

3-Program Objectives

1. To graduate dentists and researchers with distinguished scientific backgrounds and high competence in the field of scientific research.
2. To strive to meet the requirements of all specialties in the various fields of dentistry.

3. Introducing modern educational methods, advanced technologies, and the latest information and curricula, especially for the academic program of oral and dental medicine, and ensuring the transfer of knowledge from the teaching staff to dentists so that they are adequately equipped to provide their services from a medical and educational standpoint.
4. Graduating dentists who have sufficient ability for global, cultural and scientific communication.

4- Programmatic Accreditation

The College of Dentistry strives to improve outcomes and achieve its goals to obtain international programmatic accreditation.

5- Other External Influences

Teaching clinics, library, internet, community, dental association, pediatric dentistry societies, specialized dental centers.

6- Program Structure

Program structure	Number of courses	Credit hours	Percentage	Notes
The detailed table is available for each department in the College of Dentistry and includes all the required information.				

- **Notes may include whether a course is a core or elective.**

7- Program Description

Year/Level	Course Code	Course Name or Credit	Hours
Detailed schedule information is available for each department within the College of Dentistry and includes all required information.			

8-Expected Learning Outcomes of the Program

Knowledge

1. Ensuring the student's familiarity with the parts and tissues of the mouth.
2. Enabling the student to identify the components of each part of the mouth and teeth and study the scientific and functional structure of these parts.
3. Enabling the student to distinguish between normal and pathological conditions to ensure accurate diagnosis and effective treatment.
4. To be able to accurately resolve urgent health problems to ensure the maintenance of good oral health.
5. To have a thorough understanding of external factors affecting oral and dental health

Skills

1. Using modern medical clinic equipment to ensure accuracy in work performance and precise results.
2. Being able to practically apply all theoretical study materials within and outside teaching clinics through the treatment of clinical cases.
3. Enabling dental students and graduates to possess advanced skills in writing scientific and applied research papers to serve the community and solve health problems.

Values

1. Adherence to the ethics of the dental profession in the treatment of clinical and diagnostic cases.
2. Commitment to respecting the rights of colleagues and ensuring their participation in scientific research and clinical practice.
3. The dentist must continuously update their medical knowledge and keep abreast of the latest developments in dental practice and research.

9- Teaching and Learning Strategies

1. Using the latest technologies to present theoretical lectures.
2. Practical application of concepts studied theoretically in specialized laboratories and teaching hospitals.
3. Scientific seminars (students are assigned a set of topics within the curriculum for theoretical presentation and discussion) .
4. Organizing small group work to arrive at the correct solution to some problems.
5. Using blended learning, both in-person and online, to cope with all circumstances and ensure the continuity of the educational process.

10-Assessment Methods

1. Daily exams (theoretical and practical) .
2. Midterm and final exams.
3. Weekly seminars and discussion groups.
4. Student scientific activities.

11-Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skill (If any)	Faculty Number General	
	general	Specialized		staff	Lecturer
Detailed table information is available for each branch within the College of Dentistry and includes all requirements.					

12-Professional Development

Guidance for New Faculty Members

1. Preparing seminars and training courses for new faculty members
2. Holding regular meetings to familiarize new faculty members with work contexts
3. Providing ongoing guidance and follow-up, offering advice and motivation to ensure professional development.

13-Professional Development for Faculty Members

1. Continuous learning and seeking professional updates.
2. Utilizing the library and the internet, in addition to attending seminars and specialized scientific workshops.
3. Active participation in teaching hospitals to refine skills.

14- Admission Criteria:

Central admission is based on the high school graduation average and application to the Ministry of Higher Education via a specific form.

15-Sources of Information about the Program:

Main The website of the Ministry of Higher Education and Scientific Research, the University of Diyala website, and the College of Dentistry website.

16- Program Development Plan

1. Developing the college's academic and administrative staff and continuously improving their performance through annual evaluation scores, identifying their strengths and weaknesses.
2. Conducting evaluation and development workshops to enhance the performance of senior leadership, faculty members, and staff working at the college.
3. Developing and updating the college's annual curriculum and keeping pace with the latest curriculum resources.
4. Refining and enhancing the skills of all college staff.
5. Attending specialized seminars and workshops.
6. Encouraging faculty members to actively participate in clinical rotations at teaching hospitals to hone their practical skills.
7. Developing a guide to improve the quality of graduates and obtain academic accreditation.
8. Develop a strategic plan for the college and define the goals to be achieved annually to ensure the distribution of tasks and guarantee accuracy in work and the achievement of the desired goals.

17-Program Description				
Year/Level	Course Code	Course Name	Credit Hours	
			Theory	Practical
First	101 AN	Human Anatomy	30	60
	103COM	Computer	0	60
	104 DA	Anatomy Dental	30	60
	105 HR	Human Rights	30	----
	106 CH M	Chemistry Medical	60	60
	107 PHS	Medical Physics	60	60
	108 BIO	Biology	60	60
	102ANA	medical terminology	30	----
Seconed	212BC	Biochemistry	60	60
	213GH	General Histology	60	60
	214PH	General Physiology	60	60
	216BC	Baath crimes	30	-----
	203CS	Computer Sciences	30	-----
	202 AL	Arabic	30	-----
	209DM	Dental material	30	60
	210PR	Prosthodontics	30	120
	211EL 215OH	Oral histology and embryology	60	60
	210AN	General Anatomy	30	60



18-Curriculum Skills Outline

			Required program Learning outcomes															
Year/Level	CourseCode	CourseName	Knowledge				Skills				Ethics				General and transferable skills (other skills related to employability and personal development)			
			A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4	D1	D2	D3	D4
First	101 AN	Human Anatomy	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	103COM	Computer	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓				
	104 DA	Dental Anatomy	✓	✓			✓				✓	✓						
	105 HR	Human Rights	✓	✓			✓	✓			✓	✓			✓	✓	✓	✓
	106 CH M	Chemistry Medical	✓	✓			✓	✓	✓		✓	✓	✓	✓	✓	✓	✓	✓
	107 PHS	Medical Physics	✓	✓			✓	✓			✓	✓	✓	✓	✓	✓		
	108 BIO	Biology	✓	✓			✓	✓	✓		✓	✓	✓	✓				
	102ANA	medical terminology	✓	✓	✓	✓	✓	✓	✓		✓	✓						
Second	212BC	Biochemistry	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓				
	213GH	General	✓	✓	✓		✓	✓		✓								

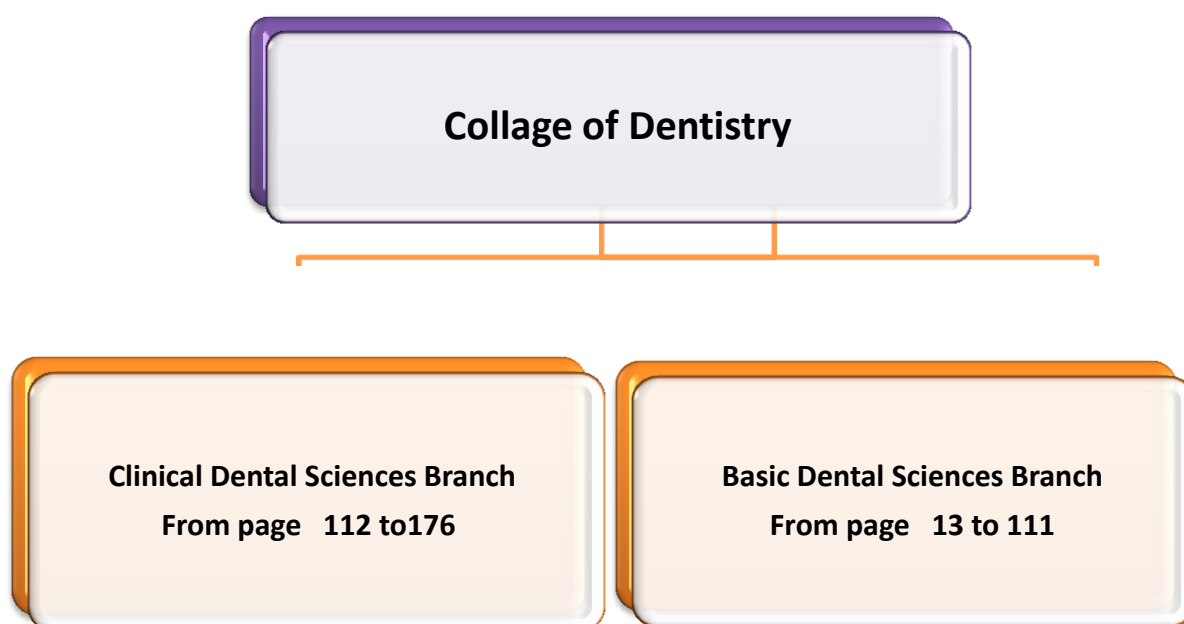
		Histology																
	214PH	General Physiology	✓	✓			✓				✓	✓						
	216BC	Baath crimes	✓	✓			✓	✓			✓	✓						
	203CS	Computer Sciences	✓	✓			✓	✓	✓	✓	✓	✓						
	202 AL	Arabic	✓	✓			✓	✓	✓	✓	✓	✓						
	209DM	Dental material	✓	✓	✓		✓	✓			✓	✓						
	210PR	Prosthodontics	✓	✓			✓	✓			✓	✓	✓	✓				
	211EL 215OH	Oral histology and embryology	✓	✓	✓			✓	✓		✓	✓	✓					
	210AN	General Anatomy	✓			✓	✓	✓	✓	✓	✓	✓	✓	✓				

Course description template for the collage of Dentistry

1- Institution Name	
College of Dentistry	
2- Course Code	
Each course and subject has a code in the description of each department within the College of Dentistry.	
3- Semester/Year	
2026-2025	
4- Date of Preparation of this Description	
2026-2025	
5-Available Attendance Options	
Mandatory Attendance	
6-Total Credit Hours / Total Units	
A detailed description of each subject is available in the description of each department within the College of Dentistry.	
7-Name of Course Instructor (if more than one, please list them)	
A detailed description of each course is available in the course description for each department within the Faculty of Dentistry.	
8-Course Objectives	
1. To prepare highly qualified dentists with advanced scientific and practical skills to provide treatment services. 2. To meet the labor market's needs for dentists. 3. To provide advanced treatment services under the supervision of experienced scientific staff, utilizing modern technologies . 4. Supporting continuing medical education for dentists in the country. 5. Encouraging scientific research to address oral and dental health problems in the community. 6. Providing medical and technical consultations to various government sectors. 7. Raising awareness about methods of preventing oral and dental diseases.	
9-Teaching and Learning Strategies	
Strategy	1. Theoretical lectures using the latest teaching and demonstration methods (interactive whiteboard and data projector) to present clinical and illustrative cases. 2. Practical laboratory and clinical application within the college laboratories and the teaching hospital. 3. Weekly and monthly discussion groups and seminars.

	4. Small group discussions to propose solutions to individual and community problems. 5. Blended learning, combining in-person and online learning through the e-learning platform (Classroom).
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**Academic description templates for the departments of the College of
Dentistry/University of Diyala**



1

- Academic Description Template for the Basic Dental Sciences Branch

The academic description for the Basic Dental Sciences branch was written in accordance with Administrative Order No. 105 dated 10/20/2024 and is represented by the gentlemen whose names are listed below:

1

- Dr. Fatima Kadhim IbrahimPresident

2

- Asst.Lec. Noor Adnan Hassan..... Member

3

- Asst.Lec. Mohammed Jassim Mohammed.... Member

4

- Asst.Lec. Rana Fattah Mahmoud..... Member

5

- Asst .Lec Zainab Ali Thaban..... Member

The academic description for the Basic Dental Sciences branch was reviewed by the gentlemen whose names are listed below in the University Quality Assurance and Performance Division:

1

- Asst Proffesor . Manar Abdul Razzaq Hassan

2

- Dr. Lina Ali Hasaballah

1. Program Vision

- Providing medical consultations and integrated healthcare enhances cooperation among various state sectors and ensures the better delivery of dental services.

This requires coordinated efforts between universities, health centers, and governmental institutions, in addition to investing in community awareness programs about the importance of oral health care.

- Furthermore, research can be utilized to study health trends and analyze data to identify the groups most at risk, thereby contributing to the development of preventive and therapeutic plans that effectively address the needs of society.

2. Program Mission

The College of Dentistry believes that human development is the foundation for preparing generations capable of leading society and building the nation.

Our objectives are embodied in education, scientific research, and community service through providing an inspiring academic environment, distinguished human resources, and curricula aligned with the needs of the labor market.

We strive to prepare qualified graduates distinguished by creativity and knowledge, while strengthening partnerships with the community to achieve sustainable development.

Moreover, we emphasize the importance of integrating theoretical knowledge with practical application, and we work diligently to compete at the international level.

3. Program Objectives

- The College of Dentistry was established in 2024 with the aim of preparing medical professionals specialized in the fields of oral and maxillofacial medicine and surgery, with outstanding scientific and professional competence.

The college includes modern dental clinics where students receive clinical training in all relevant specialties, such as oral and maxillofacial surgery, prosthodontics, pediatric and preventive dentistry, orthodontics, restorative and cosmetic dentistry, periodontology, as well as oral diagnosis, all utilizing the latest technologies.

- In addition, students are trained in a variety of scientific and applied laboratories. The duration of study at the college is five years.

4. Program Accreditation

The College of Dentistry strives to improve outcomes and achieve its goals to obtain international program accreditation.

5. Other External Influences

Teaching clinics, teaching laboratories, library, internet, community, dental association, pediatric dentistry societies, specialized dental centers.

6- Program Structure

Program Structure	Number of courses	Credit hours	Percentag	Reviews*
Institutional requirement	12	52		
College requirement	12	52		
department requirement	12	52		
Summer training				
Others				

Notes may include whether the course is core or elective •

7-program description

Years	Course code	Course title	Credit hours	
First	103CS	Computer Sciences	60	
	105HR	Human Rights	30	
	106CH	Medical Chemistry	60	60
	107PHS	Medical Physics	60	60
	108BIO	Biology	60	60
	102AL	Arabic language	60	
Second	212BC	Biochemistry	60	60
	213GH	General Histology	60	60
	214PH	(General Physiology	60	60
	216BC	Baath crimes	30	
	203CS	Computer Sciences	30	
	202AL	Arabic language	30	30

8-Expected Learning Outcomes of the Program

Knowledge

1-Recognize the importance of biomedical sciences as a foundation for understanding human growth, development, and health.

- 2-Understand the concepts of oral biology, including the identification of tooth forms and functions, and related structures in health and disease.
- 3-Comprehend the etiology and pathology of oral diseases, with emphasis on pathophysiology, diagnosis, prevention, and treatment, enabling the student to formulate a comprehensive treatment plan for the patient.
- 4-Identify recent advances in the field of biomedical sciences and their impact on dental practice and progress in terms of materials and medical devices.
- 5-Acquire comprehensive knowledge of patient care and the management of both basic and advanced skills, applying behavioral sciences and communication skills in clinical practice.
- 6- Understand the medical, legal, and ethical principles governing the dental profession.

Skills

1. Promote professional ethics and enhance positive interaction with patients among graduates.
2. Enable students to acquire problem-solving and critical thinking skills.
3. Foster continuous commitment to the principle of lifelong learning to ensure sustainable professional development.
4. Ensure that graduates possess a high ability to gather, analyze, and integrate theoretical information in order to provide appropriate oral healthcare procedures.

Values

1. Thinking Skills According to Student's Ability: This skill aims to enhance the student's ability to think critically and reflectively about concrete matters, understanding when, what, and how to think, thereby improving logical reasoning skills.
2. Critical Thinking Skills: Aims to enable the student to propose appropriate solutions to the problems presented.
3. Awareness of the Importance of Balance: Enhances the student's awareness of the need to balance freedom and responsibility.
4. Decision-Making Skills: Focuses on making well-considered decisions in the best interest of the patient, based on logical thinking and careful analysis.

9- Teaching and Learning Strategies

1. Delivering lectures.
2. Providing lecture materials to students on the college website.
3. Conducting experiments in laboratories.
4. Self-directed learning.
5. Educational clinics.
6. Showing educational videos.
7. Using projectors and digital cameras.
8. Employing educational models.
9. Organizing training courses and workshops.

10. Pre-clinical teaching and clinical practice.
11. Forming student groups.
12. E-classes / online classes.
13. Incorporating topics on communication and interpersonal skills as part of the curriculum.
14. Focusing on professional ethics and practice management.
15. Assigning student groups projects to enhance and develop personal interaction.

10. Evaluation Methods

1. Written exams/theoretical tests.
2. Oral examinations.
3. Practical laboratory tests.
4. Practical tests using mannequins.
5. Practical tests on patients.
6. Reports and case studies.
7. Evaluation of students' performance in the final-year graduation project, including their ability to apply the required knowledge and assessment of project outcomes.
8. Evaluation of students' performance in related courses.
9. Assessment of students' interaction with patients, faculty members, and clinical staff as part of continuous assessment in clinical courses.
10. Continuous monitoring of professional behavior and adherence to college rules and regulations.

11– Collage members

Name	Specialization		Specific requirements	College staff
	General	Specialized		
Prof. Dr Anfal shaker mutib	Biology	Molecular biology	✓	
Assist. Prof. Dr. Fatima Kazem Ibrahim	Biology	Physiology	✓	
Assist. Prof. Dr. Radina Ali Latif	Physics	Plasma Physics	✓	
Asst .Dr. Prof. Muthana adulqader	Biology	Biology		✓

Saleh				
Assist. Prof.Dr. Ziad Tareq Lafta	Arabic language	Andalusian Literature	✓	
Assist. Prof Dr. Bara Hassan Latif	Chemistry	Organic Chemistry	✓	
Lecturer Dr. Ayman Mazhar	Computer Science	Medical Information Technology		✓
Lecturer Dr. Ola Rabah Mahmoud	Biology	Philosophy biology		✓
Lecturer Dr.Lina Ali Hasballah	Biology	Parasitology	✓	
Assistant Lecturer Ramadan Nu'man Ghazal	Law Public	General Law	✓	
Assistant Lecturer Marwa Mansur Hussian	Medical microbiology	Medical Microbiology	✓	
Assistant Lecturer Rahma Mohammed Abbass	Medical microbiology	Medical Microbiology	✓	
Assistant Lecturer Rana Fattah Mahmoud	Biomedical	Biomedicine	✓	
Assistant Lecturer Mohammed Jassim Mohammed	Chemistry	Clinical Biochemistry	✓	
Assistant Lecturer Wissam Faisal Wadi	Biology	Parasitology	✓	
Assistant Lecturer Noor Adnan Hassan	Medical Microbiology	Medical Microbiology	✓	
Assistant Lecturer Zainab Ali Thu'ban	Arabic Language	Literature	✓	
Assistant Lecturer Abeer Ali Hameed	Chemistry	Chemistry	✓	
Assistant Lecturer Abdulwadood Rahman Hameed	Quranic Sciences	Quranic Sciences	✓	

Assistant Lecturer Batool Abdul Abdullah	Electrical & Electronics	Biomedical Engineering	✓	
Assistant Lecturer Suha Khalil Ibrahim	dentistry	Oral Microbiology	✓	
Assistant Lecturer Dohaa Saleh Mohammed Taha	Chemistry	Organic Chemistry	✓	
Assistant Lecturer Ali Abdul Kareem Ismail	Biology	Immunology	✓	
Assistant Lecturer Ghada Taha Ahmed	Chemistry	Organic Chemistry	✓	
Assistant Lecturer Muntha Ahmed Abdul Kareem	Biology	Microbiology	✓	
Assistant lecturer habib qais jafar	Political sciences	International Relations	✓	
Asst. lecturer haneen faleh hasan	Biology	Microbiology	✓	

12-Professional Development

Mentoring new collage members

The process you describe appears comprehensive and very useful for orienting new and visiting faculty members. The following additional steps could be taken to enhance this program:

1. **Personal Orientation Meetings:** - Arrange one-on-one meetings with academic officers to provide an overview of expectations and available opportunities.
2. **Interactive Activities:** Incorporate interactive activities such as group workshops or brainstorming sessions to foster communication and interaction among new faculty members.
3. **Ongoing Evaluation:** Establish a mechanism to evaluate the program's effectiveness through surveys or discussion sessions to gather feedback and recommendations.
4. **Guidance Manual:** Providing a comprehensive guide containing information on policies and procedures, as well as advice on academic and social life within the institution.
5. **Support Network:** Establishing a platform for communication between new and existing members to exchange experiences and assist in adjustment.
6. **Regular Follow-up:** Organize regular follow-up sessions to ensure ongoing support

and guidance, and to provide assistance when needed.

In this way, the academic experience of new faculty members can be enhanced, and they can feel welcomed and supported from the beginning of their careers.

13. Professional development of collage members

- Negotiation and persuasion skills: Students should possess the ability to influence and persuade others, interact with them to discuss ideas, and strive to reach agreements.
- Leadership skills: Students should have leadership skills, enabling them to guide and motivate others to achieve common goals.
- Independence and responsibility at work: The student must be able to take responsibility and work independently in various circumstances and situations.

14- Admission Criteria

Admission criteria include selecting students based on their cumulative grade point average according to the central admissions system, along with an assessment of their physical, mental, and social abilities that qualify them to handle medical cases and the demands of their studies. Most dental colleges require [specific qualifications/qualifications]. Personal interviews are conducted with applicants to assess characteristics such as willingness to help others, self-confidence, ability to handle challenges, teamwork, and ability to work independently.

15- Key sources of information about the program

1. The college and university websites.
2. The university directory.
3. 3. Academic resources and college textbooks.

16- Program Development Plan

1. Continuously developing scientific and administrative staff and evaluating their performance annually
2. Conducting educational seminars to refine individual skills
3. Developing new and advanced methods to obtain academic accreditation

17-Program Skills Outline															
Year/Level				Required program Learning outcomes											
				Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First	103CS	computer sciences	Basic	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
	105HR	Human rights	Basic	✓	✓			✓	✓			✓	✓		
	106CH	Medical chemistry	Basic	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓
	107PC	Medical physics	Basic	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓
	108BL	Biology	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	102AL	Arabic Language	Basic	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓
Second	212BC	Biochemstery	Basic	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	213GH	General histology	Basic	✓	✓	✓		✓	✓		✓				
	214PH	General physiology	Basic	✓	✓			✓				✓	✓		
	216BC	Baath crimes	Basic	✓	✓			✓	✓			✓	✓		
	203CS	Computer sciences	Basic	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓

	202AL	Arabic Language	Basic	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓
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- **Please tick the boxes corresponding to the individual program learning outcomes under evalua.**

Academic Description for First Stage
Course description template for Computer sciences

1.Course Name:
computer sciences
2.Course Code:
103 CS
3.Semester / Year:
2025-2026
4.Description Preparation Date:
1/10/2025
5. Available Attendance Forms:
attendance in classroom for theoretical course per week
6. Number of Credit Hours (Total) :
Number of Units (Total) 60hour/4 credite unite
7. Course administrator's name (mention all, if more than one name)
aymen.mbade@uodiyala.edu.iq
Lecturer Dr. Ayman Mazhar Badr
8.Course Objective
Develop Basic Skills: Introduce students to fundamental concepts in computer science, including computer components, operating systems, and basic software applications. Enhance Critical Thinking: Encourage students to solve problems through analytical thinking and the use of appropriate software tools. Apply Technology in Daily Life: Explore how computers and technology are used in various fields such as education, work, and entertainment. Teach Digital Safety: Raise awareness among students about the importance of online security and methods for protecting personal information. Foster Creativity: Encourage students to use computers as a tool for creative expression, such as graphic design and video editing. Prepare Students for the Job Market: Equip students with the knowledge and skills needed to meet the demands of the technology and information sector.
9. Teaching and Learning Strategies
1. Active Learning: Encourages students to actively participate in the learning process

- through activities that require critical thinking, such as group discussions and projects.
2. Problem-Based Learning (PBL): Motivates students to solve real or simulated problems, helping them apply knowledge and skills in practical contexts.
 3. Collaborative Learning: Promotes teamwork among students as they work together to achieve common educational goals, enhancing communication and social interaction skill
 4. Use of Technology: Integrates technological tools such as educational software, mobile applications, and digital resources to enrich the learning experience and make it more interactive.
 5. Student-Centered Learning: Focuses on students' needs and interests, giving them the opportunity to select specific topics or learning methods that suit them best.
 6. Inquiry-Based Learning: Encourages students to ask questions and gather information from different sources, helping them develop research and analytical skills.

10. The structure of the course for theoretical / first seson					
Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1 2	1	<u>Introduction to Computer:</u> - Concepts of Hardware and Software with their components; - Concept of Computing, Data and Information - Applications of Information Electronics and Communication Technology (IECT); - Connecting input/output devices, and peripherals to CPU	Computer science	Using coputer and smart board	Daily, monthly, midterm, final exam.
3 4	1	- Computer components - Computer portions - Hardware parts - I/O units	Computer science	Computer science	Daily, monthly, midterm, final exam.

		Memory types Volatile and non-volatile memory Secondary storage			
5 6	1	<u>Computer Components:</u> - CPU components - Control unit - Arithmetic logic unite and register - Computer ports - Personal computer	Computer science	Computer science	Daily, monthly, midterm, final exam.
7 8	1	<u>Operating System and Graphical User Interface GUI:</u> - Operating System; - Basics of Common Operating Systems; - The User Interface, Using Mouse Techniques; Use of Common Icons, - Status Bar, - Using Menu and Menu-selection,	Computer science	Computer science	Daily, monthly, midterm, final exam.
9 10	1	Concept of Folders and Directories, Opening and closing of different Windows; Creating Short cuts. Customization and personalization of GUIS Accessibility features in GUIS - User experience	Computer science	Computer science	Daily, monthly, midterm, final exam.
11 12	1	<u>Word Processing:</u> Word Processing Basics; Opening and Closing of documents; Text creation and Manipulation; Formatting of text;	Computer science	Computer science	Daily, monthly, midterm, final exam.

13	1	Creating and managing tables	Computer science	Computer science	Daily, monthly, midterm, final exam.
14		Utilizing styles and themes			
15		- Spell check and grammar tools - Using headers and footers - Introduction to spreadsheet software - Creating and formatting worksheets			

The structure of the course for theoretical / second seson					
Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1 2	1	- Spread Sheet (Cont.): Sorting and Filtering Data, Using Formulas and Functions. . Spread Sheet (Cont): Using Formulas and Functions, Using Pivot Tables for Data Analysis.	Computer science	Computer science	Daily, monthly, midterm, final exam.
3 4	1	- Spread Sheet (Cont.): Data Validation and Error Checking, Data Visualization: Creating Charts and Graphs. - Presentation Software: Introduction to Presentation Software, Overview of Popular Presentation Tools, Creating a New Presentation.	Computer science	Computer science	Daily, monthly, midterm, final exam.
5 6	1	<u>Presentation Software:</u> - Basics of presentation software; - Creating Presentation; Preparation and Presentation of Slides; - Slide Show; - Taking printouts of	Computer science	Computer science	Daily, monthly, midterm, final exam.

		presentation / handouts.			
7 8	1	- Presentation Software (Cont.): Using Templates and Themes, Inserting and Formatting Text and Images, Transition and Animation Effects - Presentation Software (Cont.): Using Speaker Notes and Timers, Advanced Features: Hyperlinks and Action Buttons.	Computer science	Computer science	Daily, monthly, midterm, final exam.
9 10	1	introduction to Internet and Web Browsers (Cont): Concept of Internet and its Applications; connecting to Internet. introduction to Internet and Web Browsers (cont): World Wide Web; Web Browsing software's, Search Engines.	Computer science	Computer science	Daily, monthly, midterm, final exam.
11 12	1	Introduction to Internet and Web Browsers (Cont.): Understanding URL: Domain name; IP Address. 27. Communications and Emails: Basics of electronic mail; Getting an email account; Sending and receiving emails; Accessing sent emails; Using Emails; Document collaboration.	Computer science	Computer science	Daily, monthly, midterm, final exam.
13 14 15	1	- Communications and Emails (cont): Sending and receiving emails; Accessing sent emails; Using Emails; Document collaboration. 29. Introduction to Cloud Computing and Services: Definition of Cloud Computing and its concept, Cloud-	Computer science	Computer science	Daily, monthly, midterm, final exam.

		Based Office Suites (Office 365 and Google Workspace).			
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11.Cours Evaluation

Grade Distribution (out of 100):

15% : Midterm exam.

15% : Annual effort (includes summer training, daily and monthly exams, oral and written tests, practical requirements, reports, etc.).

70% : Final theoretical exam.

12.Infrastructure of

1-Required course books	Window 10 Office 2016 Fundamentals of Computers and Their Office Applications – Part I and Part II
2- main references (sources)	Computer application in management E-learning concepts and techniques
3- Recommended books and references (scientific journals, reports)	- graham Brown, David Wastson, “Cambridge IGCSE information and communication technology” ,3rd Edition (2020) - alan evans , Kendall Martin , Mary Anne Poatsy, “Technology In Action Complete”, 16th Edition (2020) Ahmed Banafa, “ Interrduction to Artificial Intelligence (AI)”, 1st Edition (2024).
4- Electronic references, websites	

Course description template for Human Rights and Democracy

1. Course Name:
Human Rights and Democracy
2.Course Code:
105HR
3.Semester / Year:
2024-2025
4.Description Preparation Date:
1/10/2025
5. Available Attendance Forms:
attendance in classroom for theoretical course per week
6. Number of Credit Hours (Total) / Number of Units (Total)
30hour/2credite unite
7. Course administrator's name (mention all, if more than one name)
ramadhan@uodiyala.edu.iq Lecturer Ramadan Noaman Ghazal Asst. Lecturer Zainab Ali Thaban Asst. Lecturer Abdulwadood Rahman Hameed Asst. lecturer habeeb qais jaafar
8.Course Objective
Enabling students to understand civil and political rights: This objective aims to familiarize students with their civil and political rights, ensuring their continuous awareness and engagement. It helps them understand the scope and limits of their freedoms, in addition to learning about the historical development and evolution of these rights. Introducing students to the concept of democracy: Students should gain knowledge of the concept of democracy, the foundations of building a democratic state, as well as the different types of democratic systems and how they function.
9. Teaching and Learning Strategies

lectures with PowerPoint presentations to clarify concepts and organize information in an interactive way.

Scientific discussions: Encouraging students to participate in academic discussions to deepen their understanding and analyze presented ideas.

Guiding students to specialized websites: Directing students to use specific academic websites that help broaden their knowledge and improve their skills.

Providing lectures from Arabic books: Supplying students with lectures derived from Arabic books in grammar, literature, and orthography to strengthen their language skills.

10-The structure of the course for theoretical / first seson					
Week	Hours	Required educationalgoals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Introduction / Part One: Human Right Chapter One: Human Rights in Ancient Civilization Section One: Human Rights in Greek and Egyptian Civilizations Subsection One: Human Rights in the Greek Civilization Subsection Two: Human Rights in the Ancient Egyptian Civilization Section Two: Human Rights in Other Ancient Civilizations	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
2	2	Chapter Two: Human Rights in Divine Laws and Religions -	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.

		Section One: Human Rights in Christianity and Judaism Section Two: Human Rights in Islam			
3	2	- Chapter Three: Sources of Human Rights - Section One: International Sources - Subsection One: The Universal Declaration of Human Rights - Subsection	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
4	2	- Two: The Two International Covenants on Human Rights	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
5	2	- Section Two: National Sources - Subsection One: The French Declaration of the Rights of Man and of the Citizen (26 August 1789)	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
6	2	- Subsection Two: French Constitutions and Declarations Following the 1789 Declaration of Rights	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
7	2	Subsection Three: The Constitution of the Republic of Iraq (2000)	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
8	2	Chapter Four: Guarantees of Human Rights Section One: Guarantees of Human Rights at the National Level Subsection One:	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.

		Constitutional Guarantees			
9	2	Subsection Two: Judicial Guarantees	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
10	2	Section Two: Guarantees of Human Rights in Islam Subsection One: Affirmation of the Principle of Dual Responsibility in Islamic Society Subsection Two: The Religious Nature of Islamic Law	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
11	2	Subsection Three: Some Islamic Systems for the Benefit of Individuals, the Community, and Governing Authorities	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
12	2	Section Three: Guarantees of Human Rights at the International Level Subsection One: The United Nations Charter Subsection Two: The United Nations General Assembly	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
13	2	Subsection Three: The Economic and Social Council Subsection Four: The	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.

		Human Rights Council			
14	2	Section Four: The Role of Regional Organizations in Protecting Human Rights Subsection One: The European Convention on Human Rights	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	2	Subsection Two: The American Convention on Human Rights Subsection Three: The African Charter on Human and Peoples' Rights Subsection Four: The Arab Charter on Human Rights Chapter Five: The Future of Human Rights Section One: Technological Progress and Its Impact on Human Rights and Public Freedoms	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.

The structure of the course for theoretical / second seson					
Week	Hours	Required educationalgoals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Subsection One: Political Parties and	Human Rights and	Using coputer	Daily, monthly,

		Human Rights Subsection Two: The Role of Media and Socialization	Democracy	and smart board	midterm, final exam.
2	2	- Section Two: Globalization and Human Rights Subsection One: Privacy and Human Rights - Subsection Two: Hegemony and Human Rights	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
3	2	Chapter One: The Concept of Democracy – Its Development, Definition, and Dimensions - Section One: The Roots and Development of the Concept of Democracy	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
4	2	Section Two: The Definition of Democracy	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
5	2	- Section Three: Democracy Between Universality and Particularity	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
6	2	Chapter Two: Forms of Democracy - Section One: Direct Democracy - Subsection One: The Content of Direct Democracy - Subsection Two:	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.

		Applications of Direct Democracy - Subsection Three: Evaluation of the Direct Democracy System			
7	2	Section Two: Semi-Direct Democracy Subsection One: The Concept of Semi-Direct Democracy Subsection Two: Forms of Semi-Direct Democracy	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
8	2	Subsection Three: Evaluation of the Semi-Direct Democracy System Section Three: Representative Democracy	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
9	2	Subsection Three: Forms of the Representative Parliamentary System	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
10	2	Section Four: The Parliamentary Assembly Subsection One: The Unicameral and Bicameral Parliamentary System Subsection Two: The Internal Organization of the Parliamentary	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.

		Assembly			
11	2	Section Four: The Parliamentary Assembly Subsection One: The Unicameral and Bicameral Parliamentary System Subsection Two: The Internal Organization of the Parliamentary Assembly	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
12	2	Chapter Three: Mechanism of the Representative Parliamentary System: Elections Section One: The Concept of Elections and Their Legal Adaptation Subsection One: The Concept of Elections Subsection Two: Legal Adaptation of Elections Section Two: The Electoral Body Subsection One: The Concept of the Electoral Body Subsection Two:	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.

		Formation of the Electoral Body			
13	2	Subsection Three: Election Candidates Section Three: Organization of the Electoral Process Subsection One: Determination of Electoral Districts Subsection Two: Electoral Districts Subsection Three: Election Candidates	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
14	2	Subsection Four: Election Campaign Subsection Five: Voting Section Four: Organization of Elections Subsection Two: Individual Voting and List Voting (American / Asian Systems)	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	2	Subsection Three: The Majority System and the Proportional Representation System Subsection Four: The System of Interest	Human Rights and Democracy	Using coputer and smart board	Daily, monthly, midterm, final exam.

		Representation			
		Subsection Five: Optional and Compulsory Voting Systems			
		Subsection Six: Secret Voting and Open Voting Systems			

12.Cours Evaluation

Grade Distribution (out of 100):

15% : Midterm exam.

15% : Annual effort (includes summer training, daily and monthly exams, oral and written tests, practical requirements, reports, etc.)..

70% : Final theoretical exam.

13.Infrastructure of

1-Required course books	Hafez Alwan Hamadi – Human Rights
2- main references (sources)	Hameed Hanwan Khalid – Human Rights Group of Authors – Understanding Human Rights
3- Recommended books and references (scientific journals, reports)	
4- Electronic references, websites	

Course description template for Medical Chemistry

1. Course Name:
Medical chemistry
2. Course Code:
106CH
3. Semester / Year:
2025-2026
4. Description Preparation Date:
1/10/2025
5. Available Attendance Forms:
attendance in classroom for theoretical course per week
6. Number of Credit Hours (Total) / Number of Units (Total)
Number of theoretical hours: 60 Number of practical hours: 60 Number of units: 6
7. Course administrator's name (mention all, if more than one name)
baraa.h@uodiyala.edu.iq Asst. Prof. Baraa Hassan Lateef Asst. Lecturer Mohammed Jasim Mohammed Asst. Lecturer Abeer Ali Hameed Asst. Lecturer doha saleh mohammed Asst. Lecturer ghada taha ahmed
8. Course Objectives
Course Objective: The Medical Chemistry course aims to introduce students to the fundamentals of chemistry in its various fields, including inorganic, organic, and biological chemistry, with a focus on how these areas are related to dentistry. The course helps students understand chemical reactions and the materials used in medical treatments and diagnostics related to oral and dental health.
9. Teaching and Learning Strategies
1. Lectures using PowerPoint presentations 2. Presentation of educational videos 3. Guiding students to useful websites for further learning 4. Monitoring students' way of thinking, expression, and responsiveness through

5. Scientific discussions

10.The structure of the course for theoretical / first seson

Week	Hours	Required educationalgoals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Acid, Base and Salt	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
2	2	salts, preparation of salts	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
3	2	Fluid and electrolyte	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
4	2	Buffer-pH and Acid-Base Balance	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
5	2	acid-base balance and blood pH	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
6	2	Colloids and colloidal dispersions	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
7	2	Chirality in Biological Systems (Molarity)	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
8	2	Molar concentration	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
9	2	Pollution	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
10	2	Radiochemistry	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
11	2	Alkanes and Cycloalkanes	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

12	2	Alkenes and Alkynes	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
13	2	Aromatic compounds	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
14	2	Aromatic compounds in Nature	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	2	Stereoisomers of Carbon	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

The structure of the course for practical / first seson

Week	Hours	Required educatio nalgoals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Safety of chemicals part 1	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
2	2	Safety of chemicals part2	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
3	2	Action of Strong Base and Acids	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
4	2	Solubility rules and Applications (Solubility rules of salts).	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
5	2	Test for negative ions (Anions).part 1	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
6	2	Test for negative ions (Anions). part 2	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
7	2	PH meter	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
8	2	Test for positive ions (Cations). part 1	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

9	2	Test for positive ions (Cations). part 2	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
10	2	Titration	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
11	2	hydrocarbons	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
12	2	Aliphatic Hydrocarbons	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
13	2	Aromatic hydrocarbons Part.1	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
14	2	Aromatic hydrocarbons Part.2	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	2	Preparation of aspirin	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

The structure of the course for theoretical / second seson

Week	Hours	Required educationalgoals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Diastereomers	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
2	2	Alcohols, Phenols, Ethers and Thiols (preparation, reactions)	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
3	2	Carboxylic Acids And Their Derivatives , part 1	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
4	2	Carboxylic Acids And Their Derivatives , part 2	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
5	2	Aldehydes and ketones	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
6	2	Carbohydrates	Medical chemistry	Using coputer and	Daily, monthly, midterm, final exam.

				smart board	
7	2	Monosaccharide's	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
8	2	Disaccharides	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
9	2	Lipids	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
10	2	Derived lipids	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
11	1	Proteins	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
12	1	Amino acids Effects of protein on oral health	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
13	1	Nucleic Acids	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
14	1	Nucleosides, Nucleotides	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	1	Dioxy and ribo Nucliec acids	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

The structure of the course for practical / second seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Alcohol	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
2	2	Phenols reactions	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
3	2	Aldehydes and ketones	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

4	2	Carboxylic Acids reactions part 1	Medical chemistry	Using coputer and smart board2	Daily, monthly, midterm, final exam.
5	2	Carboxylic Acids reactions part 2	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
6	2	Carbohydrates reactions	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
7	2	Monosaccharides reactions	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
8	2	Disaccharides reactions	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
9	2	Lipids reactions part 1	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
10	2	Lipids reactions part 2	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
11	1	Proteins reactions	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
12	1	Amino acids reactions	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
13	1	Paper chromatography part 1	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
14	1	Paper chromatography Part 2	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	1	Osmosis	Medical chemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

11.Cours Evaluation

Grade Distribution (out of 100):

15% : Midterm exam.

25% : Annual effort (includes summer training, daily and monthly exams, oral and written tests, practical requirements, reports, etc.).

20% : Final practical exam.

40% : Final theoretical exam.

12.Infrastructure of

1-Required course books	• The Chemical Basis Of Life :General ,Organic, and Biological Chemistry for the Health Sciences By George H.Schmid
2- main references (sources)	• Practical Organic And BIO- Chemistry • BY R. H. A. PLIMINER • Reader in Physiological Chemistry, University of London, University College • A text-book of macro and semimicro qualitative inorganic analysis. • Fifth Edition Revised by G. Svehla, Ph. D., D. Sc., F. R. I. C Reader in Analytical Chemistry, Queen's University, Belfast
3- Recommended books and references(scientific journals, reports)	
4- Electronic references, websites	

Course description template for Medical physics

1. Course Name:
medical physics
2.Course Code:
107P
3.Semester / Year:
2025-2026
4.Description Preparation Date:
1/10/2025
5. Available Attendance Forms:
attendance in classroom for theoretical course per week
6. Number of Credit Hours (Total) / Number of Units (Total)
120hour/6 credite unite
7. Course administrator's name (mention all, if more than one name)
Asst. Prof. Dr. Rudaina Ali Latif Lecturer Batool Abdul Abdullah
8. Course Objectives
Enabling the student to understand physical concepts related to the human body: The course aims to introduce students to the fundamental physical concepts that explain how the human body functions. Physical functions of human body organs and medical applications: The course covers the study of the physical functions of human organs and how this knowledge can be applied in medical diagnosis and treatment, both theoretically and practically. Theoretical and practical mastery of the prescribed curriculum content: The course seeks to provide students with comprehensive theoretical and practical understanding of all prescribed curriculum topics, enabling them to apply knowledge effectively.
9.Teaching and Learning Strategies
Lectures using PowerPoint presentations Guiding students to useful websites for further learning Monitoring students' way of thinking, expression, and responsiveness through Scientific discussions

10.The structure of the course for theorctical / first seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1 2	4	Terminology Terms: Medical Physics, physical medicine, Physical therapy, Health Physics, Radiological Physics, clinical physics. Modeling, Accuracy, Precision, False Positive, False Negative.	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
3 4	4	Force on &in body: Static forces :(type of levers with medical examples). Dynamic forces (Centrifuge	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
5 6	4	Physics of the skeleton: Bones:(Function of bones, Composition of bone, bone remodeling, compact and trabecular bone) Stress-strain curve :(compressive and tensile stress, young modulus). Bone joints :(Synovial fluid, coefficient of a joint).	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
7 8	4	Heat and cold in medicine: Physical basis of heat and temperature, Temperature scales, Converting Temperatures, Temperature in	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.

		Dentistry, Thermal expansion, (Linear, Area, Volume Thermal Expansion), Thermometry, Heat therapy, Thermography, Cold in medicine and cryosurgery. Thermal conductivity.			
9 10	4	Energy, work and power of the body: First law of thermodynamic. Energy change in the body (Met, Basal metabolic rate (BMR). Work and power. Efficiency heat losses from the body. Anaerobic phase and aerobic phase. Hypothalamus (body's thermostat). Heat lost by (radiation, convection, evaporation of sweat and respiration).	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
11 12	4	Pressure: Definition, absolute pressure, gauge pressure, negative pressure, unit of pressure. Measurement of pressure in the body (Manometer). Pressure inside the skull. Eye pressure. Pressure in the skeleton. Pressure in the urinary bladder. Boyle's law: (pressure while diving). HOT (hyperbaric oxygen therapy).	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.

13 14	4	Electricity within the body: Electrical potential of nerves (resting potential, action potential in myelinated and unmyelinated nerves) Electromyogram (EMG). Electrical potential in the heart (electrocardiogram ECG). Electroencephalogram (EEG)	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	4	Sound in medicine: Properties of sound. Stethoscope (including heart sound).mechanism of hearing	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.

The structure of the course for practical / first seson					
Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Guidelines of Medical Physics Lab and Rules must be obeyed by the students	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
2	2	Graphing Techniques	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
3 4	4	Ohm's law: - verify ohm's law - to find the value of different values of resistance	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
5 6	4	Semiconductors (junction diode): To determine the characteristics of the semiconductors Comparison between omic and non-omic	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.

		resistance			
7 8	4	Cathode Ray Oscilloscope - Measurement of deflection sensitivity of D. C. voltage. - Measurement of deflection sensitivity of A. C. voltage	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
9 10	4	The focal length of convex lens: -Rough value of focal length of different convex lenses, -A graphical method of measuring of focal length, Comparison between these methods and the given value.	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
11 12	4	Hook's law: To verify Hook's law and determine the force constant of the spring. -To determine the work done by stretching the spring.	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
13 14	4	Focal length of concave mirror: - Locating the radius of curvature - Determining the focal length	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	2	General review and 1st course exam	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.

The structure of the course for theoretical / second seson					
Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1 2	4	Ultrasound (A-scan, B-scan, M-scan and Doppler effect).	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.

		Physiological effect of ultrasound in therapy			
3 4	4	Light in medicine: Light nature, Planck Equation, (Reflection, Refraction and Absorption of Light, Properties of light), Diffuse reflection, Specular reflection, Phototherapy, Application of ultraviolet and infrared light in medicine, Tanning and Skin Cancer.	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
5 6	4	Laser in medicine. What is laser? Application of laser in medicine Atomic Transitions, Population inversion, Laser Typical Characteristics, General Applications of Laser, Laser Dental Applications, Reshape gum tissue, Laser aided teeth whitening, Laser Drill.	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
7 8	4	Physics of eye and vision: Focusing element of the eye (cornea, lens). Element of the eye (pupil, aqueous humor, vitreous humor, sclera). Visual acuity, Snellen chart, optical density.	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
9 10	4	Physics of diagnostic X-ray: Properties of X-ray, production of X-ray. Absorption of X-ray,	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.

		contrast media-ray image (penumbra, grid, and intensifying screens).Radiation to patients from X-ray (filters).			
11 12	4	Physics of nuclear medicine: Radioactivity decay, half-life, units. Basic instrumentation and its medical application (GM-tube, Photomultiplier tube, scintillation detector, solid state detector).Therapy with radioactivity. Radiation doses in nuclear medicine.	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
13 14	4	Physics of radiation therapy: The dose units (Rad and Gray).Principles of radiation therapy. Brach therapy, quality factor (QF)	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.

The structure of the course for practical / second seson					
Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1 2	4	Laser applications: - To measure the width of a single slit by using a laser -To measure the wavelength of laser by using a certain single slit	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
3	4	Boyle's law: -To verify Boyle's law -To measure the pressure	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.

4		of the atmosphere			
5 6	4	Inverse Square law: - To verify the inverse square law - Radiation shielding by different thicknesses of of a certain material	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
7 8	4	Viscosity of a liquid - To determine the viscosity of a medium using a small sphere falls with a constant terminal velocity. - To verify Stokes' law	Medical physics	Using coputer and smart board2	Daily, monthly, midterm, final exam.
9 10	4	Velocity of the sound - To measure the velocity of the sound by using a resonance tube, closed at one end, at room temperature. - Calculated the theoretical and practical values of the velocity of sound and comparing between them.	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
11 12	4	The focal length of a converging lens - To determine the focal length of a converging lens by lens displacement method using conjugate foci. - To calculate curvature value of this converging lens	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.
13 14	4	Simple Pendulum -To determine the periodic time and its variation with the length of the	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.

		pendulum -To calculate the acceleration of free fall			
15	2	General review and 2nd course exam	Medical physics	Using coputer and smart board	Daily, monthly, midterm, final exam.

11.Cours Evaluation

Grade Distribution (out of 100):

15% : Midterm exam.

25% : Annual effort (includes summer training, daily and monthly exams, oral and written tests, practical requirements, reports, etc.).

20% : Final practical exam.

40% : Final theoretical exam.

12.Infrastructure of

1-Required course books	• Medical Physics by John Cameron • Physics of the human body by Irving Herman
2- main references (sources)	• Physics for scientists and engineer, Raymond A, serway, 1987.
3- Recommended books and references(scientific journals, reports)	
4- Electronic references, websites	

Course description template for Biology

1.Course Name:	
Biology	
2.Course Code:	
108 Bio	
3.Semester / Year:	
2025-2026	
4.Description Preparation Date:	
1/10/2025	
5. Available Attendance Forms:	
attendance in classroom for theoretical course per week	
6. Number of Credit Hours (Total) / Number of Units (Total)	
120hour/6 credite unite	
7. Course administrator's name (mention all, if more than one name)	
Prof. Dr. anfal shaker mutaib	anfal@uodiyala.edu.iq
Asst. Prof Muthana Abdulqader	Salehdr.muthanna@uodiyala.edu.iq
Lecture .Dr.lina ali hasballah	Lina.a@uodiyala.edu.iq
Asst. Lecturer Ali Abdul Kareem	ali.legi@uodiyala.edu.iq
Asst. Lecturer Soha Khalil Ibrahim	alqaisy.suha@udiyala.com
asst.lecture.wisam faysal	wisam.faisal@uodiyala.edu.iq
Asst.Lecture . Rana Fatah Mahmud	rana.f@uodiyala.edu.iq
asst. lecturer montaha ahme	dmuntaha.abdul-kareem@uodiyala.edu.iq
Asst. lecturer haneen faleh hasan	han.fh0089@gmail.com
Asst. Lecture . marwa mansur hussin	marwa.m@uodiyala.edu.iq
8. Course Objectives	
Introduction to General Biology: Provides a comprehensive overview of basic biological concepts, including the study of living organisms, vital processes, and ecological relationships. Study of Cell and Tissue Biology: Focuses on understanding the structure and function of the cell, the formation of different tissues in living organisms, and their roles in vital processes. Study of Medical Parasitology: Covers the study of parasites and their impact on human health, including types of parasites, their life cycles, modes of transmission, and effects on tissues and organs.	
9. Teaching and Learning Strategies	

Using Lectures via PowerPoint: Delivering lectures with PowerPoint to clarify concepts and organize information in an interactive manner.

Scientific Discussions: Encouraging students to participate in scientific discussions to deepen their understanding and analyze presented ideas.

Guiding Students to Specialized Websites: Directing students to use certain specialized websites that help broaden their knowledge and improve their skills.

Providing Students with Lectures from Arabic Books: Offering lectures extracted from Arabic books in grammar, literature, and spelling to strengthen their language skills.

10.The structure of the course for theoretical / first seson

Week	Hours	Required educational goals	Unit name and/or topic	Education Method	Evaluationmethod
1	2	Introduction to biology	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
2	2	Prokaryotes and Eukaryotes	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
3	2	General and oral Immunity	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
4	2	Bacteria and oral disease	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
5	2	Genetics and its role in oral diseases	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
6	2	Simple epithelial tissue (Tongue)	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
7	2	Stratified epithelial tissue	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
8	2	Glandular epithelial tissue (salivary gland)	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
9	2	General connective tissue (blood)	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.

10	2	Muscular tissue	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
11	2	Nerve tissue	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
12	2	Cell structure (oral mucus membrane)	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
13	2	Plasma membrane structure	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
14	2	Passage of Materials across Cell Membrane	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	2	Cell cycle	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.

The structure of the course for practical / first seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Laboratory safety	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
2	2	Parts of microscope	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
3	2	Types of cells	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
4	2	Simple epithelial tissue	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
5	2	Stratified epithelia tissue	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
6	2	Glandular epithelial tissue	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.

7	2	Serous, Mucous, Sero-mucous cell glands	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
8	2	Proper connective tissue, Loose	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
9	2	Proper connective tissue, dense	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
10	2	Special connective tissue, type of cells	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
11	2	Cartilage, Hyaline, Elastic, Fibro	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
12	2	Compact and spongy bone	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
13	2	Human Blood, W.B.C , R.B.C and frog blood	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
14	2	Muscular tissue: Skeletal, cardiac and smooth muscles	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	2	Nerve cell	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.

The structure of the course for theoretical / second seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	M16itosis and meiosis	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
2	2	Cell energy	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.

3	2	Nucleic acid, DNA and RNA	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
4	2	Introduction to parasitology	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
5	2	Types of parasites and host	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
6	2	General and oral protozoa	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
7	2	Human amoebas, E. histolytica, E.coli, E.gingivalis	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
8	2	Flagellates, Giardia lamblia, Trichomonas tenax, T.hominas, T.vaginalis	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
9	2	Leishmania , cutaneous and vesiral	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
10	2	Sporozoa, Plasmodium spp.	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
11	2	Toxoplasma gondii	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
12	2	Nemathelminthes, Ascaris lumbricoides,	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.

13	2	Ancylostoma duodenale, Entrobilus vermicularis	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
14	2	Platyhelminthes, Fasciola hepatica	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	2	Schistosoma spp.	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.

.The structure of the course for practical / second seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Central and peripheral nerve system	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
2	2	Spinal cord and meninges	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
3	2	Entamoeba histolytica , Entamoeba coli	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
4	2	Giardia lamblia , Trichomonas vaginalis Trichomonan tenax	Biology	Using coputer and smart board2	Daily, monthly, midterm, final exam.
5	2	Leishmania tropica, Leshmania donovani	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
6	2	Trypanosoma gambiense, T.rhodesien se	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.

7	2	Plasmodium vivax, Toxoplasma gondii	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
8	2	Balantidium coli	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
9	2	Echinococcus granulosus, Taenia saginata Taenia solium	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
10	2	Ancylostoma, Ascaris , Entrobisus	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
11	2	Schistosoma spp, Fasciola hepatica	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
12	2	Endoskeleton of frog	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
13	2	Experiment...examine samples of water	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
14	2	Experiment...examine samples of water (one hour), Experiment ...Blood groups(one hour)	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	2	Experiment ...Blood groups	Biology	Using coputer and smart board	Daily, monthly, midterm, final exam.

11.Cours Evaluation

Grade Distribution (out of 100):

15% : Midterm exam.

25% : Annual effort (includes summer training, daily and monthly exams, oral and written tests, practical requirements, reports, etc.).

20% : Final practical exam.

40% : Final theoretical exam.

12.Infrastructure of

1-Required course books	Human biology
2- main references (sources)	1. Paniker's Textbook of Medical parasitology 2. eight edition(2018) 3. Textbook of Histology , (2020) by Leslie P. Gartner , Elsevier Health Sciences, Medical - 704 pages. 4. CELL BIOLOGY, Third edition. (2017) 5. Thomas. D; William .C; Jennefer. L. and Graham. T.
3- Recommended books and references(scientific journals, reports)	
4- Electronic references, websites	https://openstax.org/books/anatomy-and-physiology/pages/1-introduction https://www.cdc.gov/index.htm

Course description template for Arabic Language

1.Course Name:
Arabic Language
2.Course Code:
102 AL
3.Semester / Year:
2025-2026
4.Description Preparation Date:
1/10/2025
5. Available Attendance Forms:
attendance in classroom for theoretical course per week
6. Number of Credit Hours (Total) / Number of Units (Total)
60hour/4credite unite
7. Course administrator's name (mention all, if more than one name)
Asst. Prof. Dr. Ziad Tariq lafta drziyadtariq@uodiyala.edu.iq
8. Course Objectives
Empowering students with Arabic grammar rules and trying to keep them connected to them, as they are often similar to English grammar rules, which requires referring to the original language when needed. University mental development through learning the correct scientific Arabic
9. Teaching and Learning Strategies
Using Lectures via PowerPoint: Delivering lectures with PowerPoint to clarify concepts and organize information in an interactive manner. Scientific Discussions: Encouraging students to participate in scientific discussions to deepen their understanding and analyze presented ideas. Guiding Students to Specialized Websites: Directing students to use certain specialized websites that help broaden their knowledge and improve their skills. Providing Students with Lectures from Arabic Books: Offering lectures extracted from Arabic books in grammar, literature, and spelling to strengthen their language skills.

10. The structure of the course for theoretical / first seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	‘Literary themes poetic selections in the pre-Islamic era .(Mu'allaqat)	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
2	2	Poem of Antarah ibn Shaddad	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
3	2	Morphological topics - Morphological balance	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
4	2	Plurals in Arabic	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
5	2	Assigning the verb to pronouns	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
6	2	Verb conjugation in terms of health and illness	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
7	2	Stripping and increasing	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
8	2	Derivatives	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
9	2	Language skills: solar and lunar alphabets	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
10	2	Rules for writing punctuation marks	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
11	2	Rules for writing the first, middle, and hamza, and the final hamza of connection and separation	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.

12	2	Arabic dictionaries lexicographical schools	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
13	2	The meanings of strange words in the such as ‘Holy Quran the word (tafahum) and (farsha), based on the book of Al- Al-Isfahani Raghīb	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
14	2	My school curriculum (eye , foundation, and exercise) extracting words	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
15	2	Common linguistic errors	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.

The structure of the course for theoretical / second session

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluation method
1	2	Literary topics Ibn al- Rumi’s Ba’iyyah Your (verses (seven enemy learns from . So do your friend not have many . companions	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
2	2	Human values in pre- Islamic poetry	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
3	2	Islam and poetry	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
4	2	Grammatical topics, parts of speech and	Arabic	Theoretical lecture	Daily, monthly, midterm, final exam.

		inflectional their signs		power point using	
5	2	The inflected and the passive, the definite indefinite and the	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
6	2	Subject and predicate	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
7	2	Abrogators	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
8	2	Subject and deputy subject	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
9	2	Arabic Rhetoric A General Introduction Rhetoric to Arabic and Its Definition Language and (1 terminology Introduction to the (2 definition of sciences rhetorical Explain its (3 relationship to the .Arabic language	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
10	2	Rhetoric (its definition and types)	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
11	2	Simile (definition, types and applications)	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
12	2	Truth and metaphor	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
13	2	Metaphor (its definition, relationships, and	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.

		(applications			
14	2	Metaphor (definition, types and applications)	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.
15	2	Common language errors	Arabic	Theoretical lecture power point using	Daily, monthly, midterm, final exam.

11.Cours Evaluation

Grade Distribution (out of 100):

15% : Midterm exam.

15% : Annual effort

70% :. Final theoretical exam.

12.Infrastructure of

1-Required course books	Required textbooks (methodology if any)
2- main references (sources)	Recommended supporting books and references (scientific journals, reports, etc.)
3- Recommended books and references (scientific journals, reports)	Recommended supporting books and references (scientific journals, reports, etc.)
4- Electronic references, websites	Electronic references and websites

Academic Description for Second Stage

Course description template for Biochemistry

1.Course Name:
Biochemistry
2.Course Code:
212BC
3.Semester / Year:
2025-2026
5. Description Preparation Date:
1/10/2025
5. Available Attendance Forms:attendance in classroom for theoretical course per week
6. Number of Credit Hours (Total) / Number of Units (Total)
120hour/6credite unite
7. Course administrator's name (mention all, if more than one name)
Mohammed.j@uodiyala.edu.iq Asst. lecturer. Mohammed Jassim Mohammed Asst. Lecturer Abeer Ali Hameed Asst. Lecturer Ghada Taha Ahmed
8.Course Objectives
1. Understand the chemical composition and structure of biomolecules such as carbohydrates, lipids, proteins, and nucleic acids. 2. Explain the principles of enzyme structure, function, and regulation. 3. Describe major metabolic pathways and their integration in living systems. 4. Apply biochemical concepts to understand physiological and pathological processes. 5. Develop analytical and critical thinking skills in solving biochemical problems. 6. Relate biochemical knowledge to clinical and laboratory applications.
9.Teaching and Learning Strategies
Active Learning: Encourages students to actively participate in the learning process through activities that require critical thinking, such as group discussions and projects. Problem-Based Learning: Motivates students to solve real or hypothetical problems, helping them apply knowledge and skills in practical contexts. Collaborative Learning: Promotes teamwork among students as they work together to

achieve shared educational goals, enhancing communication and social interaction skills.

Student-Centered Learning: Focuses on students' needs and interests, giving them the opportunity to choose specific topics or learning methods that suit them.

Inquiry-Based Learning: Encourages students to ask questions and gather information from various sources, helping them develop research and analytical skills.

10.The structure of the course for theorctical / first seson

Week	Hours	Required educational goals	Unit name and/or topic	Education Method	Evaluationmethod
1	2	Enzymes: Definition ,Terminology , and Classification	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
2	2	Mechanism of enzyme action	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
3	2	Clinical significance of enzyme assays	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
4	2	Vitamins, definition, classification	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
5	2	Digestion and absorption of carbohydrates, lipids ,and proteins	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
6	2	Chemistry of carbohydrates	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
7	2	Metabolism of Carbohydrates: part 1	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
8	2	Metabolism of Carbohydrates :part 2	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
9	2	Carbohydrates metabolism regulation	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

10	2	Chemistry of Proteins and amino acids	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
11	2	Metabolism of Proteins	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
12	2	Metabolism of Protein regulation	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
13	2	Metabolism of Protein inherited disorder	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
14	2	Lipid :definition, classification	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	2	Exam	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

The structure of the course for practical / first seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Lab safety	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
2	2	Sample collection-1	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
3	2	Sample collection -2	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
4	2	Spectrophotometer	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
5	2	Standard curve	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

6	2	Blood glucose+ HbA1c	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
7	2	Total Protein	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
8	2	Albumin+ Globulin	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
9	2	Troponin	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
10	2	Liver function test (Bilirubin)	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
11	2	Alkaline Phosphatase	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
12	2	Transaminases (ALT&AST)	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
13	2	Lipid in blood (cholesterol & lipoprotein)	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
14	2	Triglyceride	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	2	Kidney function Test (urea)	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

The structure of the course for theoretical / second season					
Week	Hours	Required educational goals	Unit name and/or topic	Education Method	Evaluationmethod
1	2	Metabolism of Lipid: oxidation of Fatty Acids	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
2	2	Biosynthesis of Fatty Acids	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

3	2	Integration of metabolism of carbohydrates, lipid ,and Proteins	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
4	2	Metabolism of Purines and pyrimidines	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
5	2	Metabolism of Purines and pyrimidines disorder	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
6	2	Nucleic Acids Definition and Protein synthesis	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
7	2	Hormone definition, classification	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
8	2	Hormone disorder	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
9	2	Acid-base balance	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
10	2	Trace elements disorder	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
11	2	Salivary secretion(saliva), Pancreatic juice	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
12	2	Electrolytes	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
13	2	Liver Function	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
14	2	Kidney Function	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	2	Exam	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

The structure of the course for practical / second seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Serum creatinine &creatinine clearness	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
2	2	General Urine Analysis-1	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
3	2	General Urine Analysis-2	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
4	2	Uric acid	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
5	2	Amylase in serum+ saliva	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
6	2	creatine phosphokinase	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
7	2	lactate Dehydrogenase	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
8	2	serum calcium	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
9	2	serum phosphorus	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
10	2	serum Na	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
11	2	serum K	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
12	2	serum Iron	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
13	2	Vitamin D	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

14	2	Vitamin C	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.
15	2	Acid phosphatase.	Biochemistry	Using coputer and smart board	Daily, monthly, midterm, final exam.

11.Cours Evaluation

Grade Distribution (out of 100):

15% : Midterm exam.

25% : Annual effort (includes summer training, daily and monthly exams, oral and written tests, practical requirements, reports, etc.).

20% : Final practical exam.

40% : Final theoretical exam.

12.Infrastructure of

1-Required course books	Textbook of Biochemistry for dental/Nursing/Pharmacy Student Ed. MN Chatterjea.2009
2- main references (sources)	References: 1- Lippincott Illustrated Reviews Biochemistry th Ed 2017. 2- Marton crook: Clinical Biochemistry and metabolic medicine; 2012. 3-Crook Martin.Clinical Biochemistry and Metabolic Medicine
3- Recommended books and references(scientific journals, reports)	
4- Electronic references, websites	

Academic Description Form For General Histology

1.Course Name:
General Histology
2.Course Code:
213GH
3.Semester / Year
2026 -2025
4.Description Preparation Date:
1/10/2025
5. Available Attendance Forms:
Attendance in the classroom for the theoretical subject (weekly)
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours/4 units of theoretical study 60 hours/2 units of practical study
7.Course administrator's name (mention all, if more than one name)
rana.f@uodiyala.edu.iq Assistant lecerer Rana Fattah Mahmoud Lecturer .DR. Lina Ali Hasballah Lina.a@uodiyala.edu.iq Asst. Lecturer Muntaha Ahmed Abdul Kareem muntaha.abdul-kareem@uodiyala.edu.iq Asst. Lecturer Marwa Mansur Hussian marwa.m@uodiyala.edu.iq Asst. lecturer haneen faleh hasan han.fh0089@gmail.com
8. Course Objectives
1. Understanding Histological Structure: Introducing students to the microscopic characteristics of the four major tissues (epithelial, connective, muscle, and nervous) and their functions. 2. Linking Structure to Function: Explaining the relationship between histological structure and organ function, particularly in the oral and dental areas. 3. Microscopic Skills: Enabling students to differentiate tissue types and accurately analyze slides under a light microscope. 4. Clinical Applications: Correlating histological changes with common dental diseases (such as gingivitis and enamel erosion). 5. Basic Laboratory Techniques: Teaching students the principles of preparing histological specimens (fixation, staining, and microscopic examination).

6. Foundation for Advanced Levels: Preparing students to understand later courses such as histopathology and pathology.

9. Teaching and Learning Strategies

1. Interactive multimedia-supported lectures: Using presentations with high-resolution microscopic images and 3D illustrations, linking theoretical concepts to clinical applications in dentistry.
2. Intensive laboratory practical sessions: Practical training in the use of light microscopes and the analysis of histological slides, with a focus on oral and dental tissues, and the application of a small group system (4-5 students per microscope).
3. Case-based learning: Studying pathological cases associated with histological changes, linking oral diseases to histological structures, and group discussions to solve histological problems.
4. Point Power: Providing an interactive histological image bank, electronic self-tests, recorded lectures, and digital educational materials.
5. Continuous assessment: Periodic theoretical and practical tests, assessment of microscope skills, and assessment of histological analysis abilities.
6. Guided self-learning: Guiding students to use the histological atlas and prepare individual practical reports, and encouraging research in modern scientific sources.

10. The structure of the course for theoretical / first seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Cells, Basic Tissue	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
2	2	Epithelial Tissue	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
3	2	Connective Tissue	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
4	2	Respiratory System: conducting portion	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
5	2	Respiratory System: respiratory portion	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams

6	2	Urinary System: kidney nephrons, collecting tubules and ducts	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
7	2	Urinary System: ureter, urinary bladder, and male and female	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
8	2	Integumentary System: Skin: epidermis, dermis	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
9	2	Integumentary System: skin glands, hair, and nails	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
10	2	Hemopoiesis: bone marrow	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
11	2	Hemopoiesis: blood cells	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
12	2	Circulatory System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
13	2	Circulatory System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
14	2	Lymphoid System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
15	2	Lymphoid System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams

The structure of the course for practical / first seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Slides of basic types of tissue	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student

					notebooks.
2	2	Slides of types of epithelial tissue	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
3	2	Slides of types of blood cells in blood smears	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
4	2	Slides of larynx, trachea	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
5	2	Slides of lungs including bronchi and bronchioles	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
6	2	Slides of kidney	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
7	2	Slides of ureter, urinary bladder	General Histology	Theoretical-practical lecture	Daily, monthly, and final exams, as well as practical

				using PowerPoint and microscopic slide examination	lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
8	2	Slides of layers of epidermis, dermis	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
9	2	Slides of skin glands, hair	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
10	2	Slides of bone marrow types	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
11	2	Slides of blood cells development	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
12	2	Slides of large artery (aorta), small artery	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope

					and correcting student notebooks.
13	2	Slides of medium sized vein	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
14	2	Slides of lymph nodes, palatine tonsils	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
15	2	Slides of thymus, spleen	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.

The structure of the course for theoretical / second seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Nervous System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
2	2	Nervous System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
3	2	Endocrine System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams

4	2	Endocrine System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
5	2	Endocrine System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
6	2	Digestive System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
7	2	Digestive System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
8	2	Digestive System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
9	2	Digestive System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
10	2	Male Reproductive System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
11	2	Male Reproductive System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
12	2	Female Reproductive System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
13	2	Female Reproductive System	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
14	2	Special Sense Organs: eye	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
15	2	Special Sense Organs: ear	General Histology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams

The structure of the course for practical / second seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Slides of thymus, spleen	General Histology	Theoretical-practical lecture using PowerPoint and microscopic	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs

				slide examination	under a microscope and correcting student notebooks.
2	2	Slides of nerve fibers, spinal cord	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
3	2	Slides of ganglia, cerebrum, and cerebellum	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
4	2	Slides of pituitary gland, thyroid gland	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
5	2	Slides of parathyroid glands, adrenal glands	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
6	2	Slides of pineal gland, endocrine pancreas	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
7	2	Slides of lip, tongue, and salivary glands	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and

					correcting student notebooks.
8	2	Slides of esophagus, stomach	istology General H	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
9	2	Slides of duodenum, ileum, and colon	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
10	2	Slides of appendix, liver, pancreas, and gallbladder	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
11	2	Slides of testes, duct of the epididymis	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
12	2	Slides of prostate gland, seminal vesicles, and penis	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
13	2	Slides of ovaries, corpus luteum, and uterus	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.

14	2	Slides of placenta, vagina, and mammary glands	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
15	2	Slides of vertical section of cornea, retina	General Histology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.

11.Cours Evaluation

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

15% Mid-year

25% Annual effort (including daily and monthly exams and practical requirements)

20% Final practical exam

40% Final theoretical exam

12.Infrastructure of

1-Required course books	Jonquiere's Basic Histology Text and Atlas
2- main references (sources)	
3- Recommended books and references (scientific journals, reports)	Jonquiere's Basic Histology Text and Atlas Thirteen Edition (2013) by Anthony L. Mescher ; Di Fiore's Atlas of Histology with Functional Correlations, Twelfth Edition (2013) by Victor P. Eroschenko; Illustrated Dental Embryology, Histology, and Anatomy, Fourth Edition (2016) by Margaret J. Fehrenbach and Tracy Popwics
4- Electronic references, websites	College website

Course description template for General physiology

1.Course Name:
General physiology
2.Course Code:
214PH
3.Semester / Year:
2025-2026
4.Description Preparation Date:
1/10/2025
5. Available Attendance Forms:
Attendance in the classroom for the theoretical subject (weekly)
6. Number of Credit Hours (Total) / Number of Units (Total)
120 hours/6 units of theoretical study
7. Course administrator's name (mention all, if more than one name)
fatimakad87@uodiyala.edu.iq Asst. Prof. Dr. Fatima Kazem Ibrahim Asst. Lecturer Noor Adnan Hassan Asst. Lecturer Rahma Mohammed Abbas Asst. lecturer wisam faisal Asst. lecturer ali abdul alkareem Asst. lecturer Marwa Mansur Hussian Asst. lecturer suha Khalil
8.Course Objectives
Introduction to Physiology: Provides a comprehensive overview of the normal functioning of body organs and systems. Study of Salivary Glands: Focuses on the structure of salivary glands, the major types of glands, and their physiological functions. Study of Blood Components: Covers the composition of blood, types of blood cells and their functions, along with common blood-related diseases.

9. Teaching and Learning Strategies

Lectures using PowerPoint: Delivering lectures with PowerPoint presentations to illustrate concepts and organize information interactively.

Scientific Discussions: Encouraging students to participate in scientific discussions to deepen their understanding and analyze presented ideas.

Guidance to Specialized Websites: Directing students to use specialized websites that help expand their knowledge and improve their skills.

Providing Lectures from Arabic References: Supplying lectures extracted from Arabic books in grammar, literature, and orthography to strengthen students' linguistic skills.

10. The structure of the course for theoretical / first seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Introduction	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
2	2	Body fluid	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
3	2	Homeostasis & transport across cell membrane	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
4	2	Oral cavity & salivary glands	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
5	2	Salivary functions & regulation of salivary secretion	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
6	2	Blood	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
7	2	White Blood Cells	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
8	2	Hemoglobin	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
9	2	Blood groups	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams

10	2	Hemostasis & blood coagulation	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
11	2	Cardiovascular system: Blood vessels	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
12	2	Cardiovascular system: Blood pressure	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
13	2	Cardiovascular system	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
14	2	Respiratory system	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
15	2	Respiratory system: lung volumes & capacities	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams

The structure of the course for practical / first seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Microscope	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
2	2	Collection of Blood Samples	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
3	2	Blood Smears	General physiology	Theoretical-practical lecture using PowerPoint	Daily, monthly, and final exams, as well as practical lab work, include drawing

				and microscopic slide examination	histological sections of organs under a microscope and correcting student notebooks.
4	2	Function of Saliva& Taste sensation	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
5	2	Stimulation and collection of salivary secretion	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
6	2	Separation of blood samples	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
7	2	Differential WBCS	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
8	2	Total Count of WBCs	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student

					notebooks.
9	2	Total Count of RBCs	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
10	2	Blood Groups	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
11	2	Estimation of Hemoglobin	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
12	2	Bleeding and clotting time	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
13	2	Self-Monitoring of blood glucose test	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
14	2	Measurement of blood	General	Theoretical-	Daily, monthly, and final

		pressure & pulse rate	physiology	practical lecture using PowerPoint and microscopic slide examination	exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
15	2	Effect of exercise on blood pressure and respiratory rate	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.

The structure of the course for theoretical / second seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Special sensation : vision, hearing, taste& smell	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
2	2	Temperature of the body	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
3	2	Urinary system	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
4	2	Urinary system: urine formation	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
5	2	Endocrine system	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
6	2	Major Endocrine glands	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
7	2	Digestive system	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams

8	2	Digestive system	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
9	2	Muscular system: muscle structure	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
10	2	Muscular system: Tone, contraction	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
11	2	Nervous system: Nerve impulse, synapses	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
12	2	Nervous system	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
13	2	Nervous system	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
14	2	Reproductive system: Aging & reproductive system	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams
15	2	Aviation and Deep physiology	General physiology	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual and final exams

13. The structure of the course for practical / second seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	2	Physiology of vision test	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
2	2	Physiology of hearing test	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and

				examination	correcting student notebooks.
3	2	Physiology of smell sensation	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
4	2	Measurement of body temperature	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
5	2	Thyroid function (body mass index)	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
6	2	Thyroid function (body mass index)	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
7	2	Resuscitation & Artificial respiration	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
8	2	Resuscitation & Artificial respiration	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.

9	2	Physiology of skeletal muscles	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
10	2	Physiology of skeletal muscles	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
11	2	Physiology of skeletal muscles	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
12	2	Examination of reflexes (motor function)	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
13	2	Seminars and examination	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
14	2	Seminars and examination	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.

15	2	Seminars and examination	General physiology	Theoretical-practical lecture using PowerPoint and microscopic slide examination	Daily, monthly, and final exams, as well as practical lab work, include drawing histological sections of organs under a microscope and correcting student notebooks.
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11.Cours Evaluation

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

15% Mid-year

25% Annual effort (including daily and monthly exams and practical requirements)

20% Final practical exam

40% Final theoretical exam

12.Infrastructure of

1-Required course books	General physiology
2- main references (sources)	Gauton
3- Recommended books and references (scientific journals, reports)	
4- Electronic references, websites	

Course description template for Baath crimes

1.Course Name:
Baath crimes
2.Course Code:
216BC
3.Semester / Year:
2026-2025
4.Description Preparation Date:
1/10/2025
5. Available Attendance Forms:
Attendance in the classroom for the theoretical subject (weekly)
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours/2 units of theoretical study
7. Course administrator's name (mention all, if more than one name)
Lecturer Ramadan Ghazal Noaman ramadhan@uodiyala.edu.iq Asst. Lecturer Abdalwdwd Rahman hamid abdalwdwdrhman@gmail.com Asst. Lecturer Zainab Ali Thaaban zainab.ali@uodiyala.edu.iq
8.Course Objectives
The course aims to provide students with knowledge and awareness of the crimes committed by the dissolved Ba'ath Party against the Iraqi people across all components of society. It seeks to establish a culture of rejecting all forms of oppression and authoritarianism, while encouraging the demand for civil and political rights.
9. Teaching and Learning Strategies
Delivering lectures using PowerPoint presentations. Class discussions and dialogue-based learning.

10. The structure of the course for theoretical / first seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	1	Crimes of the Ba'ath Party under the Iraqi Special Criminal Tribunal Law	Baath crimes	PowerPoint	Q&A
2	1	The Concept of Crimes and Their Types	Baath crimes	PowerPoint	Q&A
3	1	Definition of Crime: Linguistically and Terminologically	Baath crimes	PowerPoint	Q&A
4	1	Types of Crimes	Baath crimes	PowerPoint	Q&A
5	1	Types of International Crimes	Baath crimes	PowerPoint	Q&A
6	1	Decisions Issued by the Criminal Court	Baath crimes	PowerPoint	Q&A
7	1	The Most Prominent Violations of Psychological and Social Crimes	Baath crimes	PowerPoint	Q&A
8	1	Psychological Crimes	Baath crimes	PowerPoint	Q&A
9	1	Mechanisms of Psychological Crimes	Baath crimes	PowerPoint	Q&A
10	1	Effects of Psychological Crimes	Baath crimes	PowerPoint	Q&A
11	1	Psychological Crimes	Baath crimes	PowerPoint	Q&A
12	1	Militarization of Society	Baath crimes	PowerPoint	Q&A
13	1	The Ba'ath Party's Stance on Religion	Baath crimes	PowerPoint	Q&A
14	1	Violation of Iraqi Laws	Baath crimes	PowerPoint	Q&A
15	1	Forms of Human Rights Violations	Baath crimes	PowerPoint	Q&A

The structure of the course for theoretical / second seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
.1	1	Some Decisions on Political Violations	Baath crimes	PowerPoint	Q&A
.2	1	Places of Prisons and Detention	Baath crimes	PowerPoint	Q&A
.3	1	Environmental Crimes of the Ba'ath Regime	Baath crimes	PowerPoint	Q&A
.4	1	War Pollution	Baath crimes	PowerPoint	Q&A
.5	1	Destruction of Cities and Villages	Baath crimes	PowerPoint	Q&A
.6	1	Draining of the Marshes	Baath crimes	PowerPoint	Q&A
.7	1	Bulldozing of Orchards	Baath crimes	PowerPoint	Q&A
.8	1	Mass Graves	Baath crimes	PowerPoint	Q&A
.9	1	Genocidal Mass Grave Events	Baath crimes	PowerPoint	Q&A
10	1	Symbolic Classification of Genocidal Mass Graves	Baath crimes	PowerPoint	Q&A
11	1	Presentation of Genocide Crime Documents	Baath crimes	PowerPoint	Q&A
12	1	Decisions of the Criminal Court	Baath crimes	PowerPoint	Q&A

13	1	The Charges Brought Against Saddam and His Associates	Baath crimes	PowerPoint	Q&A
14	1	Presentation of Pictorial Documents of the Crimes	Baath crimes	PowerPoint	Q&A
15	1	Presentation of Photographic Documents of the Crimes	Baath crimes	PowerPoint	Q&A

11.Cours Evaluation

Grade Distribution (out of 100):

15% : Midterm exam.

15% : Annual effort (includes summer training, daily and monthly exams, oral and written tests, practical requirements, reports, etc.)..

70% : Final theoretical exam.

12.Infrastructure of

1-Required course books	Crimes of the Ba'ath Regime in Iraq
2- main references (sources)	Archive of the Political Prisoners Foundation
3- Recommended books and references (scientific journals, reports)	
4- Electronic references, websites	

Course description template for Arabic Language

1.Course Name:
Arabic Language
2.Course Code:
202AL
3.Semester / Year:
2025-2026
4.Description Preparation Date:
1/10/2025
5. Available Attendance Forms:
Attendance in the classroom for the theoretical subject (weekly)
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours/4 units of theoretical study
7.Course administrator's name (mention all, if more than one name)
Asst. Prof. Dr. Ziad Tariq lafta drziyadtariq@uodiyala.edu.iq
8.Course Objectives
Empowering students with Arabic grammar rules and trying to keep them connected to them, as they are often similar to English grammar rules, which requires referring to the original language when needed. University mental development through learning the correct scientific Arabic
9.Teaching and learning Strategies
Delivering lectures using PowerPoint presentations. Class discussions and dialogue-based learning.

10.The structure of the course for theoretical / first seson					
Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	1	Literary topics ‘Al-Sharif Al-Radi Verses from the poem Al-Sharif Al-Radi of	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations

		in mourning for his mother I would cry for you even if my tears could , and my thirst quench I would say even if words could cure my .illness			
2	1	Dalia of Abu al-Ala al-Ma'arri It is useless in my religion and belief. A wail, but no weeping .singing of a singer	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
3	1	Verses by Al-Jawahiri Al-Sayyab and Rain Song Stranger to the Gulf	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
4	1	Prose arts	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
5	1	Grammar topics present tense verb Install it and make it jism	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
6	1	The Majrūrat	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
7	1	The accusatives	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
8	1	Language skills Rules for writing the	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final

		letter taa (open and closed)			examinations
9	1	Rules for writing the letter alif (extended and shortened)	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
10	1	Writing the letters Ḍād and Ḍā	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
11	1	Arabic dictionaries Stages of language collection	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
12	1	Dictionaries of words meanings and	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
13	1	Common linguistic errors	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
14	1	: Course structure / Second semester / Arabic language Theoretical aspect	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
15	1	Required learning outcomes	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations

11.The structure of the course for theoretical / second seson					
Week	Hours	Required educational goals	Unit name and/or topic	Education Method	Evaluationmethod
1	1	Literary topics Al-Mutanabbi	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final

		Verses from Al-Mutanabbi's Mimiyyah			examinations
2	1	Ibn al-Farid Verses from Ibn poem Farid's	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
3	1	Mustafa Gamal El-Din I saw him (Baghdad May the (clash did not be upon you ages	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
4	1	Muhammad Mahdi al-Jawahiri Poem (Peace be upon (tall palm trees the	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
5	1	Morphological topics declension	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
6	1	The name in terms of masculinity and femininity	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
7	1	The noun in terms of abstraction and increase	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
8	1	Morphological topics Derivation of nouns in terms of (noun masculine and (feminine	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
9	1	The noun in terms of abstraction and increase	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
10	1	The noun in terms of singular, dual and	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final

		plural			examinations
11	1	Grammar topics Number and its rules	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
12	1	Dependencies	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
13	1	dictionaries, Arabic my school curriculum (Al-Maqayis) and (Al- Sahah), and exercises on extracting words	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
14	1	Arabic rhetoric Rhetoric and its the impact on eloquence of speech	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations
15	1	Moral embellishments antithesis, ‹(pun contrast, good reasoning, emphasizing praise with something (resembling blame	Arabic	Theoretical lecture power point using	Daily and monthly exams, midterm and final examinations

11.Cours Evaluation

Grade Distribution (out of 100):

15% : Midterm exam.

15% : Annual effort (includes summer training, daily and monthly exams, oral and written tests, practical requirements, reports, etc.).

70% : Final theoretical exam.

12.Infrastructure of

1-Required course books	Arabic language for non-major departments
2- main references (sources)	Ibn Aqils explanation Collection of Arabic Lessons Comprehensive grammar Rules for studing the Arabic language
3- Recommended books and references(scientific journals, reports)	
4- Electronic references, websites	

Course description template for Computer Sciences

1.Course Name:
Computer Sciences
2. Course Code:
203CS
3.Semester / Year:
2026-2025
4.Description Preparation Date:
1/10/2025
5. Available Attendance Forms:
Attendance in the classroom for the theoretical subject (weekly)
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours/2 units of theoretical study
7. Course administrator's name (mention all, if more than one name)
Aymen.m.badr@uodyiala.edu.iq Lecturer Dr. Ayman Muthar Badr
8.Course Objectives
Developing Basic Skills: Introducing students to fundamental concepts in computer science, including computer components, operating systems, and basic software. Enhancing Critical Thinking: Encouraging students to solve problems through analytical thinking and the use of appropriate software. Applying Technology in Daily Life: Exploring how computers and technology are used in various fields such as education, work, and entertainment. Teaching Digital Safety: Raising students' awareness of the importance of online security and ways to protect personal information. Stimulating Creativity: Encouraging students to use computers as tools for creative expression, such as graphic design and video editing. Preparing Students for the Job Market: Equipping them with the knowledge and skills necessary to meet the demands of the technology and information sector.
9. Teaching and Learning Strategies
Delivering lectures using PowerPoint presentations. Class discussions and dialogue-based learning.

10.The structure of the course for theoretical / first seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	1	<u>Security and Networking:</u> - What is a network? - Types of Network. - Basic Network Components.	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
2	1	- Basic Network Components.	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
3	1	-Network security basics -understanding network threats -network troubleshooting	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
4	1	- Introduction to network troubleshooting Common network issues and symptom - network troubleshooting tools and utilitis	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
5	1	- using command line tools for diagnostics - identifying and resoling connectivity issues - diagnosing network performance problems	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
6	1	- E commerce - Concepts of electronic banking services :	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations

		- ATM and debit - Card services			
7	1	- E commerce - Phone banking - SMS banking - Electronic alert - Mobile banking	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
8	1	- Computer troubleshooting - Introduction to computer troubleshooting - Common hardware issues and solution - Diagnosing software problems	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
9	1	- Hardware components: - Diagnosis and repair - Using safe mode for troubleshooting	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
10	1	- Troubleshooting operating systems issues - Identifying and resolving - Blue screen errors - Dealing with slow computer performance	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
11	1	- Virus and malware removal techniques - Updating drivers and software	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
12	1	- Introduction to AI: - Definition of AI - history of AI - AI techniques and approaches	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
13	1	- Introduction to AI: - Key characteristics of AI - Benefit of AI - Role of data in AI systems	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations

14	1	- Challenges and limitation of AI - Role of data in AI system	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
15	1	- AI tools and framework.	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations

The structure of the course for theoretical /Second seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
.1	1	- Role of AI in modern smartphone: - AI driven mobile technology - Virtual assistants(siri, google assistant, alexa)	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
.2	1	- Adaptive learning - Real-time translation services	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
.3	1	- Future of AI in smartphone technology - Challenges of implementing AI in mobile devices	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
.4	1	- Application and tools of AI - Overview of AI application in various industries. - Education and healthcare	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
.5	1	- Transportation and advertising	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations

.6	1	- Finance, robotics and personalization	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
.7	1	- AI in marketing - Targeting and personalization	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
.8	1	- AI in image and video analysis, smart cities	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
.9	1	- Future trends in AI application and tools	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
.10	1	- AI and society - Introduction to AI and its societal impact - Role of AI in enhancing public safety	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
.11	1	- Cultural perspectives on AI adoption - AI and governance - Policy implications	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
.12	1	-	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
.13	1	- Ethical challenges in AI - Ethical implications of autonomous systems - Ethics in AI driven marketing and advertising	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
.14	1	- Ethical considerations - Human rights and AI implementation	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations

.15	1	- Future of AI - Future trends in AI - Recent research and emerging technologies3.	Computer Sciences	Using the computer with the smart board	Daily and monthly exams, midterm and final examinations
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11.Cours Evaluation

Grade Distribution (out of 100):

15% : Midterm exam.

15% : Annual effort (includes summer training, daily and monthly exams, oral and written tests, practical requirements, reports, etc.)..

70% : Final theoretical exam.

12.Infrastructure of

1-Required course books	Introduction to the World of Artificial Intelligence – 2005 Fundamentals of Computer – 2016
2- main references (sources)	Cambridge IGCSE Information and Communication Technology, 2020
3- Recommended books and references (scientific journals, reports)	Technology in Action Complete, 2020
4- Electronic references, websites	Introducation to AI, 1 st Edition, 2024

2

• Academic Description Template for the Basic Dental Sciences Branch

The academic description for the Basic Dental Sciences branch was written in accordance with Administrative Order No. 105 dated 10/20/2024 and is represented by the gentlemen whose names are listed below:

1

• Asst.Lec. Athraa Hussein Medhat..... President

2

• Asst.lec.Aya Kanaan Taher..... Member

3

• Asst.Lec .Sumaya Hussein Ali..... Member

4

• Asst.Lec . Hussein Ahmed Taher.....Member

5

• Asst.Lec. Kadhim Hussein Jalal.....Member

The academic description for the Basic Dental Sciences branch was reviewed by the gentlemen whose names are listed below in the University Quality Assurance and Performance Division:

1

• Asst Proffesor . Manar Abdul Razzaq Hassan

2

• Dr. Lina Ali Hasaballah

1. Program Vision

A pioneering, knowledge-producing university that competes globally for international accreditation and global advancement, graduating dentists capable of working in all sectors to provide integrated medical services.

2. Program Mission

At Diyala University, we possess a comprehensive system of scientific and humanities colleges. We believe that human development is the foundation for creating generations capable of leading society and building the nation. Our goal is embodied in learning, teaching, research, and community service through providing a stimulating university environment, distinguished human resources, and curricula that meet the demands of the labor market and our goal is to prepare qualified graduates distinguished by their intellect, knowledge, creativity, and openness to society to achieve partnership and sustainable development. We emphasize the integration of theoretical and practical knowledge and strive for global competitiveness.

3. Program Objectives

In 2024, the College of Dentistry was established with the aim of training medical professionals specializing in oral and dental medicine, with outstanding levels of knowledge and expertise. The college includes modern dental clinics where students gain practical experience in all dental specialties and fields, including oral and maxillofacial surgery, pediatric and preventive dentistry, prosthodontics, orthodontics, periodontics, oral diagnostics, fillings, and cosmetic dentistry, using the latest technologies. In addition, they receive instruction in diverse scientific and practical laboratories throughout their five-year college studies.

4. Program Accreditation

The College of Dentistry strives to improve outcomes and achieve its goals to obtain international program accreditation.

5. Other External Influences

Educational clinics, library, internet, community, dental association, pediatric dental societies, specialized dental centers.

6- Program Structure

Program Structure	Number of courses	Credit hours	Percentag	Reviews*
Enterprise requirments	7	31		
College requirments	7	31		
Department requirments	7	31		

7-program description

Years	Course code	Course title	Credit hours	
First	101AN	General anatomy	30	60
	104DA	Dental anatomy	60	60
	ANA102	Medical terminology	15	
Second	209DM	Dental material	30	60
	210PR	Prosthodontics	30	120
	211EL 215OH	Oral histology and embryology	60	60
	210AN	General Anatomy	30	60

8- Expected Learning Outcomes of the Program

Knowledge

1. Recognize the importance of biomedical sciences as a foundation for understanding human growth, development, and health.
2. Understand the concepts of oral biology, including the identification of tooth forms and functions, and related structures in health and disease.
3. Comprehend the etiology and pathology of oral diseases, with emphasis on pathophysiology, diagnosis, prevention, and treatment, enabling the student to formulate a comprehensive treatment plan for the patient.
4. Identify recent advances in the field of biomedical sciences and their impact on dental practice and progress in terms of materials and medical devices.
5. Acquire comprehensive knowledge of patient care and the management of both basic and

advanced skills, applying behavioral sciences and communication skills in clinical practice.

6- Understand the medical, legal, and ethical principles governing the dental profession.

Skills

1. Promote professional ethics and enhance positive interaction with patients among graduates.
2. Enable students to acquire problem-solving and critical thinking skills.
3. Foster continuous commitment to the principle of lifelong learning to ensure sustainable professional development.
4. Ensure that graduates possess a high ability to gather, analyze, and integrate theoretical information in order to provide appropriate oral healthcare procedures.

Values

1. Thinking Skills According to Student's Ability: This skill aims to enhance the student's ability to think critically and reflectively about concrete matters, understanding when, what, and how to think, thereby improving logical reasoning skills.
2. Critical Thinking Skills: Aims to enable the student to propose appropriate solutions to the problems presented.
3. Awareness of the Importance of Balance: Enhances the student's awareness of the need to balance freedom and responsibility.
4. Decision-Making Skills: Focuses on making well-considered decisions in the best interest of the patient, based on logical thinking and careful analysis.

9- Teaching and Learning Strategies

1. Delivering lectures to students
2. Making lectures available to students on the college website
3. Conducting scientific experiments in the college laboratories
4. Using educational models to illustrate concepts for students
5. Utilizing self-directed learning methods
6. Providing educational clinics for students
7. Using educational and explanatory films
8. Using projectors and digital cameras
9. Conduct training courses and workshops to enhance students' skills
10. Provide pre-clinical and applied clinical education
11. Form student groups
12. Utilize online classrooms
13. Integrate topics related to communication, interpersonal skills, professional ethics, and practice management into the curriculum
14. Assigning a group of students to basic projects to encourage and develop personal qualities

10. Evaluation Methods

- Written examinations
- Oral examinations
- Practical examinations in laboratories
- Practical exercises using mannequins
- Clinical examinations on patients
- Preparation of reports and studies
- Assessment of students' performance in their final year graduation project, their ability to apply the required knowledge, and evaluation of the project's results
- Assessment of students' performance in related courses
- Monitoring student interaction with patients, faculty, and clinical staff as part of ongoing assessment during clinical rotations
- Continuously monitoring professional conduct and adherence to college rules and regulations

11. Collage members

Academic rank	Specialization		staff	Number of the teaching staff
	General	Special		
1. Asist. Prof. Dr. Hayder Mahdi Idan	Oral and Dental Medicine and Surgery	Oral medicine	✓	
2. Lec. Dr. Ali Hakiem Tawfieq	Oral and Dental Medicine and Surgery	Oral and maxillofacial radiology	✓	
3. Lec. Dr. Rabeia jasim khalil	Oral and Dental Medicine and Surgery	Conservative Dentistry	✓	
4. Asist. Prof. Manar Abd Alrazaq Hassan	Oral and Dental Medicine and Surgery	Oral histology	✓	
5. Asist. Lec. Sumia Husain Ali	Oral and Dental Medicine and Surgery	Pediatric Dentistry	✓	
6. Asist. Lec. Aya Kanaan Taher	Oral and Dental Medicine and Surgery	Preventive Dentistry	✓	
7. Asist. Lec. Sumaya Mohammed Mansor	Oral and Dental Medicine and	Oral and maxillofacial pathology	✓	

	Surgery			
8. Asist. Lec. Kadhim Hussien Jalal	Oral and Dental Medicine and Surgery	Oral and maxillofacial surgery	✓	
9. Asist. Lec. Athraa Hussein madhat	Oral and Dental Medicine and Surgery	Pediatric Dentistry	✓	
10. Asist. Lec. Hussain Ahmed Tahir	Oral and Dental Medicine and Surgery	Oral and maxillofacial surgery	✓	
11. B.D.S. Hayfaa Kadhim Bander	Oral and Dental Medicine and Surgery		✓	
12. Zahraa ghanem Hadi	Bachelor of Science in Life Sciences		✓	
13. B.D.S. Abdulhameed Hailan Ahmed	Oral and Dental Medicine and Surgery			✓
14. B.D.S. Raheel Ibrahim Abd alhameed	Oral and Dental Medicine and Surgery			✓

12. Professional Development

Mentoring new collage members

Briefly describe the process used to guide new, visiting, full-time and part-time faculty members at the institutional and departmental levels.

Professional development of collage members

- Negotiation and Persuasion: The student should be able to influence, persuade, discuss, and reach agreements with others
- Leadership: The student should be able to lead, motivate, and guide others
- Independence in Action: The student should be able to take responsibility and be independent under various circumstances

13. Professional Development

The approved admission criteria include students who have a specific cumulative grade point average (GPA) that meets the central admission requirements, in addition to certain specific qualifications such as mental and physical abilities and social behavior that enable them to meet the demands of study and allow them to manage any medical conditions they may face in the future. These qualities are determined through interviews with applicants, with some questions being asked by a specialized committee nominated by the college deanship

14. Collage Professional Development

1. The college and university website.
2. The university directory.
3. College books and academic resources.

15. Program Development Plan

- Continuously developing scientific and administrative staff and evaluating their performance annually.
- Conducting educational seminars to refine individual skills
- Developing new and advanced methods to obtain academic accreditation

16. Admission Criteria

1. Official enrollment in the College of Dentistry in accordance with university regulations.
2. Successful completion of all required preclinical dental courses.
3. Achievement of the minimum academic standards specified by the college for progression to clinical studies.
4. Demonstrated competency in basic medical and dental sciences relevant to clinical dental practice.
5. Compliance with ethical, professional, and health requirements necessary for clinical training.
6. Fulfillment of all institutional and accreditation body requirements governing admission and progression

17.Program Skills Outline															
Year/Level	Course Code	Course Name	Basic or optional	Required program Learning outcomes											
				Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First	101AN	General anatomy	Basic	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
	104DA	Dental anatomy	Basic	✓	✓			✓				✓	✓		
	ANA102	Medical terminology	Basic	✓	✓			✓	✓	✓		✓	✓		
Second	209DM	Dental material	Basic	✓	✓	✓		✓	✓			✓	✓		
	210PR	Prosthodontics	Basic	✓	✓			✓	✓			✓	✓	✓	✓
	211EL 215OH	Oral histology and embryology	Basic	✓	✓	✓		✓	✓			✓	✓	✓	
	210AN	General Anatomy	Basic	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓

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

Academic Description for First Stage

Course description template for general anatomy

1.Course Name:
General Anatomy
2.Course Code:
101AN
3.Semester / Year:
2025/2026
4.Description Preparation Date:
2025/2026
5. Available Attendance Forms:
Classroom attendance for theoretical and laboratory subjects
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours of theory / 60 hours of practical
7. Course administrator's name (mention all, if more than one name)
1.Asst Lec Sumaya Mohammed Mansour sumaya.mohammed@uodiyala.edu.iq 2.Asst. Lec Hussein Ahmed Tahir Hussein.alkhalidy@uodiyala.edu.iq 3. Asst. Kadhim Hussein Jalal kadhim.hussein@uodiyala.edu.iq
8. Course Objectives
- Study the basic anatomical structures of the body, focusing on the parts of the head, face, jaws, and teeth. - Understand the major nerves and arteries associated with the mouth and teeth and their vital functions. - Analyze the muscles and structures responsible for mouth and jaw movement, chewing, and speech. - Use anatomical terminology accurately to describe structures related to the mouth and face
9. Teaching and Learning Strategies
Apply anatomical knowledge to clinical contexts in dentistry.

- Develop observational skills and recognize anatomical details through reliance on models, x-rays, and photographs.
- Prepare students to understand advanced anatomy and future clinical medical specialties.
- Provide students with a comprehensive understanding of human anatomy and its relevance to the dental profession.

10.The structure of the course for theoretical / first seson

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	1	General anatomy	Introduction to Human Anatomy Descriptive Anatomic Terms	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
2	1	General anatomy	Basic Structures: Skin, Fasciae, Muscle, Joints, Ligament, Bursae	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
3	1	General anatomy	Basic Structures: Bone, Cartilage, Blood Vessels, Lymphatic System	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
4	1	General anatomy	Basic Structures: Bone, Cartilage, Blood Vessels, Lymphatic System	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
5	1	General anatomy	Basic Structures: Nervous System, Mucous Membranes, Serous Membrane	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
6	1	General anatomy	Skeletal system of the body: Skull :Cranial Bones	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
7	1	General anatomy	Skeletal system of the body: Skull :Cranial	Theoretical lecture using	Daily, monthly, semi-annual,

			Bones	PowerPoint	and final exams
8	1	General anatomy	Skeletal system of the body: Skull : Facial Bones	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
9	1	General anatomy	Skeletal system of the body: Skull : Facial Bones	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
10	1	General anatomy	External Views of the Skull	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
11	1	General anatomy	External Views of the Skull	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
12	1	General anatomy	The Cranial Cavity Major Foramina and Fissures locations and structures pass through Neonatal Skull	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
13	1	General anatomy	The Cranial Cavity Major Foramina and Fissures locations and structures pass through Neonatal Skull	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
14	1	General anatomy	Skeleton of the Orbital Region, Openings into theOrbital Cavity Skeleton of the External Nose, nasal cavity, Paranasal Sinuses Auditory ossicles Hyoid bone	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
15	1	General anatomy	Skeleton of the OrbitalRegion, Openings into theOrbital Cavity	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams

			Skeleton of the External Nose, nasal cavity, Paranasal Sinuses Auditory ossicles Hyoid bone		
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The structure of the course for theoretical / second seson					
Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluationmethod
1	1	General anatomy	The Vertebral Column	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
2	1	General anatomy	The Vertebral Column	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
3	1	General anatomy	Structure of the • Thoracic Wall Joints of the Chest • Wall Suprapleural Membrane• Diaphragm• Surface Anatomy•	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
4	1	General anatomy	Structure of the • Thoracic Wall Joints of the Chest • Wall Suprapleural Membrane• Diaphragm• Surface Anatomy•	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
5	1	General anatomy	Thoracic cavity: Mediastinum, Pleurae, Trachea, Bronchi, Lungs	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams

6	1	General anatomy	Thoracic cavity: Mediastinum, Pleurae, Trachea, Bronchi, Lungs	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
7	1	General anatomy	Pericardium, Heart, Large arteries, veins and nerves of thorax	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
8	1	General anatomy	Pericardium, Heart, Large arteries, veins and nerves of thorax	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
9	1	General anatomy	Pericardium, Heart, Large arteries, veins and nerves of thorax	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
10	1	General anatomy	Bones of the Shoulder (Pectoral girdle) girdles Bones of the Upper • extremities	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
11	1	General anatomy	Bones of the Shoulder (Pectoral girdle) girdles Bones of the Upper • extremities	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
12	1	General anatomy	Bones of the Shoulder (Pectoral girdle) girdles Bones of the Upper • extremities	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
13	1	General anatomy	Bones of the Shoulder (Pectoral girdle) girdles Bones of the Upper • extremities	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
14	1	General anatomy	Abdominal cavity and organs	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
15	1	General anatomy	Abdominal cavity and organs	Theoretical lecture using PowerPoin	Daily, monthly, semi-annual, and final exams

The structure of the course for Laboratory sessions

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluation method
1	2	General anatomy	Introduction to anatomy	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
2	2	General anatomy	Basic structures part 1 (Skin, Fasciae, Muscle, Joints, Ligament, Bursae)	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
3	2	General anatomy	Basic structures part 2 (bone, Cartilage, Blood Vessels, Lymphatic System) and classification of human skeleton	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
4	1	General anatomy	Basic structures part 3 (Nervous System, Mucous Membranes, Serous Membranes)	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
5	2	General anatomy	a Frontal Bone, Parietal bones	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
6	2	General anatomy	Occipital bone	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
7	1	General anatomy	Temporal bones	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
8	1	General anatomy	Sphenoid bone	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
9	1	General anatomy	Ethmoid bone	Summary of theory lecture using PowerPoint	Daily, monthly, semi-annual, and final exams

10	1	General anatomy	Zygomatic bones,Maxillae	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
11	2	General anatomy	Nasal bones ,Lacrimal bones, Vomer,Palatine bones,Inferior Conchae	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
12	2	General anatomy	Mandible	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
13	2	General anatomy	External Views of the Skull	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
14	2	General anatomy	Cranial cavity	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
15	2	General anatomy	Major Foramina and Fissures locations and structures pass through the skull	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
16	2	General anatomy	Orbit	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
17	2	General anatomy	nasal cavity	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
18	2	General anatomy	Auditory ossicles , Hyoid bone	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
19	2	General anatomy	General Characteristics of a Vertebra	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
20	2	General anatomy	Vertebral column	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
21	2	General anatomy	Structure of the Thoracic cage (Sternum ,Ribs,	Summary of theory lecture using	Daily, monthly, semi-annual, and

			Costal Cartilages)	PowerPoin	final exams
22	2	General anatomy	Thoracic cavity (Mediastinum, Pleurae, Trachea, Bronchi)	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
23	2	General anatomy	Lung	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
24	2	General anatomy	Anatomy of heart	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
25	2	General anatomy	Major arteries, veins and nerves of thorax	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
26	2	General anatomy	Bones of the Shoulder (Pectoral girdle) girdles	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
27	2	General anatomy	Bones of the Upper extremities	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
28	2	General anatomy	Bones of the Pelvic girdle	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
29	2	General anatomy	Bones of the Lower extremities	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
30	2	General anatomy	Abdominal cavity and organs	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams

11.Cours Evaluation

- Distribution of the score out of 100 according to the tasks assigned to the student such as daily preparation and exams
- Daily, oral, monthly, editorial, and reports.... Etc.
- 15% Half Year
- 25% annual pursuit. Includes daily and monthly exams, and practical requirements
- 20% Final Practical Exam
- 40% Final Theoretical Exam

12.Infrastructure of

1-Required course books	1.Snell Clinical anatomy 7 th edition 2. Netter's head and neck anatomy for dentistry 2 ndedition 2012
2- main references (sources)	
3- Recommended books and references(scientific journals, reports)	Scientific Reasearch Scientific journal
4- Electronic references, websites	Educational website

Course Description Form Dental Anatomy

1. Course Title:	
Dental Anatomy	
2. Course code:	
104DA	
3. Chapter/ Year	
2025/2026	
4. Date of preparation of this description	
2025/2026	
5. Available Attendance Formats:	
Attendance in the classroom of the theoretical subject (weekly)	
6. Number of Hours of Study (Total) / Number of Units (Total):	
60 theoretical hours / 60 practical hours / 6 Units	
7. Course administrator name (if more than one name is mentioned with the official email)	
Lec. Dr.Rabea Jasim Khalil d.rabea779@uodiyala.edu.iq	
8. Course Objectives	
To provide comprehensive knowledge of dental morphology and function, which is fundamental to all aspects of dental practice. Dental Anatomy is considered a core course in the pre-clinical dental curriculum, introducing students to the anatomical features of both permanent and deciduous teeth. Furthermore, it aims to develop students' psychomotor skills by carving teeth into appropriate forms and functions. Through this course, students acquire the knowledge to identify teeth, recognize them, diagnose dental anomalies, and treat or manage dental diseases. Among the most important objectives of Dental Anatomy is to equip students with fundamental cognitive skills related to tooth morphology, thereby preparing them for the skill of restoring proper tooth form in clinical procedures. Dental Anatomy provides the foundational knowledge through lectures and develops students' motor skills through a series of two-dimensional drawing projects and exercises for carving teeth from wax blocks.	
9. Teaching and Learning Strategies	
1. To equip students with the ability to differentiate between various teeth through knowledge of their anatomical characteristics. 2. To enable students to acquire skills in carving dental forms using wax blocks. 3. To prepare students for clinical work by providing them with the skills to restore detailed	Strategy

tooth anatomy using dental filling materials.

10. Course Structure/ First Semester/ Dental Anatomy/ Theoretical

Week	Hours	Required Learning Outcomes	Name of unit or topic	Learning method	Evaluation Method
1 and 2	2	Introduction Nomenclature Heterodont Diphyodont The Deciduous Teeth The Permanent Teeth Anterior and Posterior Teeth The Jaw	Introduction	data show projector, presentation figure figure	Daily and monthly exams annual and -Semi final
3 and 4	2	Numbering Systems 1. Universal notation system. 2. Palmer notation system. Crown and Root Dental pulp. Anatomical crown. Surfaces and Ridges	Numbering Systems	data show projector, presentation figure figure	Daily and monthly exams annual and -Semi final
5 and 6	2	Anatomical Landmarks Cusp, Tubercle, Cingulum, Ridge, Fossa, Developmental groove, Pit	Anatomical Landmarks	data show projector, presentation figure figure	Daily and monthly exams annual and -Semi final
7 and 8	2	Permanent Maxillary Central Incisor Characteristic features of incisor's crown Permanent Maxillary Central Incisor (Principal)	Permanent Maxillary Central Incisor	data show projector, presentation figure figure	Daily and monthly exams annual and -Semi final
9 and 10	2	Permanent Maxillary Lateral Incisor Principal identifying features (Labial Aspect, Mesial Aspect, Distal Aspect Variations from the	Permanent Maxillary Lateral Incisor	data show projector, presentation figure figure	Daily and monthly exams annual and -Semi final

		typical form (Anomalies)			
11,12, and 13	2	Permanent Mandibular Incisors Characteristic features of Permanent mandibular Incisors Permanent Mandibular Central Incisor Principal identifying features Permanent Mandibular Lateral Incisor Principal identifying features Some differences between maxillary and mandibular central incisors Main differences between maxillary central and lateral incisors	Permanent Mandibular Incisors	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
13,14, and 15	2	Permanent Canines General Characteristic Features of the Canines The Permanent Maxillary Canine Principal Identifying Features The Permanent Mandibular Canine Principal Identifying Feature	Canines	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
Course Structure/ Second semester/ Dental Anatomy/ Theoretical					
Week	Hours	Required Learning Outcomes	Name of unit or topic	Learning method	Evaluation Method
15,16, and 17	2	Permanent Maxillary Premolars Some characteristic features	Permanent Maxillary Premolars	data show projector, presentation	Daily and monthly exams annual and -Semi final

		to all posterior teeth Maxillary First Premolar <i>Principal identifying features: Maxillary Second Premolar</i> <i>Principal identifying features</i>		figure	
18 and 19	2	Permanent Mandibular Premolars Mandibular First Premolar Characteristics that resemble those of the mandibular canine. Characteristics that resemble those of the mandibular second premolar. Principal Identifying Features	Permanent Mandibular First Premolars	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
20	2	Permanent Mandibular Second Premolar Principal Identifying Features	Permanent Mandibular Second Premolar	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
21 and 22	2	Permanent Maxillary Molars Maxillary First Molar Principal Identifying Features Maxillary second Molar	Permanent Maxillary First Molar Permanent maxillary second and third molars	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
23	2	Permanent Mandibular Molars Mandibular First Molar, Principal Identifying Features	Permanent Mandibular First Molar	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
24	2	Permanent Mandibular Second Molar Principal Identifying Features Mandibular Third Molar Principal Identifying Features	Permanent Mandibular Second and third Molars	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
25 and 26	2	Tooth Development Sequential Order of Deciduous Teeth	Tooth Development	data show projector, presentation	Daily and monthly exams annual and -Semi

		According to their Eruption Times Deciduous Teeth The Importance of Deciduous Teeth Maxillary Deciduous Teeth Mandibular Deciduous Teeth Principal Differences between Deciduous and Permanent Teeth		figure	final
27 and 28	2	Pulp Cavities of the Maxillary Teeth Pulp Cavities of the Mandibular Teeth	Pulp Cavities	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
29 and 30	2	Occlusion and physiologic form of teeth and periodontium	Occlusion and physiologic form of teeth and periodontium	data show projector, presentation figure	Daily and monthly exams annual and -Semi final

Course Structure / first Semester / Dental Anatomy / Practical

Week	Hours	Required Learning Outcomes	Name of unit or topic	Learning method	Evaluation Method
1	2	Introduction to Dental Anatomy & Carving Instruments		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
2	2	Numbering systems.		data show projector, presentation figure	Daily and monthly exams and annual-Semi final
3	2	Practical demonstration of Carving a Cube (1cm*1cm*1cm)		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
4	2	introduction to Anatomical		data show projector,	Daily and monthly exams

		landmarks on Teeth models. Carving a cube.		presentation figure	annual and -Semi final
5	2	Description & Carving of the Labial Aspect of P. Max. Right Central Incisor.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
6	2	Description & Carving of the Mesial aspect of P. Max. Right Central Incisor.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
7	2	Description, Carving & Finishing of the Incisal Aspect of Permanent Max. Right Central Incisor.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
8	2	Practical Training of Carving of P. Max. Right Central Incisor		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
9	2	Practical Exam. Of Carving of P. Max. Right Central Incisor		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
10	2	Description & Carving of the Labial & Mesial Aspects of P. Max. Right Canine.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
11	2	Description, Carving & Finishing of the Incisal Aspect of P. Max. Right Canine.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
12	2	Practical Training of Carving of P. Max. Right Canine.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
13	2	Practical Exam. of Carving of P. Max. Right Canine.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
14	2	Mid-Year Practical Examination of		data show projector,	Daily and monthly exams

		Tooth Carving.		presentation figure	annual and -Semi final
15	2	Description & Carving of the Buccal & Mesial Aspects of P.Max. Right 1st Premolar.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final

Course Structure / Second Semester / dental material/ Practical

Week	Hou rs	Required Learning Outcomes	Name of unit or topic	Learning method	Evaluation Method
1	2	Description, Carving & Finishing of the Occlusal Aspect of P.Max. Right 1st Premolar.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
2	2	Practical Training of Carving of P. Max. Right 1st Premolar		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
3	2	Practical Exam. Of Carving of P. Max. Right 1st Premolar		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
4	2	Description & Carving of the Buccal & Mesial Aspects of P.Mand. Right 1st Premolar.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
5	2	Description, Carving & Finishing of the Occlusal Aspect of P.Mand. Right 1st Premolar.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
6	2	Practical Training of Carving of P. Mand. Right 1st Premolar		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
7	2	Practical Exam. Of Carving of P. Mand. Right 1st Premolar		data show projector, presentation	Daily and monthly exams annual and -Semi final

				figure	
8	2	Description & Carving of the Buccal & Mesial Aspects of PMax.Right 1st Molar.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
9	2	Description, Carving & Finishing of the Occlusal Aspect of P. Max. Right 1st Molar.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
10	2	Practical Training of Carving of P. Max. Right 1st molar.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
11	2	Practical Exam. of Carving of P. Max. Right 1st molar.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
12	2	Description & Carving of the Buccal & Mesial Aspects of P. Mand. Right 1st Molar		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
13	2	Description, Carving & Finishing of the Occlusal aspect of P.Mand 1st Molar/Practical Training of Carving p.Mand 1st molar.		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
14	2	Practical Examination of Carving of P. Mand. Right 1st molar		data show projector, presentation figure	Daily and monthly exams annual and -Semi final
15	2	Final Oral & Practical Examination of Tooth carving		data show projector, presentation figure	Daily and monthly exams annual and -Semi final

11.Course Evaluation

- Distribution of the score out of 100 according to the tasks assigned to the student such as daily preparation and exams
- Daily, oral, monthly, editorial, and reports.... Etc.

- 15% Half Year
- 25% annual pursuit. Includes daily and monthly exams, and practical requirements
- 20% Final Practical Exam
- 40% Final Theoretical Exam

12. Learning and Teaching Resources

1. Woelfel's dental anatomy, its relevance to dentistry. by Rickne C Scheid. 2. Wheeler's Atlas of Tooth Form By Major M Ash.	Required Textbooks
	Main References (Sources)
• Scientific Research • Scientific Journals	Recommended Books and References (Scientific Journals, Reports.....)
• Educational Websites	Electronic References, and Websites

Course Description Form Medical terminology

1. Course Title :					
Medical terminology					
2. Course code:					
ANA102					
3. Chapter/ Year					
2025/2026					
4. Date of preparation of this description					
2025/2026					
5. Available Attendance Formats:					
Attendance in the classroom of the theoretical subject (weekly)					
6. Number of Hours of Study (Total) / Number of Units (Total):					
15 hours :1 unit					
7. Course administrator name (if more than one name is mentioned with the official email)					
Lec. Dr. Ali Hakiem Tawfieg (hakim@uodiyala.edu.iq)					
8. Course Objectives					
Recognizing medical terminology, which facilitates their use in the primary and higher academic years.					
9. Teaching and Learning Strategies					
1.Presentation by power point program 2. Scientific discussions 3. Guiding students to some specialized websites 4. Seminars (students are assigned a topic within the curriculum for presentation and discussion)					Strategy
10. Course Structure / First Semester / dental material / Theoretical					
Week	Hours	Required Learning Outcomes	Name of unit or topic	Learning method	Evaluation Method
1	1	Medical terminology	(Prefixes &)suffixes	data show Theoretical lecture	Daily and monthly exams annual and final-Semi
2	1	Medical terminology	Integumentary	data show projector,	Daily and monthly exams

			system	presentation figure	annual and final-Semi
3	1	Medical terminology	Muscular system	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
4	1	Medical terminology	Respiratory system	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
5	1	Medical terminology	Digestive system	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
6	1	Medical terminology	Nervous system	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
7	1	Medical terminology	Cardiovascular system	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
8	1	Medical terminology	Blood and Lymph	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
9	1	Dental material	Immune system	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
10	1	Medical terminology	Endocrine system	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
11	1	Medical terminology	Five sense	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
12	1	Medical terminology	Genitourinary system	data show projector, presentation	Daily and monthly exams annual and final-Semi

				figure	
13	1	Medical terminology	(Dental terminology (part I	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
14	1	Medical terminology	(Dental terminology (part II	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
15	1	Medical terminology	(Dental terminology (part III	data show projector, presentation figure	Daily and monthly exams annual and final-Semi

11. Course Evaluation

- Distribution of the score out of 100 according to the tasks assigned to the student such as daily preparation and exams
- Daily, oral, monthly, editorial, and reports.... Etc.
- 15% Half Year
- 15% annual pursuit. Includes daily and monthly exams.
- 70% Final Theoretical Exam

12. Learning and Teaching Resources

Required course books	Medical terminology
main references (sources)	Medical terminology: Latin and Greek origin with Arabic and English explanations.
Recommended books and references (scientific journals, reports).	Prefixes denoting numbers Medical terminology Noun Suffixes
Electronic references, websites	https://aimseducation.edu/blog/essential%E7%BF%BEmedical-terms

Academic Description for Second Stage
Course Description Form Dental Material

1. Course Title :					
Dental material					
2. Course code:					
209DM					
3. Year /Chapter					
2025/2026					
4. Date of preparation of this description					
2025/2026					
5. Available Attendance Formats:					
Attendance in the classroom of the theoretical subject (weekly					
6. Number of Hours of Study (Total) / Number of Units (Total):					
30theoretical hours / 60 practical hours / 4 units					
7. Course administrator name (if more than one name is mentioned with the official email)					
Lec. Dr. Rabea jassem khaleel d.rabea779@uodiyala.edu.iq Assist. Lec. Athraa Hussein madhat athraa.hussien@uodiyala.edu.iq Assist. Lec.Aya kanaan taher aya.kanaan@uodiyala.edu.iq					
8. Course Objectives					
The course aims to provide students with basic knowledge about the properties and uses of dental materials, with a focus on selecting a clinically appropriate material, understanding its interactions within the mouth, and developing skills for dealing with them practically according to safety and quality standards.					
9. Teaching and Learning Strategies					
The course relies on a combination of theoretical lectures, practical labs, and demonstrations, with the goal of linking the scientific aspect with clinical application. Students are also encouraged to engage in discussion, active participation, and self-study to keep up with the latest developments in the field of dental materials.					Strategy
10. Course Structure / First Semester / dental material / Theoretical					
Week	Hours	Required Learning Outcomes	Name of unit or topic	Learning method	Evaluation Method
1	1	Dental material	Introduction and physical properties of dental material	data show projector, presentation figure	Daily and monthly exams annual and -Semi final

				figure	
2	1	Dental material	Mechanical properties	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
3	1	Dental material	Gypsum materials	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
4	1	Dental material	Gypsum materials	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
5	1	Dental material	Impression materials	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
6	1	Dental material	Impression materials	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
7	1	Dental material	Impression materials	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
8	1	Dental material	Impression materials	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
9	1	Dental material	Impression materials	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
10	1	Dental material	Waxes	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
11	1	Dental material	Waxes	data show projector, presentation	Daily and monthly exams annual and -Semi

				figure	final
12	1	Dental material	Polymers	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
13	1	Dental material	Polymers	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
14	1	Dental material	Investment materials	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
15	1	Dental material	Cement materials	data show projector, presentation figure	Daily and monthly exams annual and -Semi final

Course Structure / Second Semester / Dental material/ Theoretical					
Week	Hours	Required Learning Outcomes	Name of unit or topic	Learning method	Evaluation Method
1	1	Dental material	Temporary filling	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
2	1	Dental material	Metal and metal alloy	data show projector, presentation figure	Daily and monthly exams and final annual-Semi
3	1	Dental material	Metal and metal alloy	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
4	1	Dental material	Metal and metal alloy	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
5	1	Dental material	Metal and metal	data show	Daily and monthly

			alloy	projector, presentation figure	exams annual and final-Semi
6	1	Dental material	Filling materials	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
7	1	Dental material	Filling materials	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
8	1	Dental material	Filling materials	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
9	1	Dental material	Filling materials	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
10	1	Dental material	Preventive materials	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
11	1	Dental material	Root canal filling materials (obturator materials)	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
12	1	Dental material	Finishing and polishing material	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
13	1	Dental material	Relining material	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
14	1	Dental material	Implant materials	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
15	1	Dental material	Maxillofacial materials	data show projector, presentation	Daily and monthly exams annual and final-Semi

				figure	
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Course Structure / first Semester / dental material/ Practical

Week	Hours	Required Learning Outcomes	Name of unit or topic	Learning method	Evaluation Method
1	2	Dental material	Introduction and physical properties of dental material	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
2	2	Dental material	Mechanical properties (stress strain curve)	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
3	2	Dental material	Showing different types of gypsum materials (plaster and stone)	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
4	2	Dental material	Steps of mixing plaster and demonstrate the steps of setting	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
5	2	Dental material	Impression plaster, demonstrate the manipulation of impression compound	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
6	2	Dental material	Zinc oxide impression material and agar impression demonstrate the mixing of zinc oxide impression	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
7	2	Dental material	Alginate impression (elastic impression) showing the trays used and the mixing of alginate and water according to manufacturer instructions	data show projector, presentation figure	Daily and monthly exams annual and final-Semi

8	2	Dental material	Polysulphide, condensation and addition silicon\mixing of heavy body and light body	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
9	2	Dental material	Polyether, hybrid impression, digital impression	data show projector, presentation figure	Daily and monthly exams and final annual-Semi
10	2	Dental material	Showing different types of wax (denture base plate, denture casting wax and others	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
11	2	Dental material	Demonstrate how to use wax material and its manipulation	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
12	2	Dental material	Introduction to polymers	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
13	2	Dental material	Different types of denture base materials(heat, cold and light activated	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
14	2	Dental material	polymers) demonstrate the mixing of polymer and monomer	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
15	2	Dental material	Thermoplastic polymers (flexible denture base material)	data show projector, presentation figure	Daily and monthly exams final annual and-Semi

Course Structure / Second Semester / dental material/ Practical

Week	Hours	Required Learning Outcomes	Name of unit or topic	Learning method	Evaluation Method
1	2	Dental material	Introduction to cement materials	data show projector,	Daily and monthly exams annual and final-Semi

				presentation figure	
2	2	Dental material	Showing different types of cement materials and the method of mixing of cement	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
3	2	Dental material	Introduction to metal and metal alloy	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
4	2	Dental material	Temporary filling (use and manipulation)	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
5	2	Dental material	Introduction to metal and metal alloy	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
6	2	Dental material	Showing the different types of metal and metal alloy	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
7	2	Dental material	Introduction to crown and bridge material	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
8	2	Dental material	Introduction to filling material	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
9	2	Dental material	Amalgam filling showing the amalgam capsules and mixing of amalgam	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
10	2	Dental material	Composite filing (chemical and light activated)	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
11	2	Dental material	Micro filled, hybrid, and nano-composite	data show projector, presentation	Daily and monthly exams annual and final-Semi

				figure	
12	2	Dental material	Demonstrate the setting of chemical and light activated composite filling material	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
13	2	Dental material	Showing different types of preventive materials (tooth pastes, gargles.	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
14	2	Dental material	Mouth wash fluoride varnishes and resin sealers)	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
15	2	Dental material	Demonstrate the obturating materials (Gutta percha, sealers) and endodontic instruments	data show projector, presentation figure	Daily and monthly exams annual and final-Semi

11. Course Evaluation

- Distribution of the score out of 100 according to the tasks assigned to the student such as daily preparation and exams
- Daily, oral, monthly, editorial, and reports.... Etc.
- 15% Half Year
- 25% annual pursuit. Includes daily and monthly exams, and practical requirements
- 20% Final Practical Exam
- 40% Final Theoretical Exam

12. Learning and Teaching Resources

Philips science of dental materials 2012 edition 12 Craig's Restorative dental materials 2018 edition 14	Required Textbooks
	Main References (Sources)
• Scientific Research • Scientific Journals	Recommended Books and References (Scientific Journals, Reports.....)
• Educational Websites	Electronic References, and Websites

Course Description Form Prosthodontics

1. Course Title :	
Prosthodontics	
2. Course code:	
210PR	
3. Chapter/ Year	
2025/2026	
4. Description Preparation Date:	
2025/2026	
5. Available Attendance Formats:	
Attendance in the classroom of the theoretical subject (weekly)	
6. Number of Hours of Study (Total) / Number of Units (Total):	
30theoretical hours / 120 practical hours / 6 units	
7. Course administrator name (if more than one name imentioned with the official email)	
Prof. Dr Mustafa Ghani Taher,	mustafa.gheni.taher@gmail.com
Asist Prof. Dr. Hayder Mahde Idan,	haider.m@uodiyala.edu.iq
Lec. Dr. Ali Hakeem towfiq	aliali.ahsr.82@gmail
8. Course Objectives	
1. General definition of dental manufacturing material, covering the important subjects in four stages, from the second to the fifth stage 2. • Definition of the terminology used in explaining and clarifying the legal curriculum for its application in commercial practice, through the entire section	
9. Teaching and Learning Strategies	
1. Explaining the theoretical material in detail on screen, utilizing students' critical thinking and problem-solving skills, and posing direct and indirect questions related to the scientific materials 2. Training students on the fabrication of a complete set of dental prostheses 3. Providing essential information on dental prosthetics	Strategy

4. • Giving feedback, guidance, and monitoring the practical aspects	
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10. Course Structure / First Semester / Prosthodontics / Theoretical

Week	Hours	Required Learning Outcomes	Name of unit or topic	Learning method	Evaluation Method
1	1	Complete denture Objective of complete denture General consideration in complete denture construction Complete denture component parts	Introduction	data show projector, presentation figure figure	Daily and monthly exams annual and final-Semi
2	1	Anatomical landmarks Maxillary arch anatomical landmarks Supporting structures Limiting structures Relief areas	Anatomical landmarks	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
3	1	Anatomical landmarks Mandibular arch anatomical landmarks Supporting structures Limiting structures Relief areas	Anatomical landmarks	data show projector, presentation figure	Daily and monthly exams and final annual-Semi
4	1	Impression tray - Definition Parts of the impression tray Types of tray Stock tray – Definition Types of stock trays Factors effect in selection of stock tray	Complete Denture Impression	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
5	1	Special tray Advantages of special tray Materials used for construction of special tray Types of special tray Techniques or methods for construction of special tray Criteria for special tray construction	Complete Denture Impression	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
6	1	Dental impression - Definition Complete denture impression - Definition Objective of impression making Primary impression - Definition Materials used for making	Complete Denture Impression	data show projector, presentation figure	Daily and monthly exams annual and final-Semi

		primary impression Primary cast - Definition Production of study cast Secondary impression - Definition Master cast- Definition Materials used for final impression Technique used for making final impression Boxing an impression and making the casts Advantages of boxing Common fault in impression making			
7	1	Record base - Definition Requirements of record base Types of materials used in construction of record base	Record Base	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
8	1	Occlusion rims - Definition Requirements of occlusion rim Materials used in construction of occlusion rim Measurements of maxillary occlusion rim Measurements of mandibular occlusion rim Uses of occlusion rim Occlusal plane Fox – bite	Occlusion Rims	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
9	1	Temporomandibular joint (TMJ) – Definition Ligaments Muscles	Anatomy And Physiology Of Temporomandibular Joint	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
10	1	Mandibular axes and mandibular movements Knowledge of mandibular movements Mandibular movements	Anatomy And Physiology Of Temporomandibular Joint	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
11	1	Types of jaw relation Vertical jaw relation Rest position Inter – occlusal distance Importance of vertical dimension Increased vertical	Maxillomandibular relation	data show projector, presentation figure	Daily and monthly exams annual and final-Semi

		dimension Decreased vertical dimension			
12	1	Method of recording rest vertical dimension Method of recording occlusal vertical dimension Pre – extraction records Methods without pre – extraction record	Methods Of Recording Vertical Relation	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
13	1	Centric jaw relation Importance of centric jaw relation Methods of recording jaw relation Factors that complicates centric jaw relation Methods of recording eccentric jaw relation	Horizontal Jaw Relation	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
14	1	Dental articulator Definition Functions of articulator Requirements of articulator Types of articulator	Dental Articulators (Classification & Digital computerized articulator programming)	data show projector, presentation figure	Daily and monthly exams annual and final-Semi
15	1	Face- bow Definition Parts of face – bow Types of face – bow Important of the face– bow	Face – Bow	data show projector, presentation figure	Daily and monthly exams annual and final-Semi

Course Structure / Second Semester / Prosthodontics / Theoretical					
Week	Hours	Required Learning Outcomes	Name of unit or topic	Learning method	Evaluation Method
1	1	Mounting □□ Definition □□ Preparation of articulator □□ Preparation of the casts and mounting the upper cast on CL II articulator □□ Mounting the lower cast □□ Errors occurred during mounting	Mounting	data show projector, presentation figure	Daily and monthly exams annual-Semi and final
2	1	Selection of anterior teeth	Selection Of	data	Daily and

		☐ ☐ The factors of shade selection ☐ ☐ Size selection a. Length b. Width ☐ ☐ Form selection ☐ ☐ Materials of anterior teeth ☐ ☐ Difference between acrylic and porcelain teeth	Artificial Teeth	show projector, presentation on figure	monthly exams annual -Semi and final
3	1	✓ Shade ✓ Bucco-lingual width ✓ Mesio-distal length ✓ Occluso-lingival height ✓ Occlusal form ✓ Advantages of cusp form teeth ✓ Advantages of non- cusp form teeth	Selection Of Posterior Teeth	data show projector, presentation on figure	Daily and monthly exams annual and -Semi final
4	1	✓ Guideline of artificial teeth ✓ Arrangement anterior teeth ☐ ☐ Arrangement of upper anterior teeth	Arrangement Of Artificial Teeth	data show projector, presentation on figure	Daily and monthly exams annual -Semi and final
5	1	☐ Curve of Spee ☐ Compensatory curves ☐ Arrangement of lower posterior teeth ☐ Arrangement of upper posterior teeth ☐ Common errors in arrangement of teeth	Arrangement Of Posterior Teeth	data show projector, presentation on figure	Daily and monthly exams annual -Semi and final
6	1	• Waxing ✓ Definition ✓ Requirements of waxing the polish surfaces ✓ The procedure of waxing ✓ Establishing the posterior palatal seal area ✓ Procedure for carving of posterior palatal seal area ✓ Advantages of posterior palatal seal • Esthetic consideration in complete denture	Waxing And Carving	data show projector, presentation on figure	Daily and monthly exams annual -Semi and final
7	1	Occlusion ☐ Occlusion of complete denture	Complete Denture	data show projector,	Daily and monthly exams annual -Semi

		☐ Centric occlusion ☐ Centric relation	Occlusion	presentati on figure	and final
8	1	☐ Eccentric occlusion ☐ Concepts of complete denture occlusion ☐ Try-in appointment	Complete Denture Occlusion	data show projector, presentati on figure	Daily and monthly exams annual -Semi and final
9	1	- Flasking of the denture ✓ Flasking techniques	Processing Of The Denture (Flasking)	data show projector, presentati on figure	Daily and monthly exams annual -Semi and final
10	1	☐ Causes of errors in occlusion ☐ Selective grinding ☐ Correction of occlusal errors ☐ Disadvantages of intra – oral correction ☐ Advantages of extra – oral correction ☐ Rules for selective grinding	Occlusal Correction	data show projector, presentati on figure	Daily and monthly exams annual-Semi and final
11	1	☐ Procedure of finishing ☐ Grinding and cutting instruments ☐ Polishing of complete denture ☐ Principles of polishing ☐ Procedures of polishing	Finishing And Polishing Of Complete Denture	data show projector, presentati on figure	Daily and monthly exams annual -Semi and final
12	1	☐ Types of material used in repair ☐ Causes of denture fracture ☐ Types of repair ☐ Laboratory procedure for repairing fractured denture base	Repair Of Complete Denture	data show projector, presentati on figure	Daily and monthly exams annual -Semi and final
13	1	☐ Replacement of broken or missing tooth ☐ Replacement of missing or lost part ☐ Requirement of repair	Repair Of Complete Denture	data show projector, presentati on figure	Daily and monthly exams annual -Semi and final

14	1	☐ Indication for relining or rebasing ☐ Relining ☐ Contraindications of relining and rebasing ☐ The impression techniques for relining and rebasing	Relining And Rebasing	data show projector, presentation figure	Daily and monthly exams annual -Semi and final
15	1	☐ Laboratory procedures for relining ☐ Rebasing ☐ The chair – side relining technique	Relining And Rebasing	data show projector, presentation figure	Daily and monthly exams annual -Semi and final

Course Structure / first Semester / Prosthodontics / Practical

Week	Hours	Required Learning Outcomes	Name of unit or topic	Learning method	Evaluation Method
1	4	Prosthodontics	Clinical and laboratory steps of complete denture construction	data show projector, presentation figure, work	Daily and monthly exams annual -Semi and final
2	4	Prosthodontics	Taking primary impression on metal mold by impression compound and beading and boxing and pouring by dental plaster	data show projector, presentation figure, work	Daily and monthly exams annual -Semi and final
3	4	Prosthodontics	Pouring on rubber mold (upper and lower primary cast)	data show projector, presentation figure, work	Daily and monthly exams annual -Semi and final
4	4	Prosthodontics	Description of anatomical landmarks (maxillary and mandibular arch)	data show projector, presentation figure, work	Daily and monthly exams annual -Semi and final
5	4	Prosthodontics	Demonstration of making upper and lower special tray by	data show projector, presentation	Daily and monthly exams

			cold cure acrylic	figure, work	annual -Semi and final
6	4	Prosthodontics	Finishing and polishing of special tray and evaluation	data show projector, presentation figure, work	Daily and monthly exams annual -Semi and final
7	4	Prosthodontics	Demonstration of taking final impression and construction of master cast	data show projector, presentation figure, work	Daily and monthly exams annual -Semi and final
8	4	Prosthodontics	Evaluation of record base construction, finishing and polishing	data show projector, presentation figure, work	Daily and monthly exams annual -Semi and final
9	4	Prosthodontics	Bite rims construction (upper and lower arch)	data show projector, presentation figure, work	Daily and monthly exams annual -Semi and final
10	4	Prosthodontics	Demonstration of face bow and fox bite and description of types of jaw relation	data show projector, presentation figure, work	Daily and monthly exams annual -Semi and final
11	4	Prosthodontics	Description about the methods of recording vertical jaw relation	data show projector, presentation figure, work	Daily and monthly exams annual -Semi and final
12	4	Prosthodontics	Description about the methods of recording horizontal jaw relation	data show projector, presentation figure, work	Daily and monthly exams annual -Semi and final
13	4	Prosthodontics	Demonstration about the types of articulators, parts, its uses and action	data show projector, presentation figure, work	Daily and monthly exams annual -Semi and final

14	4	Prosthodontics	Mounting of upper and lower casts on articulators	data show projector, presentation figure, work	Daily and monthly exams annual -Semi and final
15	4	Prosthodontics	Mounting of upper and lower casts on articulators (continue) and evaluation of the student work	data show projector, presentation figure, work	Daily and monthly exams annual -Semi and final

Course Structure / Second Semester / Prosthodontics / Practical

Week	Hours	Required Learning Outcomes	Name of unit or topic	Learning method	Evaluation Method
1	4	Prosthodontics	Description the methods of selection of anterior and posterior teeth for complete denture	data show projector, presentation figure, work	Daily and monthly exams annual and final-Semi
2	4	Prosthodontics	Demonstration about arrangement of upper and lower anterior teeth	data show projector, presentation figure, work	Daily and monthly exams annual and final-Semi
3	4	Prosthodontics	Arrangement of upper and lower anterior teeth (continue) and evaluation of the student work	data show projector, presentation figure, work	Daily and monthly exams annual and final-Semi
4	4	Prosthodontics	Demonstration about arrangement of upper and lower posterior teeth	data show projector, presentation figure, work	Daily and monthly exams annual and final-Semi
5	4	Prosthodontics	Arrangement of upper and lower posterior teeth(continue).	data show projector, presentation figure, work	Daily and monthly exams annual and final-Semi
6	4	Prosthodontics	Arrangement of posterior teeth and carving of posterior	data show projector, presentation	Daily and monthly exams annual and final-Semi

			palatal seal and evaluation of the student work	figure, work	
7	4	Prosthodontics	Demonstration about carving and waxing of upper complete denture	data show projector, presentation figure, work	Daily and monthly exams annual and final-Semi
8	4	Prosthodontics	Carving and waxing of lower complete denture (continue) and evaluation of the student work	data show projector, presentation figure, work	Daily and monthly exams annual and final-Semi
9	4	Prosthodontics	Flasking and investment of the denture	data show projector, presentation figure, work	Daily and monthly exams annual and final-Semi
10	4	Prosthodontics	Wax elimination, packing and curing of heat cure acrylic	data show projector, presentation figure, work	Daily and monthly exams annual and final-Semi
11	4	Prosthodontics	Deflasking, finishing and polishing of upper complete denture	data show projector, presentation figure, work	Daily and monthly exams annual and final-Semi
12	4	Prosthodontics	Deflasking, finishing and polishing of lower complete denture (continue)	data show projector, presentation figure, work	Daily and monthly exams annual and final-Semi
13	4	Prosthodontics	Demonstration of selective grinding	data show projector, presentation figure, work	Daily and monthly exams annual and final-Semi
14	4	Prosthodontics	Repair of fracture denture	data show projector, presentation figure, work	Daily and monthly exams annual and final-Semi
15	4	Prosthodontics	Repair of missing tooth	data show projector, presentation figure, work	Daily and monthly exams annual and final-Semi

11.Course Evaluation

- Distribution of the score out of 100 according to the tasks assigned to the student such as daily preparation and exams
- Daily, oral, monthly, editorial, and reports.... Etc.
- 15% Half Year
- 25% (Annual assessment for the first and second semesters) includes daily and monthly exams and practical requirements
- 20% Final Practical Exam
- 40% Final Theoretical Exam

12. Learning and Teaching Resources

Required Textbooks	Required Textbooks
Main References (Sources)	Main References (Sources)

Course Description Form Oral and Fetal Tissue

1.Course Title : Oral and Fetal Tissue
Oral histology and embryology
2.Course Code
215OH 211THE
3.Semester / Year:
2025/2026
3.Date of preparation of this description
2025/2026
4.Available Attendance Formats:
Attendance in the classroom of the theoretical subject (weekly)
5.Number of Hours of Study (Total) / Number of Units (Total):
60 theoretical hours / 60 practical hours
7.Course administrator name (if more than one name is mentioned with the official email)
Manar AbdAl Razzaq Hassan manar@uodiyala.edu.iq Rahma Mohamed abass rahma.m@uodiyala.edu.iq Mustafa ahmed othman Mustafa.ahmed64@yahoo.com
8.Course Objectives
1. Definition of Dental Students: Oral Histology and Embryology. 2. Acquire tissue cutting skills. 3. Introduce students to the mechanism of obtaining tissue samples and preparing laboratory slides. 4. and the use of advanced dye techniques and an understanding of histological examination. 5. Differentiating between different oral tissues and being able to compare the correct tissues of pathological tissue. 6. Master the methods of using staining techniques for diagnostic purposes with knowledge of the types of pigments. 7. Definition and comparison of oral tissue-forming cells. 8. The study of the development of the fetus from the stage of insemination to birth. 9. Introducing the vital processes that lead to the formation and development of the fetus. 10. Define and understand cell division, cell differentiation, tissue and organ formation.

9. Teaching and Learning Strategies

1. Focus on the study and development of tissue and the cell.
2. It studies the structure of tissues from cells, organs, and detailed components in living organisms and compares them.
3. Interest in the study of the embryonic development of living organisms starting from the fertilized egg until reaching advanced stages of development.
4. These two disciplines play a vital role in understanding diseases and how they occur, contributing to the development of modern treatments and medicines.

Strategy

10. Course Structure / First Semester / Oral Histology and Embryology / Theoretical

week	hours	Name of unit or topic	Required Learning Outcomes	Learning method	Evaluation Method
1	2	first week of development ovulation and implantation, Fusion of Oocyte and sperm cell membranes	Embryology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
2	2	Second week of development: bilaminar germ layer, development of the fetus	Embryology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
3	2	Third to eight week: embryonic period, Third week of development trilaminar germ layer	Embryology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
4	2	Development of prechordal plate and primitive streak, Development of placenta and its functions	Embryology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
5	2	Pharyngeal arch, Pharyngeal pouch and cleft	Embryology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
6	2	Development of the face, Development of the Tongue	Embryology	data show projector, presentation	Daily and monthly exams annual and -Semi

				figure	final
7	2	Development of the Palate, Cleft lip and palate	Embryology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
8	2	Slide preparation, Tooth development and growth	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
9	2	Tooth development and growth	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
10	2	Dentinogenesis, Dentin structures	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
11	2	Amelogenesis, Enamel structures	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
12	2	Clinical consideration in enamel and dentin, Dentin hypersensitivity	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
13	2	Pulp development, pulp structures	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
14	2	Root formation, Cementogenesis	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
15	2	Cementum structures, Clinical consideration of cementum	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final

Course Structure / Second Semester / Oral Histology and Embryology / Theoretical

week	hours	Name of unit or topic	Required Learning Outcomes	Learning method	Evaluation Method
1	2	Periodontium, Periodontal ligaments	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
2	2	Maxilla, mandible , alveolar bone	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
3	2	Oral mucosa membrane, Types of mucosa	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
4	2	Eruption of teeth, Mechanism of eruption	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
5	2	Shedding of the deciduous teeth, Dentino-gingival junction	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
6	2	Temporo-mandibular joints, Maxillary sinus	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
7	2	Histochemistry, Types of histochemical stain	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
8	2	Facial anomalies ,Types of Twins	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
9	2	Development of Digestive system, Congenital anomalies of Digestive system	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final

10	2	Development of nervous system, Congenital anomalies of nervous system	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
11	2	Development of muscular system, Congenital anomalies of muscular system	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
12	2	Development of skeletal system, Congenital anomalies of skeletal system	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
13	2	Characterization of proteins involved in Dentin and Bone Mineralization	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
14	2	Bone formation and resorption	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
15	2	Salivary proteins and their relevance to mineral homeostasis	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final

Course Structure / Second Semester / Oral Histology and Embryology / Practical

week	hours	Name of unit or topic	Required Learning Outcomes	Learning method	Evaluation Method
1	2	first week of development ovulation and implantation	Embryology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
2	2	Second week of development: bilaminar germ layer	Embryology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
3	2	Third week of development trilaminar germ layer	Embryology	data show projector, presentation	Daily and monthly exams annual and -Semi

				figure	final
4	2	Development of prechodral plate and primitive streak	Embryology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
5	2	Pharyngeal arch, pouch and cleft	Embryology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
6	2	development of the face and tongue	Embryology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
7	2	Development of the Palate and its annomalies	Embryology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
8	2	Slide preparation, Tooth development and growth	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
9	2	Tooth development and growth	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
10	2	Dentinogenesis, Dentin structures	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
11	2	Amelogenesis, Enamel structures	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and-Semi final
12	2	Clinical consideration in enamel and dentin, Dentin hypersensitivity	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
13	2	Pulp development, pulp structures	Oral histology	data show projector, presentation	Daily and monthly exams annual and -Semi

				figure	final
14	2	Root formation, Cementogenesis	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
15	2	Cementum structures, Clinical consideration of cementum	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final

Course Structure / Second Semester / Oral Histology and Embryology / Practical

week	hours	Name of unit or topic	Required Learning Outcomes	Learning method	Evaluation Method
1	2	Periodontium, Periodontal ligaments	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
2	2	Maxilla, mandible , alveolar bone	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
3	2	Oral mucosa membrane, Types of mucosa	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
4	2	Eruption of teeth, Mechanism of eruption	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
5	2	Shedding of the deciduous teeth, Dentino-gingival junction	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
6	2	Temporo-mandibular joints, Maxillary sinus	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final

7	2	Histochemistry, Types of histochemical stain	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
8	2	Facial anomalies ,Types of Twins	Oral histology	data show projector, presentation figure	Daily and monthly exams and annual-Semi final
9	2	Development of Digestive system, Congenital anomalies of Digestive system	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
10	2	Development of nervous system, Congenital anomalies of nervous system	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
11	2	Development of muscular system, Congenital anomalies of muscular system	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
12	2	Development of skeletal system, Congenital anomalies of skeletal system	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
13	2	Characterization of proteins involved in Dentin and Bone Mineralization	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
14	2	Development of skeletal system, Congenital anomalies of skeletal system	Oral histology	data show projector, presentation figure	Daily and monthly exams annual and -Semi final
15	2	Characterization of proteins involved in Dentin and Bone Mineralization	Oral histology	data show projector, presentation figure	Daily and monthly exams and annual-Semi final

11. Course Evaluation

1. Distribution of the score out of 100 according to the tasks assigned to the student such as daily preparation and exams
2. Daily, oral, monthly, editorial, and reports.... Etc.
3. 15% Half Year
4. 25% annual pursuit. Includes summer internships, daily and monthly exams, and practical requirements
5. 20% Final Practical Exam
6. 40% Final Theoretical Exam

12. Learning and Teaching Resources

1. Ten cates oral histology (Nanci, A.2017) 2. Orbans oral histology and embryology (Kumar.2015) 3. Oral anatomy, histology and embryology (Berkovittiz.2018)	Required Textbooks
	Main References (Sources)
4. Scientific Research 5. Scientific Journals	Recommended Books and References (Scientific Journals, Reports.....)
6. Educational Websites	Electronic References, and Websites

Course description template for general anatomy

1.Course Name:
General Anatomy
2.Course Code:
201AN
3.Semester / Year:
2025/2026
4.Description Preparation Date:
2025/2026
5. Available Attendance Forms:
Classroom attendance for theoretical and laboratory subjects
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours of theory / 60 hours of practical
7. Course administrator's name (mention all, if more than one name)
1.Asist Lec Sumaya Mohammed Mansour sumaya.mohammed@uodiyala.edu.iq 2. Asist.Lec Kadhim Hussein Jalal kadhim.hussein@uodiyala.edu.iq
8. Course Objectives
1. Study the basic anatomical structures of the body, focusing on the parts of the head, face, jaws, and teeth. 2. Understand the major nerves and arteries associated with the mouth and teeth and their vital functions. 3. Analyze the muscles and structures responsible for mouth and jaw movement, chewing, and speech. 4. Use anatomical terminology accurately to describe structures related to the mouth and face
9. Teaching and Learning Strategies
• Apply anatomical knowledge to clinical contexts in dentistry. • Develop observational skills and recognize anatomical details through reliance on models, x-rays, and photographs. • Prepare students to understand advanced anatomy and future clinical medical

specialties.

- Provide students with a comprehensive understanding of human anatomy and its relevance to the dental profession.

10.The structure of the course for theoretical / first season

Week	Hours	Required educationalgoals	Unit name and/or topic	Education method	Evaluation method
1&2	2	General anatomy	scalp layers of the scalp • Muscles of the scalp • Sensory Nerve Supply of the Scalp • Arterial Supply of the Scalp • Venous Drainage of the Scalp • Lymph Drainage of the Scalp • Clinical Notes	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
3&4	2	General anatomy	The orbital region • Eyelids • Movements of the Eyelids • Lacrimal Apparatus • Openings into the Orbital Cavity • Nerves of the Orbit • Blood and Lymph Vessels of the Orbit • Structure of the Eye • Clinical Notes	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
5	1	General anatomy	The Nasal region • The Nose • External Nose • Nerve Supply of the External Nose • Blood Supply and Venous Drainage of the External Nose • Nasal Cavity • Mucous Membrane of the Nasal Cavity • Nerve Supply of the Nasal Cavity • Blood Supply to the Nasal Cavity • Venous Drainage of the Nasal Cavity • Lymph Drainage	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams

			of the Nasal Cavity • The Paranasal Sinuses • Drainage of Mucus and Functions of Paranasal Sinuses • Clinical Notes		
6	1	General anatomy	Mandibular nerve • Introduction • Branches of the Mandibular Nerve • Otic Ganglion • Clinical Notes	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
7&8	2	General anatomy	Face • Skin of the Face • Muscles of the Face (Muscles of Facial Expression) • Sensory Nerves of the Face • Arterial Supply of the Face • venous drainage of the Face • venous drainage of the Face • Lymphatic drainage of the face • Facial nerve	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
9&10	2	General anatomy	Oral cavity The Lips The oral Cavity vestibule and Proper Sensory innervation of the Mouth Hard Palate & Soft palate Muscles of the Soft Palate Palatoglossal Arch & Palatopharyngeal Arch	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
11	1	General anatomy	Tongue • Mucous Membrane of the Tongue • Muscles of the Tongue • Movements of the Tongue	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
12	1	General anatomy	Temporal region • The temporal fossa anatomy • The infratemporal fossa • Communications •	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams

			Muscles of mastication		
13&14	2	General anatomy	Parotid gland • Parotid Region (Boundaries) • Parotid Gland • Parotid Duct • Innervation of Parotid Gland and Related Structures • Arterial Supply • Venous Drainage • Lymph Drainage • The Buccal Pad of Fat • Clinical Notes	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
15	1	General anatomy	The Pterygopalatine fossa • Boundaries, Communications and openings • Maxillary nerve • Branches from the pterygopalatine ganglion • THE PTERYGOPALATINE GANGLION • THE VEINS OF THE PTERYGOPALATINE FOSSA	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams

The structure of the course for theoretical / second season					
Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluation method
16&17	2	General anatomy	Temporomandibular joint • Introduction • The Articular Disk • Retrodiscal Tissue • Capsule • Synovial Membrane • Ligaments • Nerve Supply • Vascular Supply • Movements •	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams

			Important Relations of the Temporomandibular Joint • Clinical Notes		
18&19	2	General anatomy	The neck • Overview • Skin of the Neck • Fasciae of the Neck • Superficial Cervical Fascia • Deep Cervical Fascia • Cervical Ligaments • Muscles of the Neck • Cervical Plexus • Bones of Neck • Blood Supply • Key Neck Muscles	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
20&21	2	General anatomy	Triangles of the neck • ANTERIOR TRIANGLE • SUBMENTAL TRIANGLE • SUBMANDIBULAR TRIANGLE • CAROTID TRIANGLE • MUSCULAR TRIANGLE • Posterior Triangle • Thyroid Gland • blood supply & venous drainage • nerve supply	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
22	1	General anatomy	Submandibular region MUSCLES OF THE SUBMANDIBULAR REGION The submandibular gland Sublingual Gland	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
23&24	2	General anatomy	Root of the neck • Muscles of the Root of the Neck • The Thoracic Duct • Main Nerves of the Neck • Cervical Plexus & Brachial Plexus • Lymph Drainage of the Head and Neck • Veins of the Head	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams

			and Neck		
25&26	2	General anatomy	Arteries of the neck • Common Carotid Artery • Carotid Sinus • Carotid Body • External Carotid Artery • Internal Carotid Artery • Subclavian Arteries (3 parts) • Circle of Willis	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
27	1	General anatomy	Brain • Nervous System • Gross Anatomy of the Brain • Parts of the Brain • Ventricular System of the Brain • The Venous Blood Sinuses (Dural Sinuses) • Blood Supply of the Brain • Cranial Meninges • Dural Nerve Supply • Dural Arterial Supply • Dural Venous Drainage • Clinical Focus	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
28	1	General anatomy	Cranial nerves • Introduction • Functional Components • Summary of cranial nerves	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
29	1	General anatomy	Pharynx • Muscles of the Pharynx • Pharynx divisions • Palatine Tonsils • Waldeyer's Ring of Lymphoid Tissue	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
30	1	General anatomy	Larynx • Cartilages of the Larynx • Membranes and Ligaments of the Larynx • Inlet of the Larynx • Laryngeal Folds • Muscles of the Larynx • Nerve &	Theoretical lecture using PowerPoint	Daily, monthly, semi-annual, and final exams

			blood Supply of the Larynx		
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The structure of Laboratory sessions

Week	Hours	Required educational goals	Unit name and/or topic	Education method	Evaluation method
1	2	General anatomy	Anatomy of scalp	Summary of theory lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
2	2	General anatomy	Anatomy of face part 1	Summary of theory lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
3	2	General anatomy	Anatomy of face part 1	Summary of theory lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
4	2	General anatomy	Anatomy of parotid region	Summary of theory lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
5	2	General anatomy	Temporal, infratemporal fossa	Summary of theory lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
6	2	General anatomy	muscles of mastication	Summary of theory lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
7	2	General anatomy	Mandibular nerve	Summary of theory lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
8	2	General anatomy	Maxillary artery	Summary of theory lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
9	2	General anatomy	Pterygopalatine fossa	Summary of theory lecture using PowerPoint	Daily, monthly, semi-annual, and final exams
10	2	General anatomy	Maxillary nerve	Summary of theory lecture using	Daily, monthly, semi-annual, and

				PowerPoin	final exams
11	2	General anatomy	Nasal cavity and paranasal sinuses	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
12	2	General anatomy	Tempromandibular joint (TMJ)	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
13	2	General anatomy	Orbital region and Muscles of the eye	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
14	2	General anatomy	Ophthalmic nerve, artery and vein	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
15	2	General anatomy	anatomy of eyeball	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
16	2	General anatomy	Anatomy of mouth(The Lips ,oral Cavity,Tongue)	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
17	2	General anatomy	The Palate	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
18	2	General anatomy	Superficial anatomy of neck	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
19	2	General anatomy	Triangles of neck	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
20	2	General anatomy	Arteries of head and neck (internal carotid artery)	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
21	2	General anatomy	External carotid artery	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
22	2	General anatomy	Subclavian artery	Summary of theory lecture using	Daily, monthly, semi-annual, and

				PowerPoin	final exams
23	2	General anatomy	Veins of the Head and Neck (internal jugular vein, subclavian vein, and venus sinuse	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
24	2	General anatomy	Anatomy of brain	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
25	2	General anatomy	Submandibular region	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
26	2	General anatomy	Anatomy of pharynx	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
27	2	General anatomy	Lymph drainage of head and neck	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
28	2	General anatomy	Anatomy of larynx	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
29	2	General anatomy	Root of neck	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams
30	2	General anatomy	Cranial nerves	Summary of theory lecture using PowerPoin	Daily, monthly, semi-annual, and final exams

11.Course Evaluation

1. Distribution of the score out of 100 according to the tasks assigned to the student such as daily preparation and exams
2. Daily, oral, monthly, editorial, and reports.... Etc.
3. 15% Half Year
4. 25% annual pursuit. Includes daily and monthly exams, and practical requirements
5. 20% Final Practical Exam
6. 40% Final Theoretical Exam

12. Learning and Teaching Resources

1-Required course books	1.Snell Clinical anatomy 7 th edition 2. Netter's head and neck anatomy for dentistry 2nd edition 2012
2- main references (sources)	
3- Recommended books and references(scientific journals, reports)	Scientific Reasearch Scientific journal
4- Electronic references, websites	Educational website