Course Description Form

1. Course Name:
Medical chemistry
2. Course Code: DEN11106
3. Semester / Year: 2025-2026
Annual
4. Description Preparation Date:
13/8/2025
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours (Theoretical) + 60 hours (Practical). (Two theoretical hours and two practical hours week)
7. Course administrator's name (mention all, if more than one name)
Name: Ali Mohammad Bedryi Email: a.bedyri@alzahu.edu.iq
8. Course Objectives

Course Objectives	Preparing the student practically. - Teaching the student the scientific thinking methods Recognizing the risks of chemicals Linking medicinal chemistry to dentistry--
9. Teaching and Learning Strategies	
Strategy	Delivering the lecture in PowerPoint format – Showing explanatory videos – Directing students to use some relevant websites – Using the discussion method in the hall to follow up and know the students' ideas

10. Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	**2H**	concentration, preparation of solutions	**Learn students about how to preparation different concentration**	Using Power Point with asking question and presentation Lecture –specific videos	Quiz
2	**2H**	Salts, preparation of salts	**Learn students about how to preparation** of salts	Using Power Point with asking question and presentation Lecture –specific videos	Quiz
3	**2H**	Fluid and electrolyte	**definition** Fluid and electrolyte	Using Power Point with asking question and presentation Lecture –specific videos	Quiz

4	**2H**	Buffer-pH and Acid-Base Balance	**Learn students about how to preparation different buffer and how to uses pH meter and calibrated of pH meter**	Using Power Point with asking question and presentation Lecture –specific videos	
5	**2H**	Acid-base balance and blood pH	**Learn students about different acid base buffer in the body**	Using Power Point with asking question and presentation Lecture –specific videos	
6	**2H**	Colloids and colloidal dispersions	**Definition of** Colloids and colloidal dispersions	Using Power Point with asking question and presentation Lecture –specific videos	
7	**2H**	Chirality in Biological Systems	**Learn student about** Chirality in Biological Systems	Using Power Point with asking question and presentation Lecture –specific videos	
8	**2H**	Molar concentration	**Definition of** Molar concentration	Using Power Point with asking question and presentation Lecture –specific videos	
9	**2H**	Pollution	Pollution **Learn students about types of** Pollution and effect of Pollution on human body	Using Power Point with asking question and presentation Lecture –specific videos	
10	**2H**	Radiochemistry	Pollution **Learn students about types** Radiochemistry	Using Power Point with asking question and presentation Lecture –specific videos	
11	**2H**	Alkanes and Cycloalkanes	**Learn student about** Alkanes and Cycloalkanes and there reaction	Using Power Point with asking question and presentation Lecture –specific videos	

12	**2H**	Alkenes and Alkynes	**Learn student about difference about** Alkenes and Alkynes	Using Power Point with asking question and presentation Lecture –specific videos	
13	**2H**	Aromatic compounds	**Learn student abo** Aromatic compounds	Using Power Point with asking question and presentation Lecture –specific videos	
14	**2H**	Aromatic compounds in Nature	**Learn student about** Aromatic compounds and there reaction	Using Power Point with asking question and presentation Lecture –specific videos	
15	**2H**	Stereoisomers of Carbon	**Learn student about** Stereoisomers of Carbon	Using Power Point with asking question and presentation Lecture –specific videos	
16	**2H**	Diastereomers	**Learn student about** Diastereomers of Carbon and classification	Using Power Point with asking question and presentation Lecture –specific videos	
17	**2H**	Alcohols, Phenols, Ethers and Thiols (preparation, reactions)	**Learn student about** Alcohols, Phenols, Ethers and Thiols (preparation, reactions	Using Power Point with asking question and presentation Lecture –specific videos	
18	**2H**	Carboxylic Acids And Their Derivatives , part 1	**Learn student about** Carboxylic Acids And Their Derivatives , part 1 and **there reaction and nomenclature**	Using Power Point with asking question and presentation Lecture –specific videos	

19	**2H**	Carboxylic Acids And Their Derivatives , part 2	**Learn student about** Carboxylic Acids And Their Derivatives , part 1 like ester and amide and lactone	Using Power Point with asking question and presentation Lecture –specific videos	
20	**2H**	Aldehydes and ketones	**Learn student about** Aldehydes and ketones	Using Power Point with asking question and presentation Lecture –specific videos	
21	**2H**	Carbohydrates	**Learn student about** Carbohydrates	Using Power Point with asking question and presentation Lecture –specific videos	
22	**2H**	Monosaccharide's	**Learn student about** Monosaccharide's **and their reaction**	Using Power Point with asking question and presentation Lecture –specific videos	
23	**2H**	Disaccharides Carbohydrates and oral health	**Learn student about** Disaccharides Carbohydrates and oral health	Using Power Point with asking question and presentation Lecture –specific videos	
24	**2H**	Lipids	**Learn student about Lipids** and classification of lipids	Using Power Point with asking question and presentation Lecture –specific videos	
25	**2H**	Derived lipids The role of lipids in teeth diseases	**Learn student about** Derived lipidsThe role of lipids in teeth diseases	Using Power Point with asking question and presentation Lecture –specific videos	
26	**2H**	Proteins	**Learn student about and classification of** Proteins	Using Power Point with asking question and presentation Lecture –specific videos	

27	**2H**	Amino acids Effects of protein on oral health	**Learn student about** Amino acids Effects of protein on oral health	Using Power Point with asking question and presentation Lecture –specific videos	
28	**2H**	Nucleic Acids	**Learn student about** Nucleic Acids and difference between DNA and RNA	Using Power Point with asking question and presentation Lecture –specific videos	
29	**2H**	Nucleosides, Nucleotides	**Learn student about** Nucleosides, Nucleotides	Using Power Point with asking question and presentation Lecture –specific videos	
30	**2H**	Dioxy and ribo Nucliec acids	**Learn student about** Dioxy and ribo Nucliec acids and and different between two Dioxy and Ribo	Using Power Point with asking question and presentation Lecture –specific videos	

10.Course Structure (Practical)				
Hours	**Required learning outputs**	**Subject Title**	**Teaching Method**	**Assessment Method**
First Semester				
2 Hrs. Practical	Safety of chemicals part-1	Practical Medical Chemistry	Power Point	Quiz-Practical assessment
2 Hrs. Practical	Safety of chemicals part -2	Practical Medical Chemistry	Power Point	Practical Medical Chemistry

2 Hrs. Practical	Solubility rules and Applications (Solubility rules of salts).	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Test for negative ions (Anions).part 1	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Test for negative ions (Anions).part 1	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Test for negative ions (Anions). part 2	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	pH meter	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Test for positive ions (Cations). part 1	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Test for positive ions (Cations). part 2	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Titration-acid base titration Calculate the percentage of HAC in Vinegar	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Hydrocarbons- Definition and properties	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Aliphatic Hydrocarbons	Practical Medical Chemistry	Power Point	Practical Medical Chemistry

2 Hrs. Practical	Aromatic hydrocarbons Part.1	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Preparation of aspirin and purification	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Alcohol(identification)	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Phenols reactions And identification of phenol	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Aldehydes and ketones identification of both	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Carboxylic Acids reactions part 1	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Carboxylic Acids reactions part 2	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Carbohydrates reactions	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Monosaccharide's reactions	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Disaccharides reactions	Practical Medical Chemistry	Power Point	Practical Medical Chemistry

2 Hrs. Practical	Lipids reactions part 1	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Lipids reactions part 2	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Proteins reactions	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Amino acids reactions	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Paper chromatography part 1	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Paper chromatography Part 2	Practical Medical Chemistry	Power Point	Practical Medical Chemistry
2 Hrs. Practical	Osmosis	Practical Medical Chemistry	Power Point	Practical Medical Chemistry

11. Course Evaluation

- 15 Marks: divided by two semesters
- 25 Marks along the year: divided as:

12.5 First course: 7.5 Theoretical including two exams, homework, reports, quizzes + 5 marks in practical part including quizzes, reports, Homework

12.5 Second course: 7.5 Theoretical including two exams, homework, reports, quizzes + 5 marks in practical part including quizzes, reports, homework

- 20 Marks: Practical Final exam

- 40 Marks: Theoretical Final Exam

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	The Chemical Basis Of Life: General ,Organic, and Biological Chemistry for the Health Sciences By George H.Schmid
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
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:
Medical Physics
2. Course Code: DEN 11107
3. Semester / Year: Annual
2025-2026
4. Description Preparation Date:
22/7/2025
5. Available Attendance Forms:

Lectures (Theory) + Labs (Practical, Weekly)
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours (Theoretical) + 60 hours (Practical). (Two theoretical hours and three practical hours week)
7. Course administrator's name (mention all, if more than one name)
Name: Aqeel Kadeem Morshed **Email: aqeel.alhamaidah@alzahu.edu.iq**
8. Course Objectives

Course Objectives	• Enable the student to know the physical ideas related to the human body • The physical functions of the human body's organs and medical applications in diagnosis and treatment • Theoretical and practical mastery of the prescribed curriculum vocabulary
9. Teaching and Learning Strategies	
Strategy	- Giving lectures, discussions, and using e-learning
10. Learning and Teaching Resources	
Medical Physics	John Cameron (Authors)

10. Course Structure

Week	Hours	Unit or subject name	Required Learning Outcomes	Learning method	Evaluation method

1	2 Hrs Theory 2 HrsPractical	Terminology and modeling	Learn the terminology of medical physics	Power Point	Quiz
2	2 Hrs Theory 2 HrsPractical	measurements	Learn about the medical Measurement	Power Point	Quiz
3	2 Hrs Theory 2 HrsPractical	Static forces	Learn the type of levers with medical examples.	Power Point	Quiz
4	2 Hrs Theory 2 HrsPractical	Dynamic forces	Application s of Newton's second law.	Power Point	Quiz
5	2 Hrs Theory 2 HrsPractical	Physics of the skeleton	Learn Mechanical properties of bone	Power Point	Quiz
6	2 Hrs Theory 2 HrsPractical	Stress-strain curve and, young modulus.	pplications of young modulus.	Power Point	Quiz
7	2 Hrs Theory 2 HrsPractical	Heat and cold in medicine	Learn Physical basis of heat in medicine.	Power Point	Quiz
8	2 Hrs Theory 2 HrsPractical	Heat therapy	Learn the application & Thermograph physics.	Power Point	Quiz
9	2 Hrs Theory 2 HrsPractical	Energy	Learn the Energy change in the body.	Power Point	Quiz
10	2 Hrs Theory 2 HrsPractical	Work and power of the body.	Learn the Efficiency heat losses from the body.	Power Point	Quiz
11	2 Hrs Theory 2HrsPractical	Pressure	Learn how to measurement blood pressure in the body.	Power Point	Quiz

12	2 Hrs Theory 2 Hrs Practical	Pressure inside the body	Identify the disease cases because of high pressure and its physical methods of diagnosis.	Power Point	Quiz
13	2 Hrs Theory 2 Hrs Practical	Electricity within the body.	Learn the Application of electricity to the surface of the body	Power Point	Quiz
14	2 Hrs Theoretical 2 Hrs Practical	Electrical signals from body	Learn the recording of the potentials from muscles, heart, brain	Power Point	Quiz
15	2 Hrs Theory 2 Hrs Practical	Sound	Identify the general properties of sound	Power Point	Quiz
Second Semester					
1	2 Hrs Theory 2 Hrs Practical	Sound in medicine	Identify the reflection and transmition of sound in the body	Power Point	Quiz
2	2 Hrs Theory 2 Hrs Practical	Ultrasound	Learn the Applications of ultrasound to the body	Power Point	Quiz
3	2 Hrs Theory 2 Hrs Practical	Doppler technique	Learn the applications of Doppler technique in the body	Power Point	Quiz
4	2 Hrs Theory 2 Hrs	Light in medicine	Learn the Light properties	Power Point	Quiz
5	2 Hrs Theory 2 Hrs Practical	Ultraviolet and infrared light in medicine.	Learn the Application of Ultraviolet and infrared light in medicine.	Power Point	Quiz
6	2 Hrs Theory 2 Hrs Practical	Laser in medicine.	Learn the General Applications of Laser in	Power Point	Quiz

			medicine		
7	2 Hrs Theory 2 Hrs Practical	Laser in dentistry	Identify Laser Dental Applications.	Power Point	Quiz
8	2 Hrs Theory 2 Hrs Practical	Physics of eye and vision	Identify focusing elements of the eye.	Power Point	Quiz
9	2 Hrs Theory 2 Hrs Practical	Defective vision	Determine the Defective vision and its correction.	Power Point	Quiz
11	2 Hrs Theory 2 Hrs Practical	Physics of diagnosis X ray	Learn the field of radiology & its major branches.	Power Point	Quiz
12	2 Hrs Theory 2HrsPractical	Physics of nuclear medicine	Learn the sources of radiation and its medical uses.	Power Point	Quiz
13	2 Hrs Theory 2HrsPractical	nuclear medicine	Learn the basic instrumentations and its medical therapy	Power Point	Quiz
14	2 Hrs Theory 2HrsPractical	Physics of radiation therapy	Learn the most common radioisotope and used in Diagnosis	Power Point	Quiz
15	2 Hrs Theory 2HrsPractical	Brach therapy	Learn radioactivity Radiation doses, And Principles of radiation Therapy.	Power Point	Quiz
11.Course Evaluation					

- Midyear written exam: 15 marks
- Annual pursuit: 25 marks
- Final clinical exam: 20 marks
- Final written exam; 40 marks

12.Learning and Teaching Resources	
Required textbooks (curricular books, if any)	John R. Cameron," Medical physics", New York , 2000.
Main references (sources)	Irving Herman "Physics of the Human Body"
Recommended books and references (scientific journals, reports...)	None
Electronic References, Websites	None

Course Description Form

1. Course Name:	
Biology	
2. Course Code: DEN 11108	
3. Semester / Year: Annual	
2025-2026	
4. Description Preparation Date:	
20/8/2025	
5. Available Attendance Forms:	
Lectures (Theory) + Labs (Practical, Weekly)	
6. Number of Credit Hours (Total) / Number of Units (Total)	
60 hours (Theoretical) + 60 hours (Practical). (Two theoretical hours and three practical hours week	
7. Course administrator's name (mention all, if more than one name)	
Name: Mohammed Ehsan Abd	Email: miach680@gmail.com
8. Course Objectives	
Course Objectives	-Enabling students to learn about the structure of the animal cell and the biological processes that take place such as indirect mitosis and meiosis. -Enabling students to get familiar with the important parasites that infect the human body such as malaria, schistosomiasis, Baghdad pill and others. -Enabling students to learn about the types of animal tissues and the diseases associated with each type. -Enabling students to learn about basic genetics such as the synthesis of DNA and RNA, mutations, and some common genetic diseases such as Mongolia and hereditary hemorrhage.
9. Teaching and Learning Strategies	
Strategy	1. Use PowerPoint lectures. 2. Method of debate and discussion. 3. Using smart screens and whiteboards to display scientific material. 4. Education in laboratories to acquire scientific skills. 5. Reports and projects. 6. Student groups and Workshops. 7. Scientific trips. 8. Oral discussions

10.Course Structure (Theory)					
Week	**Hours**	**Required learning outputs**	**Subject Title**	**Teaching Method**	**Assessment Method**
First Semester					
1	1 Hrs. Theory	Learn biology branches and scientist	Introduction to biology	Power Point	Quiz
2	2 Hrs. Theory	Learn features and structure	Bacteriology	Power Point	Quiz
3	2 Hrs. Theory	Learn types of immunocelles	Human Genetics (part 1)	Power Point	Quiz
4	2 Hrs. Theory	Learn types and structure of bacteria	Human Genetics (part 2)	Power Point	Quiz
5	2 Hrs. Theory	Study basic of genetic material	Immunity	Power Point	Quiz
6	2Hrs. Theory	Learn structure and tissue features	Cell structure	Power Point	Quiz
7	2 Hrs. Theory	Learn structure and tissue features	Cell organelle	Power Point	Quiz
8	2 Hrs. Theory	Learn structure and tissue features	Epithelial tissue	Power Point	Quiz
9	2 Hrs. Theory	Learn structure and tissue features	Glandular tissue	Power Point	Quiz
10	2 Hrs. Theory	Learn structure and tissue features	Proper connective tissue	Power Point	Quiz
11	2 Hrs. Theory	Learn structure and tissue features	Specialized connective tissue	Power Point	Quiz
12	2 Hrs. Theory	Learn structure and features of cell	Muscular tissue	Power Point	Quiz
13	2 Hrs. Theory	Learn membrane function	Nervous tissue	Power Point	Quiz
14	2 Hrs. Theory	Roll of membrane in material passage	Stem cells	Power Point	Quiz
15	2 Hrs. Theory	Learn cell cycle parts	Exam	Power Point	Quiz
Second Semester					
1	1 Hrs. Theory	Study phases of mitosis &miosis	Transport across cell membrane	Power Point	Quiz

2	1 Hrs. Theory	Learn metabolism	Cellular metabolism	Power Point	Quiz
3	2 Hrs. Theory	Lean chemical structure of nuclic acid	Cell division(mitosis)	Power Point	Quiz
4	2 Hrs. Theory	Learn about general parasitology	Cell division (meiosis)	Power Point	Quiz
5	2 Hrs. Theory	Learn the relation between hosts and parasites	Cellular interaction (stable interaction)	Power Point	Quiz
6	2 Hrs. Theory	Learn life cycle and features of parasit	Cellular interaction (transient interaction)	Power Point	Quiz
7	2 Hrs. Theory	Learn life cycle and features of parasit	Introduction to biotechnology	Power Point	Quiz
8	2 Hrs. Theory	Learn life cycle and features of parasit	Introduction to parasitology	Power Point	Quiz
9	2 Hrs. Theory	Learn life cycle and features of parasit	Protozoa: sarcodina	Power Point	Quiz
10	2 Hrs. Theory	Learn life cycle and features of parasit	Protozoa: flagellata	Power Point	Quiz
11	2 Hrs. Theory	Learn life cycle and features of parasit	Protozoa: ciliataand sporozoa	Power Point	Quiz
12	2 Hrs. Theory	Learn life cycle and features of parasite	Platyhelminthes: trematoda	Power Point	Quiz
13	2 Hrs. Theory	Learn life cycle and features of parasite	Platyhelminthes: cestoda	Power Point	Quiz
14	2 Hrs. Theory	Learn life cycle and features of parasite	Nematoda	Power Point	Quiz
15	2 Hrs. Theory	Learn life cycle and features of parasite	Exam	Power Point	Quiz

10.Course Structure (Practical)					
Week	**Hours**	**Required learning outputs**	**Subject Title**	**Teaching Method**	**Assessment Method**
First Semester					
1	1 Hrs. Practical	Learn biology branches and scientist	Laboratory safety	Power Point	Quiz
2	1 Hrs. Practical	Learn features and structure microscope	Microscope	Power Point	Quiz

3	2 Hrs. Practical	Learn types of cells	Types of animal cells	Power Point	Quiz
4	2 Hrs. Practical	Learn types and structure of bacteria	Bacteriology	Power Point	Quiz
5	2 Hrs. Practical	Study basic of genetic material	Simple epithelial cells	Power Point	Quiz
6	2 Hrs. Practical	Learn structure and tissue features	Stratified epithelial cell	Power Point	Quiz
7	2 Hrs. Practical	Learn structure and tissue features	Elements of connective tissue	Power Point	Quiz
8	2 Hrs. Practical	Learn structure and tissue features	Proper connective tissue	Power Point	Quiz
9	2 Hrs. Practical	Learn structure and tissue features	Specialized connective tissue Bone	Power Point	Quiz
10	2 Hrs. Practical	Learn structure and tissue features	Specialized connective tissue Cartilage	Power Point	Quiz
11	2 Hrs. Practical	Learn structure and tissue features	Specialized connective tissue Blood	Power Point	Quiz
12	2 Hrs. Practical	Learn structure and features of cell	Glandular tissue Part 1	Power Point	Quiz
13	2 Hrs. Practical	Learn membrane function	Glandular tissue Part 2	Power Point	Quiz
14	2 Hrs. Practical	Roll of membrane in material passage	Muscular tissue	Power Point	Quiz
15	2 Hrs. Practical	Learn nervous cell parts	Nervous tissue	Power Point	Quiz
Second Semester					
1	1 Hrs. Practical	Study phases parasites	Entamoeba spp	Power Point	Quiz
2	1 Hrs. Practical	Learn about general parasitology	Giardia lambelia and Trichmonas spp	Power Point	Quiz
3	2 Hrs. Practical	Learn the relation between hosts and parasites	Leishmania sp	Power Point	Quiz
4	2 Hrs. Practical	Learn life cycle and features of parasite	Trypanosoma spp	Power Point	Quiz

5	2 Hrs. Practical	Learn life cycle and features of parasite	Plasmodium spp	Power Point	Quiz
6	2 Hrs. Practical	Learn life cycle and features of parasite	Balantidium spp	Power Point	Quiz
7	2 Hrs. Practical	Learn life cycle and features of parasite	Faciola hepatica	Power Point	Quiz
8	2 Hrs. Practical	Learn life cycle and features of parasite	Schistosoma spp	Power Point	Quiz
9	2 Hrs. Practical	Learn life cycle and features of parasite	Echinococcus granulosus	Power Point	Quiz
10	2 Hrs. Practical	Learn life cycle and features of parasite	Taenia saginata	Power Point	Quiz
11	2 Hrs. Practical	Learn life cycle and features of parasite	Taenia solium	Power Point	Quiz
12	2 Hrs. Practical	Learn life cycle and features of parasite	Ancylstoma spp	Power Point	Quiz
13	2 Hrs. Practical	Learn life cycle and features of parasite	Ascaris spp	Power Point	Quiz
14	2 Hrs. Practical	Learn life cycle and features of parasite	Enterobius vermicularis	Power Point	Quiz
15	2 Hrs. Practical	Learn life cycle and features of parasite		Power Point	Quiz
			Seminar		2

11. Course Evaluation

- 15 Marks: Mid-year exam
- 25 Marks along the year: divided as :

12.5 First course: 7.5 Theoretical including two exams, homework, reports, quizzes + 5 marks in practical part including quizzes, reports, Homework

12.5 Second course: 7.5 Theoretical including two exams, homework, reports, quizzes + 5 marks in practical part including quizzes, reports, homework

- 20 Marks: Practical Final exam
- 40 Marks: Theoretical Final Exam

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Human Biology, 8th Edition. Inderbir Singh
Main references (sources)	❖ Book of Medical parasitiolgy eight edition (2018) 2- Textbook of Histology, (2020) by Leslie P. Gartner, Elsevier Health Sciences, Medical - 704 pages. 3- CELL BIOLOGY, Third edition. (2 0 17) Thomas. D; William .C; Jennefer. L. and Graham. T. Printed in U.S.A.

	❖ Roberts , S.L. and Schmidt , G.D. ,"Foundation of Parasitology", 8thed. , McGrawHill , New York , 2009.
Recommended books and references (scientific journals, reports...)	Ross , M.H. and Pawlina , W. ,"Histology A Text and Atlas" , 6thed. , Lippincott Williams and Wilkins, London, 2011.
Electronic References, Websites	www.kcom.edu/faculty /chamberlian /courses .htm http://www.ncbi.nlm.nih.gov/books/bv

Course Description Form

1. Course Name:	
Computer Sciences	
2. Course Code: DEN 11103	
3. Semester / Year:	
2025-2026	
4. Description Preparation Date:	
10/8/2025	
5. Available Attendance Forms:	
Lectures (Theory) + Labs (Practical, Weekly)	
6. Number of Credit Hours (Total) / Number of Units (Total)	
60 hours (Theoretical) + 60 hours (Practical)	
7. Course administrator's name (mention all, if more than one name)	
Name: Aqeel Kadeem Morshed **Email**: aqeel.alhamaidah@alzahu.edu.iq	
8. Course Objectives	
Course Objectives	-The students will learn and understand the basics of computer applications and the operating system (windows) -Perform basic functions of file management -Manage print settings and print documents -The students will learn and understand the internet concept and services -The students will learn and understand the e-learning -The students will learn and understand the Google search Techniques -The students will learn and understand the best dentistry applications -The students will learn and understand Microsoft Word Processing -The students will learn and understand Microsoft PowerPoint -The students will learn and understand Microsoft Excel Sheet -The students will learn and understand how to use the internet resources
9. Teaching and Learning Strategies	
Strategy	1. Use PowerPoint lectures. 2. Method of debate and discussion. 3. Using smart screens and whiteboards to display scientific material.

	4. Education in laboratories to acquire scientific skills. 5. Oral discussions

10. Course Structure (Theory)					
Week	**Hours**	**Required learning outputs**	**Subject Title**	**Teaching Method**	**Assessment Method**
First Semester					
1	2		**Computer Fundamentals** - What is a computer - History of computer - Type of computer	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
2	2		**Computer Components** - Input devices - Output devices - Central Processing Unit	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
3	2		- Hardware - Software - Storage devices - Characteristics of the good computer	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
4	2		**Operating System** - Introduction to operating systems (Microsoft Windows) - Introduction to the Desktop - Environment (Personalizing Desktop)	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
5	2		- Control Panel - Managing User Accounts and Parental Controls - Security and Maintenance	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
6	2		**Managing files and folders** File Management (Creating, moving, renaming, and deleting folders and files)	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
7	2		- Understanding file extensions - Finding Files on Your Computer - Keyboard Shortcuts in Windows	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
8	2		**Computer Virus** - Types of computer Virus - Symptoms of a Computer Virus - Anti-Virus	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
9	2		**Internet and cloud storage** - What is the internet - Uses of the internet - Difference between the World Wide Web and the Internet Security and the Internet	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams

10	2		- Email account - Drobox - OneDrive	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
11	2		- Google Drive - Google form	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
12	2		Google search skills	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
13	2		**Introduction to E- Learning** - Online Conference	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
14	2		Google Classroom	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
15	2		Zoom application	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
Second Semester					
1			**Computer technology in dentistry (Digital dentistry)** - Uses, types, cons & pros - Useful Apps for Dentists	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
2			**Introduction to Microsoft Office Software** • **MS- Word Processing**	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
3			- Creating documents in Microsoft Word - Typing text, numbers and dates into a document - Formatting - Checking the spelling in your document - Making and saving changes to your document	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
4			- Add table - Formatting the Table - Insert shape and smart art - Screenshot - Add header, footer, page number, and date	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
5			- Page Layout - Design: watermark, page color, and page border - Insert Equation	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
6			• **MS- PowerPoint** - Create a new presentation. - Modify presentation themes. - Add and edit text to slides.	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams

			- Add new slides to a presentation		
7			- Insert clipart images and shapes to slides - Insert and modify tables and charts	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
8			- Add sound and video to a slide presentation - Insert and edit animations and slide transitions	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
9			Display a speaker-lead and self-running presentation	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
10			• **MS- Excel** - Understanding spreadsheet functionality - Creating spreadsheets in Microsoft Excel - Typing text numbers and dates into a worksheet	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
11			- Formulas and functions - Formatting - Making and saving changes to your workbook - Printing a worksheet	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
12			• **Introduction to database** - Introduction to Microsoft Access Creating Tables/ Properties	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
13			Designing Form	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
14			- Querying the Database Producing report	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
15			Exam	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams

10.Course Structure (Practical)

Week	Hours	Required learning outputs	Subject Title	Teaching Method	Assessment Method
First Semester					
1	2		**Computer Fundamentals** - What is a computer - History of computer - Type of computer	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
2	2		**Computer Components** - Input devices - Output devices - Central Processing Unit	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
3	2		- Hardware - Software - Storage devices - Characteristics of the good computer	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
4	2		**Operating System** - Introduction to operating systems (Microsoft Windows) - Introduction to the Desktop - Environment (Personalizing Desktop)	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
5	2		- Control Panel - Managing User Accounts and Parental Controls - Security and Maintenance	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
6	2		**Managing files and folders** File Management (Creating, moving, renaming, and deleting folders and files)	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
7	2		- Understanding file extensions - Finding Files on Your Computer - Keyboard Shortcuts in Windows	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
8	2		- internet and cloud storage - Email account - Drobox	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
9	2		One Drive	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
10	2		Google Drive Google form	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
11	2		Google search skills	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams

12	2		- Introduction to Microsoft Office Software - MS- Word Processing - Creating documents in Microsoft Word	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
13	2		- Typing text, numbers and dates into a document - Formatting	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
14	2		- Checking the spelling in your document - Making and saving changes to your document	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
15	2		- Add table - Formatting the Table - Insert shape and smart art	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
2Second Semester					
1	2		- Formatting - Checking the spelling in your document - Making and saving changes to your document	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
2	2		- Screenshot - Add header, footer, page number, and date - Page Layout - Design: watermark, page color, and page border - Insert Equation	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
3	2		• MS- PowerPoint - Create a new presentation. - Modify presentation themes.	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
4	2		- Add and edit text to slides. - Add new slides to a presentation	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
5	2		- Insert clipart images and shapes to slides - Insert and modify tables and charts	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
6	2		- Add sound and video to a slide presentation	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
7	2	-	- Insert and edit animations and slide transitions	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
8	2		- Display a speaker-lead and self-running presentation	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams

9	2		- MS- Excel - Understanding spreadsheet functionality - Creating spreadsheets in Microsoft Excel	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
10	2		- Formulas and functions - Formatting	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
11	2		- Making and saving changes to your workbook - Printing a worksheet	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
12	2		- Introduction to database - Introduction to Microsoft Access - Creating Tables/ Properties	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
13	2		- Designing Form	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
14	2		- Querying the Database - Producing report	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams
15	2		Practical Test	Power Point Slides+ computer	Pre-Mid-Term, Post-Mid-Term and Final Exams

11. Course Evaluation

Pre-Midterm	Theoretical Test	12.5% ,	Practical Test	7.5%
Post-Midterm	Theoretical Test	12.5%,	Practical Test	7.5%
Final Exam	Theoretical Test	35%,	Practical Test	25%

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	• Basic computer skills, Dr. Mithilesh Kumar Dubey
Main references (sources)	• Basic computer skills, Dr. Mithilesh Kumar Dubey • Word, Excel, PowerPoint, Access Office, Rajeev Gandhi Youth Saksharta Mission • Microsoft© Office 365 Connect and Collaborate Virtually Anywhere, Anytime, KATHERINE MURRAY
Recommended books and references (scientific journals, reports...)	Microsoft© Office 365 Connect and Collaborate Virtually Anywhere, Anytime, KATHERINE MURRAY

Course Description Form

1. Course Name:	
English language /Medical terminology	
2. Course Code: DEN 11110	
3. Semester / Year:	
2025-2026	
4. Description Preparation Date:	
10-8-2025	
5. Available Attendance Forms:	
Lectures (Theory)	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical)	
7. Course administrator's name (mention all, if more than one name)	
Name: Sameer Hatem Abd- al-haleem **Email:** sameer.h.@alzahu.edu.iq	
8. Course Objectives	
Course Objectives	-1. Raising the level of students in the English language to the extent that they can use it as a language of scientific, research and academic communication. -2. Improving the level of students to deal with the translation of scientific texts in a correct manner. -3. Improving the level of students in rephrasing scientific texts -4. Enabling students to write reports and scientific research using the foundations and rules of writing in the English language
9. Teaching and Learning Strategies	
Strategy	1. Use PowerPoint lectures. 2. Method of debate and discussion. 3. Using smart screens and whiteboards to display scientific material. 4. Brainstorming 5. Oral discussions

10.Course Structure					
Week	**Hours**	**Required learning outputs**	**Subject Title**	**Teaching Method**	**Assessment Method**
First Semester					
1			Prefix and Suffix	Power Point Slides	Daily, semester, mid-year and final exams
2			Small Talk	Power Point Slides	Daily, semester, mid-year and final exams
3			Common Mistake	Power Point Slides	Daily, semester, mid-year and final exams
4			Passive Voice	Power Point Slides	Daily, semester, mid-year and final exams
5			Direct and indirect speech	Power Point Slides	Daily, semester, mid-year and final exams
6			Synonyms in English	Power Point Slides	Daily, semester, mid-year and final exams
7			Adjectives	Power Point Slides	Daily, semester, mid-year and final exams
8			Integrating a quotation into an essay	Power Point Slides	Daily, semester, mid-year and final exams
9			Prepositions in English Grammar with Examples	Power Point Slides	Daily, semester, mid-year and final exams
10			Idioms and Phrase	Power Point Slides	Daily, semester, mid-year and final exams
11			Writing Assignment	Power Point Slides	Daily, semester, mid-year and final exams
12			Transition Words	Power Point Slides	Daily, semester, mid-year and final exams
13			Synonyms and Antonyms	Power Point Slides	Daily, semester, mid-year and final exams
14			Paraphrasing	Power Point Slides	Daily, semester, mid-year and final exams
15			Essay writing skills	Power Point Slides	Daily, semester, mid-year and final exams

11. Course Evaluation

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

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	https://www.teachingenglish.org.uk/publications/resource-books
Main references (sources)	https://www.teachingenglish.org.uk/publications/resource-books

Course Description Form

1. Course name:	
Humen rights	
2. Course code: DEN 11105	
3. Semester or year: Annual	
2025-2026	
4. Description preparation date:	
10/8/2025	
5. Available forms of attendance:	
Attendance in the classroom for the theoretical lecture and lab. Weekly	
6.Number of hours (total)	
Number of units (total): 30 hours / 60 academic units	
7.Name: Najwan abd-alameer abd **Email: najwan@alzahu.edu.iq**	
8. Course objectives	
Objectives of the study subject	▪ Enabling students to know the rights and civil and political wars and trying to keep them in touch with them because understanding them makes the student aware of his rights and the limits of his freedoms, in addition to his knowledge of the history of these rights. ▪ The student's knowledge of the concept of democracy, the foundations of building a democratic state, and the types of democratic organizations.
9. Learning strategies.	
The strategy	▪ Lectures using Power Point ▪ Scientific discussions ▪ Guiding students to some specialized websites ▪ Providing students with lectures from Arabic books and the prescribed curriculum.

Course Description Form

1. Course Name:
Arabic language
2. Course code: DEN 11102
3. Semester or year: 2025-2026
Annual
4. Date of preparation of the description:
20/7/2025
5. Available forms of attendance:
Lectures (Theory)
6. Number of hours (total) / Number of units (total):
30 hours
7.
Name: Haider Ali faleeh **E-mail: haedar313sh@gamil.com**
8. Course objectives

Subject objectives	▪ Emphasizing the importance of circulating the Arabic language safely and smoothly. ▪ Adjusting and mastering Arabic sentences. ▪ Resetting information for some aspects of the language, whether grammatical or literary.
Strategy	1. Delivering, describing and discussing the topic . 2. Feedback on the previous material. 3. Highlighting theoretical skills At students From the perspective of analysis and interpretation..

10. Course structure

Evaluation method	Learning method (theoretical)	Name of the unit or topic	Outputs Learning Required	The hour	The week
Oral test	Lecture/Discussion	Al-Mutanabbi (his life + poem and its analysis)	Literary topics	1	1
Oral test	Lecture/Discussion	Badr Shakir al-Sayyab (his life + poem and its analysis)		1	2
Oral test	Lecture/Discussion	Nazik Al-Malaika (Her Life + Poem and Its Analysis)		1	3

Oral test	Lecture/Discussion	Al-Jawahiri (his life + poem and its analysis)		1	4
Oral test	Lecture/Discussion	The Prophet's sermon in the Farewell Pilgrimage	Sermons	1	5
Oral test	Lecture/Discussion	Imam Ali's covenant to Malik al-Ashtar		1	6
Oral test	Lecture/Discussion	Nominal sentence	Grammar topics	1	7
Oral test	Lecture/Discussion	verbal sentence		1	8
Oral test	Lecture/Discussion	The beginner		1	9
Oral test	Lecture/Discussion	the news		1	10
Oral test	Lecture/Discussion	Copyists		1	11
Oral test	Lecture/Discussion	Original diacritical marks		1	12
Oral test	Lecture/Discussion	Subordinate diacritics		1	13
Written test		First month exam	Student Test Previous Topics	1	14
Oral test	Lecture/Discussion	Active participle + superlative form	Morphological topics	1	15
Oral test	Lecture/Discussion	participle		1	16
Oral test	Lecture/Discussion	Defective noun and its plural		1	17
Oral test	Lecture/Discussion	The defective noun and its plural		1	18
Oral test	Lecture/Discussion	Extended noun and its plural		1	19
Oral test	Lecture/Discussion	bare and augmented verb		1	20
Oral test	Lecture/Discussion	Masculine, feminine and signs of femininity		1	21
Oral test	Lecture/Discussion	Crushing plurals		1	22
Oral test	Lecture/Discussion	Diminutive		1	23
Oral test	Lecture/Discussion	Relatives		1	24

Written test	-	Second month exam	Student Test Previous Topics	1	25
		punctuation marks	Spelling topics	1	26
Oral test	Lecture/Discussion	Common mistakes and how to correct them		1	27
Oral test	Lecture/Discussion	Letters deleted and added		1	28
Oral test	Lecture/Discussion	Types of Alif + Ta + Dad and Dhad		1	29
Oral test	Lecture/Discussion	Hamza rules		1	30

11. Course Evaluation

Oral tests
Written tests

10. Learning and teaching resources

Ibn Aqil's explanation of Ibn Malik's Alfiyyah / Collection of Arabic Lessons	Textbooks(Sources)
	Electronic references,Websites

Course Description Form

1. Course Name:

General Histology

2. Course Code: DEN 11214

3. Semester / Year: 2025-2026

Annual

4. Description Preparation Date:

12/8/2025

5. Available Attendance Forms:

Lectures (Theory) + Labs (practical, weekly)

6. Number of Credit Hours (Total) / Number of Units (Total)

60 hours (Theoretical) + 60 hours (Practical). (Two theoretical hours and two practical hours week)

7. Course administrator's name (mention all, if more than one name)

Name: Sameer amorei Jassem
Email: samir1986amorry@gamil.com

8. Course Objectives

Course Objectives	• Preparing the student practically in terms of applying the acquired knowledge • Developing the student's ability to deal with multiple learning methods • Teaching students on the practical and theoretical applications of various general body tissues and all body members, and also to recognize the most important medical histological terms • Also enabling the student to possess all the sufficient medical knowledge in general histology

9. Teaching and Learning Strategies

Strategy	• The study of basic general tissues in all its details, which will provide the key to understanding the tissue sections of each organ of the human body and also enhance this study using a light microscope to give students all complete information about all the histological characteristics of the human body organs. • Giving lectures using the (power point) program with the most important educational videos. • Guide students to some websites for the purpose of benefitting from them.

10. Course structure (theory)

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
First Semester					
1	**2**	General Histology	Cells, Basic tissues	Power Point	Quiz
2	2	General Histology	Epithelia tissues	Power Point	Quiz
3	2	General Histology	Connective tissue	Power Point	Quiz
4	2	General Histology	Cells of the Connective Tissue	Power Point	Quiz
5	2	General Histology	Respiratory System A conducting portion	Power Point	Quiz
6	2	General Histology	Respiratory System A respiratory portion	Power Point	Quiz
7	2	General Histology	The Urinary System Renal Corpuscles & Blood Filtration	Power Point	Quiz
8	2	General Histology	The Urinary System Collecting Tubules & Ducts	Power Point	Quiz
9	2	General Histology	Integumentary System Skin	Power Point	Quiz
10	2	General Histology	Subcutaneous Tissue	Power Point	Quiz
11	2	General Histology	Bone Marrow Structures and functions	Power Point	Quiz
12	2	General Histology	Red Bone marrow	Power Point	Quiz
13	2	General Histology	The circulatory system	Power Point	Quiz
14	2	General Histology	Heart	Power Point	Quiz

15	2	General Histology	Blood Cells	Power Point	Quiz
Second Semester					
16	2	General Histology	Hematopoiesis	Power Point	Quiz
17	2	General Histology	The Immune System Lymph Nodes	Power Point	Quiz
18	2	General Histology	The Immune System Lymph Nodes	Power Point	Quiz
19	2	General Histology	Lymphoid Organs	Power Point	Quiz
20	2	General Histology	Nervous system\ Development of Nerve Tissue, Neurons	Power Point	Quiz
21	2	General Histology	Nervous system Microglia	Power Point	Quiz
22	2	General Histology	Endocrine system	Power Point	Quiz
23	2	General Histology	Glands	Power Point	Quiz
24	2	General Histology	Digestive systemGeneral Structure of the Digestive Tract	Power Point	Quiz
25	2	General Histology	Digestive system The Oral Cavity	Power Point	Quiz
26	2	General Histology	Male reproductive system	Power Point	Quiz
27	2	General Histology	Female reproductive system	Power Point	Quiz
28	2	General Histology	Special sense organs \ eyes	Power Point	Quiz
29	2	General Histology	Special sense organs \ ears	Power Point	Quiz

30	2		Final exam		

10. Course structure(practical)

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
First Semester					
1	**2**	General Histology	Slides of basic types of tissue	Power Point	Quiz
2	2	General Histology	Slides of types of Epithelial Tissue	Power Point	Quiz
3	2	General Histology	Slides of types of Blood cells in blood smears	Power Point	Quiz
4	2	General Histology	Slides of Larynx, Trachea	Power Point	Quiz
5	2	General Histology	Slides of Lungs including bronchi and bronchioles	Power Point	Quiz
6	2	General Histology	Slides of Kidney	Power Point	Quiz
7	2	General Histology	Slides of Ureter, urinary bladder	Power Point	Quiz
8	2	General Histology	Slides of Layers of epidermis , dermis	Power Point	Quiz
9	2	General Histology	Slides of skin glands, hair	Power Point	Quiz
10	2	General Histology	Slides bone marrow types	Power Point	Quiz
11	2	General Histology	Slides of blood cells development	Power Point	Quiz
12	2	General Histology	Slides of large artery (aorta), small artery	Power Point	Quiz

13	2	General Histology	Slides od medium sizes vein	Power Point	Quiz
14	2	General Histology	Slides of lymph nodes, palatine tonsils	Power Point	Quiz
15	2	General Histology	Slides thymus, spleen	Power Point	Quiz
Second Semester					
16	2	General Histology	Slides of nerves fibers, spinal cord	Power Point	Quiz
17	2	General Histology	Slides of ganglia, cerebrum, and cerebellum	Power Point	Quiz
18	2	General Histology	Slides of pituitary gland, thyroid gland	Power Point	Quiz
19	2	General Histology	Slides of parathyroid glands, adrenal gland	Power Point	Quiz
20	2	General Histology	Slides pineal gland, endocrine pancreas	Power Point	Quiz
21	2	General Histology	Slides of Lip, tongue, and salivary glands	Power Point	Quiz
22	2	General Histology	Slides of esophagus, stomach	Power Point	Quiz
23	2	General Histology	Slides of duodenum, ileum and colon	Power Point	Quiz
24	2	General Histology	Slides of appendix, Liver ,pancreas, and gallbladder	Power Point	Quiz
25	2	General Histology	Slides of testes, duct of the epididymis	Power Point	Quiz
26	2	General Histology	Slides of prostate gland, seminal vesicles, and uterus	Power Point	Quiz
27	2	General Histology	Slides of ovaries ,corpus luteum, and uterus	Power Point	Quiz
28	2	General Histology	Slides of placenta, vagina, and mammary glands	Power Point	Quiz

29	2	General Histology	Slides of vertical section of cornea , retina	Power Point	Quiz
30	2	General Histology	Slides of vertical section of section of internal ear	Power Point	Quiz

11. Course Evaluation
• 15 Marks: Mid-year exam • 25 Marks along the year: divided as: 12.5 First course: 7.5 Theoretical including two exams, homework, reports, quizzes + 5 marks in practical part including quizzes, reports, Homework 12.5 Second course: 7.5 Theoretical including two exams, homework, reports, quizzes + 5 marks in practical part including quizzes, reports, homework • 20 Marks: Practical Final exam • 40 Marks: Theoretical Final Exam

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	-Junqueira's Basic Histology: TEXT and ATLAS -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
Electronic References, Websites	College website

Course Description Form

1. Course Name:	
Biochemistry	
2. Course Code: DEN 11213	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
30-7-2025	
5. Available Attendance Forms:	
Weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
60 hours (Theoretical) + 60 hours (Practical). (Two theoretical hours and two practical hours week)	
7. Course administrator's name (mention all, if more than one name)	
Name: Zaid Noor Obeid Mohammad Email: zaid.noor@alzahu.edu.iq	
8. Course Objectives	
Course Objectives	• Enabling students to acquire knowledge of how to use and deal with biochemistry, in addition to introducing students to vital compounds that have importance in the human body. • Enabling students how to detect some of the vital compounds in the human body. Training students on how to collect blood sample and determine biomarker concentration, and conduct various chemical tests.
9. Teaching and Learning Strategies	
Strategy	1- Use PowerPoint lectures. 2- Method of debate and discussion. 3- Using smart screens and whiteboards to display scientific material. 4- Education in laboratories to acquire scientific skills. 5- Reports and projects. 6- Student groups and Workshops. 7-Scientific trips. Oral discussions.
10. Course structure	

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	2	Enzymes: Definition, Terminology, and Classification		Power Point	Quiz
2	2	Mechanism of enzyme action		Power Point	Quiz
3	2	Clinical significance of enzyme assays		Power Point	Quiz
4	2	Vitamins, definition, classification		Power Point	Quiz
5	2	Digestion and absorption of carbohydrates, lipids ,and proteins		Power Point	Quiz
6	2	Chemistry of carbohydrates		Power Point	Quiz
7	2	Metabolism of Carbohydrates: part 1		Power Point	Quiz
8	2	Metabolism of Carbohydrates: part 2		Power Point	Quiz
9	2	Carbohydrates metabolism regulation		Power Point	Quiz
10	2	Chemistry of Proteins and amino acids		Power Point	Quiz
11	2	Metabolism of Proteins and amino acids		Power Point	Quiz
12	2	Metabolism of Protein and amino acid regulation		Power Point	Quiz
13	2	Metabolism of Protein and amino acid inherited disorder		Power Point	Quiz
14	2	Exam		Power Point	Quiz
15	2	Lipid :definition, classification		Power Point	Quiz
16	2	Metabolism of Lipid: oxidation of Fatty Acids		Power Point	Quiz
17	2	Biosynthesis of Fatty Acids		Power Point	Quiz
18	2	Integration of metabolism of carbohydrates, lipid ,and Proteins		Power Point	Quiz
19	2	Metabolism of Purines and pyrimidines		Power Point	Quiz
20	2	Metabolism of Purines and pyrimidines disorder		Power Point	Quiz
21	2	Nucleic Acids Definition and Protein synthesis		Power Point	Quiz
22	2	Hormone definition, classification		Power	Quiz

				Point	
23	**2**	Hormone disorder		Power Point	Quiz
24	**2**	Acid-base balance		Power Point	Quiz
25	**2**	Trace elements disorder		Power Point	Quiz
26	**2**	Salivary secretion(saliva), Pancreatic juice		Power Point	Quiz
27	**2**	Electrolytes		Power Point	Quiz
28	**2**	Liver Function Test		Power Point	Quiz
29	**2**	Kidney Function Test		Power Point	Quiz
30	**2**	Exam		Power Point	Quiz

11. Course Evaluation

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

- Midyear written exam: 15 marks
- Annual pursuit: 25 marks
- Final clinical exam: 20 marks

Final written exam; 40 marks

12. Learning and Teaching Resources

Main references (sources)	Lippincott Leninger
Recommended books and references (scientific journals, reports...)	Recent researches from the internet Marten crock

10. Course structure / Practical

Week	**Hours**	**Subject name**	**Required learning outputs**	**Learning method**	**Assessment method**
1	**2**	Lab.Safety		Power Point	Quiz
2	**2**	Sample collection-1		Power Point	Quiz
3	**2**	Sample collection-2		Power Point	Quiz
4	**2**	spectrophotometer		Power Point	Quiz

5	**2**	Blood glucose & HbA1c		Power Point	Quiz
6	**2**	Total protein		Power Point	Quiz
7	**2**	Albumin + globulin		Power Point	Quiz
8	**2**	Troponin		Power Point	Quiz
9	**2**	Liver function test (bilirubin)		Power Point	Quiz
10	**2**	Alkaline phosphatase		Power Point	Quiz
11	**2**	Transaminase (ALT&AST)		Power Point	Quiz
12	**2**	Lipid in blood (cholesterol &lipoprotein)		Power Point	Quiz
13	**2**	Triglyceride		Power Point	Quiz
14	**2**	Kidney function test(urea)		Power Point	Quiz
15	**2**	Exam		Power Point	Quiz
Second semester					
16	**2**	S.creatinine and creatinine clearance		Power Point	Quiz
17	**2**	General urine analysis -1		Power Point	Quiz
18	**2**	General urine analysis -2		Power Point	Quiz
19	**2**	Uric acid		Power Point	Quiz
20	**2**	Amylase in serum and saliva		Power Point	Quiz
21	**2**	Creatine phosphokinase		Power Point	Quiz
22	**2**	Lactate dehydrogenase		Power Point	Quiz
23	**2**	Serum calcium		Power Point	Quiz
24	**2**	Serum phosphorus		Power Point	Quiz
25	**2**	Serum Na		Power Point	Quiz
26	**2**	Serum K		Power Point	Quiz
27	**2**	Serum Iron		Power Point	Quiz
28	**2**	Vitamin D		Power Point	Quiz

29	**2**	Vitamin C		Power Point	Quiz
30	**2**	Exam		Power Point	Quiz

11. Course Evaluation

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

- Midyear written exam: 15 marks
- Annual pursuit: 25 marks
- Final clinical exam: 20 marks

Final written exam; 40 marks

12. Learning and Teaching Resources

Main references (sources)	Crook, M. (2013). Clinical biochemistry and metabolic medicine. CRC press Marshall, W. J., Lapsley, M., Day, A., & Shipman, K. (2020). Clinical chemistry. Elsevier Health Sciences
Recommended books and references (scientific journals, reports...)	http://www.ncbi.nlm.nih.gov/books/bv

Course Description Form

1. Course Name:	
Medical Physiology	
2. Course Code: DEN 11215	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
10/8/2025	
5. Available Attendance Forms:	
Lectures (Theory) + Labs (Practical, Weekly)	
6. Number of Credit Hours (Total) / Number of Units (Total)	
2 hours weekly theory and 2 hours weekly practical for 30 weeks Total 120 hours – 4 units	
7. Course administrator's name (mention all, if more than one name)	
Name: Ahmed Abdullah ajrash	Email: ahmed.ajrash@gamil.com
8. Course Objectives	
Course Objectives	1- Study the functions of body structures and its secretions 2- Learn the mechanisms used by the body to do different functions 3- Learn that the physiology is the science of physics and chemistry of living materials and use the practical methods to approve that 4- Learn about the infections and diseases that infect the body organs and how to control that **5-** Learn about the body defense.
9. Teaching and Learning Strategies	
Strategy	1. Use PowerPoint lectures. 2. Method of debate and discussion. 3. Using smart screens and whiteboards to display scientific material. 4. Education in laboratories to acquire scientific skills. 5. Reports and projects and oral discussions.

10. Course Structure (Theory)					
Week	**Hours**	**Subject Title**	**Required learning outputs**	**Teaching Method**	**Assessment Method**
First Semester					
1	2 Hrs. Theory	Introduction	Function organization of the human body, Cell physiology, Cell membrane, Cell components, Cell Junction	Power Point	Quiz
2	2 Hrs. Theory	Body fluid	Type of body fluids, Intracellular and extracellular, Daily intake of water, Daily loss of body water, Constituents of extracellular and intracellular fluids, Major factors contributing to the movement of fluid, Specialized Fluids of the Body) Edema (Types of Edemas, causes of edema, Measurement of body fluid volume, Dehydration, Types of dehydration, Classification, Causes, Signs and Symptoms of Dehydration	Power Point	Quiz
3	2 Hrs. Theory	Homeostasis and Transport across the cell membrane	Positive and negative feedback system, Diffusion (passive), Carrier-mediated transport (passive or active), Vesicular transport	Power Point	Quiz
4	2 Hrs. Theory	BLOOD	Composition of blood , Hematocrit, Plasma , Functions of blood), Red blood cells (Genesis of R.B.C, polycythemia, Anemia, Destruction of R.B.C.s	Power Point	Quiz
5	2 Hrs. Theory	White Blood Cells	Types of W.B.C. , Genesis of the leukocytes, Life span of the W.B.C, Phagocytosis,	Power Point	Quiz

			Inflammation, Leukemia's, Leukopenia		
6	2Hrs. Theory	Hemoglobin	Formation of Hemoglobin , Iron Metabolism , Hb Compounds , Destruction of Hb , The common causes of jaundice	Power Point	Quiz
7	2 Hrs. Theory	Blood groups	Agglutination, Agglutinins, The Rh Group, Formation of Anti-Rh, agglutinins, Erythrobastosis Fetalis , Effect of the Mother's Antibodies on the Fetus, Transfusion Reactions resulting from mismatched Blood Types , Nature of Antibodies	Power Point	Quiz
8	2 Hrs. Theory	Hemostasis and blood coagulation	Vascular Spasm , Formation of a Platelet Plug , Mechanism of the Platelet Plug , Mechanism of Blood Coagulation , Prevention of Clotting in the Normal Vascular System , Prevention of Blood Coagulation outside the Body , Blood Disease	Power Point	Quiz
9	2 Hrs. Theory	Digestive system	The Functions of the digestive, Structural layers of digestive, Stomach, Secretions of the Stomach , Regulation of Stomach Secretion , Mixing of Stomach Contents, Stomach Emptying	Power Point	Quiz
10	2 Hrs. Theory	Digestive system	small intestine , Secretions of the Small Intestine, Movement in the Small Intestine, Liver, Functions of the Liver, Pancreatic Secretions, Regulation of Pancreatic Secretion, Large Intestine,	Power Point	Quiz

			Movment in the Large Intestine Digestion, Absorption, and Transport		
11	2 Hrs. Theory	ORAL CAVITY and Salivary Glands	Functions of Mouth, Salivary Glands (Structure, Development, Major glands, Minor glands, Clinical correlations, Regulation of Salivary Secretion, Factors Influencing Salivary Flow and Composition) (Mastication, Deglutition, Bolus Formation for Swallowing, Digestion), (speech: Definition, Mechanism, Nervous Control, Applied Physiology	Power Point	Quiz
12	2 Hrs. Theory	Salivary functions and Regulation of Salivary Secretion	Composition of Saliva, Saliva Components, Properties of Saliva, Functions of Saliva, Effect of Drugs and Chemicals on Salivary Secretion, Maintenance of Tooth Integrity, The Diagnostic Applications of Saliva and forensic uses of saliva.	Power Point	Quiz
13	2 Hrs. Theory	Cardiovascular system	Blood vessels Heart: Layers, Valves, Actions of heart, Blood Vessels, Division of circulation, Properties of Cardiac Muscle, Action Potential and Ionic Basis, Conductive system of Human Heart	Power Point	Quiz
14	2 Hrs. Theory	Cardiovascular system	Blood pressure (Cardiac Cycle, Heart Sounds, Cardiac Output, Heart Rate and Regulation, Arterial Blood Pressure and Regulation of ABP Venous Pressure and Capillary Pressure, Arterial Pulse and	Power Point	Quiz

			Venous Pulse, Regional Circulation, Electrocardiogram, Hemorrhage, Circulatory Shock and Heart Failure, Cardiovascular Adjustments during Exercise		
15	Exam				
Second Semester					
1	1 Hrs. Theory	Respiratory system	Types of Respiration, Stages of Respiration, Respiratory tract, Non respiratory functions of respiratory tract, Mechanics of Pulmonary Ventilation, Types of Respiratory pressures, Factors causing and preventing collapsing tendency of lungs	Power Point	Quiz
2	1 Hrs. Theory	Respiratory system: Lung volumes and capacities	Compliance, Variation in Compliance, The resistance and the work of breathing, Dead space, Lung volume and Lung capacity, Ventilation, Respiratory Protective Reflexes , Pulmonary function tests, Regulation of Respiration, The relationship between oral health and respiratory disease	Power Point	Quiz
3	2 Hrs. Theory	SPECIAL SENSATION	Vision, Hearing, taste & smell (Structure of Eye, Visual Process and Field of Vision, Visual Pathway Pupillary Reflexes, Color Vision, and Errors of Refraction. Structure of Ear and Auditory Pathway ,Mechanism of Hearing and Auditory Defects, Sensation of Taste and Smell	Power Point	Quiz
4	2 Hrs. Theory	Temperature of the Body	Normal body Temperatures, Physiological Variations of	Power Point	Quiz

			body temperature, Heat Balance, Heat gain or heat production in the body, Heat loss from the body, Insulator System of the Body, Blood flow to the skin from the body core provides heat transfer, Regulation of body temperature, Mechanisms to decrease or increase body temperature, Sympathetic "Chemical" Excitation of heat production		
5	2 Hrs. Theory	Urinary system	Parts of Renal system, The Kidney, Functions of kidneys, Components of kidney, Parenchyma of kidney, Nephron and Juxtaglomerular Apparatus, Renal corpuscle, Structure of renal corpuscle, Tubular portion of nephron, Collecting duct	Power Point	Quiz
6	2 Hrs. Theory	Urinary system	Urine formation (Mechanism of urine formation, Glomerular Filtration, Pressure determining filtration, Tubular Reabsorption, Tubular secretion, Micturition, Nerve supply to urinary bladder and sphincters, Renal Function Tests, Relation between renal disease & oral health)	Power Point	Quiz
7	2 Hrs. Theory	Endocrine System	Introduction, Endocrine glands, Hormones, Nature of Hormones, Classification of hormones, Hormone Secretors, Hormonal action Hormone receptors, Synthesis and storage of hormones, Mechanism of hormonal function, Measurement of	Power Point	Quiz

			Hormone Concentrations in the Blood		
8	2 Hrs. Theory	Major Endocrine Glands	Oral manifestations of endocrine dysfunction, Control Systems Involving Hypothalamus and Pituitary glands, The pituitary gland, Thyroid gland, Pancreas gland, Adrenal glands	Power Point	Quiz
9	2 Hrs. Theory	Muscular system	Muscle structure (Types, Structure, Microscopic Structure, Muscle Physiology, Properties, Contraction and contractile elements, Tone, Electrical and Molecular Changes during Muscular Contraction)	Power Point	Quiz
10	2 Hrs. Theory	Muscular system	Tone, contraction (Molecular Changes During Muscular Contraction, Neuromuscular Junction- Neuromuscular Transmission and Blockers, Nutrition and Metabolism (Energy Requirements))	Power Point	Quiz
11	2 Hrs. Theory	Nervous System	Nerve impulse, synapses Nervous System Division, Cranial nerves , Neuron and Neuroglia, Receptors, Nerve impulse, Synapse and Neurotransmitters	Power Point	Quiz
12	2 Hrs. Theory	Nervous System	(Reflex Activity, Somatosensory System and Somatomotor System, Physiology of Pain)	Power Point	Quiz
13	2 Hrs. Theory	Reproductive system	Aging & reproductive system (Male Reproductive System Female Reproductive System, Meiosis, Aging and Reproductive system.	Power Point	Quiz

14	2 Hrs. Theory	Aviation and Deep physiology	Body Response in high altitudes, physiological Changes in the Sea deep. Nutrition and metabolism (daily energy requirement, obesity and fitness)	Power Point	Quiz
15		Exam			

10. Course Structure (Practical)					
Week	**Hours**	**Subject title**	**Required learning outputs**	**Teaching Method**	**Assessment Method**
First Semester					
1	2 Hrs. Practical	microscope	Microscope work		Quiz
2	2 Hrs. Practical	Collection of Blood Samples	How to draw a blood sample		Quiz
3	2 Hrs. Practical	Blood Smears	Viewing the components of the blood under the mask by staining		Quiz
4	2 Hrs. Practical	Functions of saliva & taste sensation	Explanation of the functions of saliva		Quiz
5	2 Hrs. Practical	Stimulation and collection of salivary secretion	Stimulation of saliva by stimulants		Quiz
6	2 Hrs. Practical	Separation of blood samples	Separation of blood components using Centrifuge		Quiz
7	2 Hrs. Practical	Differential WBCs	Differentiate between types of white blood cells		Quiz
8	2 Hrs. Practical	Total Count of WBSc	Calculating the number of white blood cells using a slide for counting blood cells		Quiz

9	2 Hrs. Practical	Total Count of RBSc	Calculating the number of red blood cells using a slide for counting blood cells		Quiz
10	2 Hrs. Practical	Blood groups	Knowing the different types of blood types among individuals		Quiz
11	2 Hrs. Practical	Estimation of hemoglobin	Definition of hemoglobin and testing for hemoglobin levels		Quiz
12	2 Hrs. Practical	Bleeding and cotting time	Define bleeding time and understand its clinical relevance, Recognize the normal range for bleeding time and interpret abnormal values.		Quiz
13	2 Hrs. Practical	Self – monitoring of biood glucose test	Describe the purpose of glucose testing and its importance in diagnosing diabetes and monitoring blood sugar levels. 2. Identify the types of glucose tests available and their clinical uses. 3. Understand normal and abnormal glucose levels and interpret results.		Quiz
14	2 Hrs. Practical	Measurement of blood pressure &pulse rate	Understand the purpose of blood pressure measurement and its significance in cardiovascular health. ,Describe the procedure for accurately measuring blood pressure. ,Identify normal and abnormal blood pressure ranges and interpret readings.		Quiz
15	2 Hrs. Practical	Effect of exercise on blood pressure	Understand the purpose of measuring respiratory rate		Quiz

		and respiratory rate	and its importance in assessing respiratory and overall health. , Describe the correct technique for measuring respiratory rate. , Identify normal and abnormal respiratory rate ranges and interpret their clinical significance.		
Second Semester					
1	2 Hrs. Practical		Understand the purpose and importance of vision testing in assessing eye health and detecting vision impairments, Describe the basic types of vision tests and their uses, Recognize normal and abnormal vision test results and understand their implications.		Quiz
2	2 Hrs. Practical	Physiology of vision test	Understand the purpose of hearing tests in assessing auditory health and detecting hearing impairments, Recognize normal and abnormal hearing test results and understand their clinical implications.		Quiz
3	2 Hrs. Practical	Physiology of hearing test	Understand the purpose of smell sensation testing in evaluating olfactory nerve function,Describe the basic procedure for assessing smell sensation,Recognize normal and abnormal findings and understand their clinical significance.		Quiz

4	2 Hrs. Practical	Physiology of smell sensation	Recognize normal and abnormal temperature ranges and interpret their clinical significance, Understand the purpose of measuring body temperature in assessing health and identifying fever or hypothermia.		Quiz
5	2 Hrs. Practical	Measurement of body temperature	Understand the purpose of thyroid function tests (TFTs) in assessing thyroid health and diagnosing thyroid disorders,Identify the main types of thyroid function tests and their specific uses.		Quiz
6	2 Hrs. Practical	Thyroid function (body mass index)	Identify the main types of thyroid function tests and their specific uses.		Quiz
7	2 Hrs. Practical	Thyroid function (body mass index)	Identify when to perform resuscitation or artificial respiration based on clinical signs.		Quiz
8	2 Hrs. Practical	Resuscitation &Artificial respiration	Understand the principles and methods of resuscitation and artificial respiration in emergency situations,Describe the key techniques used in CPR (Cardiopulmonary Resuscitation) and artificial respiration.		Quiz
9	2 Hrs. Practical	Resuscitation &Artificial respiration	Understand the role of skeletal muscle testing in determining muscle function and detecting neuromuscular diseases.		Quiz
10	2 Hrs. Practical	Physiology of Skeletal muscles	Explain standard techniques for assessing skeletal muscle strength and function.		Quiz

11	2 Hrs. Practical	Physiology of Skeletal muscles	Recognize normal and abnormal results, including their clinical consequences.		Quiz
12	2 Hrs. Practical	Physiology of Skeletal muscles	Understand the purpose of reflex testing in assessing the integrity of the nervous system, Describe the procedures for examining deep tendon and superficial reflexes,Recognize normal and abnormal reflex responses and their clinical significance		Quiz
13	2 Hrs. Practical	Examination of reflexes (motor function)			Quiz
14	2 Hrs. Practical	Seminars and examinations			Quiz
15		Seminars and examinations	Understand the purpose and importance of vision testing in assessing eye health and detecting vision impairments, Describe the basic types of vision tests and their uses, Recognize normal and abnormal vision test results and understand their implications.		2
			Understand the purpose of hearing tests in assessing auditory health and detecting hearing impairments, Recognize normal and abnormal hearing test results and understand their clinical implications.		
11. Course Evaluation					

- 40 Marks along the year: divided as :

12.5 First course: 7.5 Theoretical including two exams, homework, reports, quizzes + 5 marks in practical part including quizzes, reports, Homework

12.5 Second course: 7.5 Theoretical including two exams, homework, reports, quizzes + 5 marks in practical part including quizzes, reports, homework

- 20 Marks: Practical Final exam
- 40 Marks: Theoretical Final Exam

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	A.C. Guyton & J.E. Hall (2006). Textbook of Medical Physiology (11 th ed). Elsevier Inc. ISBN 0-7216-0240-1
Main references (sources)	1- G.T. Tortora & B. Derrickson (2009). Principles of Anatomy and Physiology (12th ed). John Wiley & Sons, Inc. ISBN 978-0-470-08471-7. ❖ 2- K. Rogers (2011). Blood Physiology and Circulation (1st ed). Rosen educational services. ❖ 3- S. Roberts (2007). Human Physiology. Global Media. ❖ 4- Rodney A. Rhoades & George A. Tanner. Physiology
Recommended books and references (scientific journals, reports...)	Elsevier, Nature
Electronic References, Websites	NCBI, PubMed

1. Course name	
crimes of the Baath regime in Iraq	
2. Course code DEN 11218	
3. Season 2025-2026	
Annual	
4. Date of preparation of this description **10/8/2025**	
5. Available attendance forms	
My attendance is mandatory	
6. Total number of study hours / total number of units	
One hour per week for each section ,at a rate of (30)study hour per section annually.	
name of the decide administrator (if more than one name is mentioned) .7	
Name: Najwan abd-alameer abd **Email: najwan@alzahu.edu.iq**	
8. course objectives	
Subject objectives	**1 Introducing students to the most important crimes of the Baath party in Iraq.** **2 Highlighting serious human rights violations** **3 A detailed explanation of the definition of violations under the previous regime** **Statement of the facts of this unjust regime from the generations that are going through the stages of its rule**
9. teaching and learning strategies	
Strat	▪ **Study of the most important crimes committed by the Baath regime** ▪ **Revealing the nature of the crimes committed by the Baath regime**

e g y	▪ **An explanation of the most important of these crimes and their serious consequences that have affected all sectors without exception.**

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
First Semester					
1			Introduction crimes of the Baath regime	Power Point	quizzes
2			Concept of crimes	Power Point	quizzes
3			Crime Sections	Power Point	quizzes
4			We know crimes in language and terminology	Power Point	quizzes
5			Baath regime crimes according to the International Criminal Court	Power Point	quizzes
6			Types of international crimes	Power Point	quizzes
7			Decisions issued by the Supreme Criminal Court	Power Point	quizzes
8			Introduction to psychological and social crimes, their effects and the most prominent violations	Power Point	quizzes
9			Psychological crimes	Power Point	quizzes
10			Mechanisms of psychological crimes	Power Point	quizzes
11			Psychological effects of crimes	Power Point	quizzes
12			Social crimes	Power Point	quizzes
13			Militarization of society	Power Point	quizzes
14			The Baath regime’s position on religion	Power Point	quizzes
15			Iraq law requirements	Power Point	quizzes

Second semester					
16			Images of human rights and crimes of power	Power Point	quizzes
17			Some political and military weapons in favor of the baath	Power Point	quizzes
18			Prison and detention places for the Baath	Power Point	quizzes
19			Adah in the small arrows	Power Point	quizzes
20			War pollution ,radiation and mine explosions	Power Point	quizzes
21			Examples of affected cities (basra and the gulf)	Power Point	quizzes
22			Cities and villages (transfer of scorched earth)	Power Point	quizzes
23			Evidence of the father of scorched earth	Power Point	quizzes
24			Drying up the marshes	Power Point	quizzes
25			Palm orchards razing ,trees and farms	Power Point	quizzes
26			Introduction to mass grave crimes	Power Point	quizzes
27			Definition of mass graves	Power Point	quizzes
28			Events of the genocide graves committed by the Baath regime	Power Point	quizzes
29			Event of 1963 and events between 1979-2003	Power Point	quizzes
30			Chronological classification of genocide graves	Power Point	quizzes

11. Course Evaluation

30 marks for annual endeavor 70 + marks for final exam

12. Learning and Teaching Resources

Required textbooks (curricular books, if any	Crimes of the Baath regime in Iraq / Prepared by a specialized committee in the Ministry of Higher Education and Scientific Research
Main references (sources)	• Political Prisoners Foundation Archive • Martyrs' Foundation Archive • Iraqi Center for Documenting Extremism Crimes Archive at the Holy Abbasid Shrin

	• Salim Matar / Iraqi Environmental Encyclopedia -5 Mesopotamian Civilization Raed Abis and Dr. Abbas Attia / UN Reports Condemning the Baath Regime for Human Rights Violations for the Period from 1991 AD -2003AD .... and other sources
Recommended books and references (scientific journals, reports...)	❖ Hassan Al-Khayyat Geography of Marshes and Swamps in Southern Iraq.
Electronic References, Websites	❖ Any sites that enhance the vocabulary of the article

Course Description Form

1. Course Name/ theoretical
Microbiology
2. Course Code: DEN11318
3. Semester / Year: 2025-2026
Annual
4. Description Preparation Date: **10/8/2025**
5. Available Attendance Forms:
Lectures (Theory) + Labs (Practical, Weekly)
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours (Theoretical) + 60 hours (Practical). (Two theoretical hours and th practical hours per week)
7. Course administrator's name (mention all, if more than one name)
Theoretical part: Name: Rand Sajed Khader E-mail: Rand.Sajid@alzahu.edu.iq
8. Course Objectives

Course Objectives	1. Enable students to learn about microbiology and its divisions, as it includes the study of bacteriology, immunology and viruses, in addition to studying parasites and fungi, especially those related to oral diseases. 2. Enable students to identify the different types of bacteria, positive and negative for gram stain, phenotypic characteristics, characteristics of each bacterial type, pathogenic factors, virulence, enzymes and various toxins that cause the development of the disease and study the ways of transmission of each bacterial type and how to control the spread of epidemic diseases. 3. Enable students to acquire the skills of diagnosing and differentiating various bacterial diseases using microscopy, microbial culture and serological tests aimed at bacterial diagnosis, as well as using various laboratory experiments

	to diagnose fungal infections, studying immunological and viral tests, and knowing the sensitivity of microbial isolates to the most important antibiotics for use in treatment. 4. Enabling students to understand the principles of immunology, which include identifying the sections of immunology and its components, immune cells and their development and their role in defending against various types of diseases, types of antibodies, immune factors present in the mouth and saliva, allergic reactions and their mechanisms, the most important autoimmune diseases, phagocytosis, and the role of the complement factor. 5. Enabling students to learn about the science of viruses, the characteristics of viruses, their types and divisions, and a detailed study of viral diseases related to the dental profession, such as hepatitis viruses, oral viruses, influenza virus, AIDS, their spread methods, forms, and their role in disease development and control, especially by using vaccines. **6.** Enable students to know the relationship between various microorganisms in human body, the importance of their natural existence and the factors that t them into pathogenicity.

9. Teaching and Learning Strategies

Strategy	1- Use PowerPoint lectures. 2- Method of debate and discussion. 3- Using smart screens and whiteboards to display scientific material. 4- Education in laboratories to acquire scientific skills. 5- Reports and projects. 6- Student groups and Workshops. 7- Scientific trips. 8- Oral discussions

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First Semester					
1	2 hrs. Theory 2 hrs Practical		Orientation to the Microbiology laboratory	Power Point	quizzes + Quarterly exam.
2	2 hrs. Theory 2 hrs Practical		The microscope	Power Point	quizzes + Quarterly exam,
3	2 hrs. Theory 2 hrs Practical		Sterilization and disinfection	Power Point	quizzes + Quarterly exam.
4	2 hrs. Theory 2 hrs Practical		Bacterial growth	Power Point	quizzes + Quarterly exam.
5	2 hrs. Theory 2 hrs Practical		Types of culture media	Power Point	quizzes + Quarterly exam.
6	2 hrs. Theory 2 hrs Practical		Sampling and transport of test material	Power Point	quizzes + Quarterly exam.

7	2 hrs. Theory 2 hrs Practical		Laboratory cultivation of microorganisms	Power Point	quizzes + Quarterly exam.
8	2 hrs. Theory 2 hrs Practical		Bacterial identification: 1-Macroscopical characteristics (colonial morphology and cultural characteristics).	Power Point	quizzes + Quarterly exam.
9	2 hrs. Theory 2 hrs Practical		2. Microscopical examination (morphology of bacterial cells).	Power Point	quizzes + Quarterly exam.
10	2 hrs. Theory 2 hrs Practical		Staining	Power Point	quizzes + Quarterly exam.
11	2 hrs. Theory 2 hrs Practical		Biochemical tests (part 1).	Power Point	quizzes + Quarterly exam.
12	2 hrs. Theory 2 hrs Practical		Biochemical tests (part 2).	Power Point	quizzes + Quarterly exam.
13	2 hrs. Theory 2 hrs Practical		Biochemical tests (part 3).	Power Point	quizzes + Quarterly exam.
14	2 hrs. Theory 2 hrs Practical		Antibiotic sensitivity test (part 1).	Power Point	quizzes + Quarterly exam.
15	2 hrs. Theory 2 hrs Practical		Antibiotic sensitivity test (part 2).	Power Point	quizzes + Quarterly exam.
Second semester					
16	2 hrs. Theory 2 hrs Practical		Serological tests (antigen and antibody detection tests) (part 1).	Power Point	quizzes + report, Quarterly exam.
17	2 hrs. Theory 2 hrs Practical		Serological tests (antigen and antibody detection tests) (part 2).	Power Point	quizzes + report, Quarterly exam
18	2 hrs. Theory 2 hrs Practical		Nucleic acid assays, Animal pathogenicity test	Power Point	quizzes +report Quarterly exam.
19	2 hrs. Theory 2 hrs Practical		Staphylococci	Power Point	quizzes +report Quarterly exam.
20	2 hrs. Theory 2 hrs Practical		Streptococci	Power Point	quizzes + report ,Quarterly exam.
21	2 hrs. Theory 2 hrs Practical		Corynebacterium	Power Point	quizzes +report , Quarterly exam.
22	2 hrs. Theory 2 hrs Practical		Spore-forming Grampositive bacilli:	Power Point	quizzes +report , Quarterly exam.
23	2 hrs. Theory 2 hrs Practical		Bacillus spp.	Power Point	quizzes +report, Quarterly exam

24	2 hrs. Theory 2 hrs Practical		Clostridium spp.	Power Point	quizzes + report, Quarterly exam.
25	2 hrs. Theory 2 hrs Practical		Mycobacterium spp.	Power Point	quizzes + report, Quarterly exam.
26	2 hrs. Theory 2 hrs Practical		Enterobacteriaceae (part1)	Power Point	quizzes +report Quarterly exam.
27	2 hrs. Theory 2 hrs Practical		Enterobacteriaceae (part2)	Power Point	quizzes +report Quarterly exam.
28	2 hrs. Theory 2 hrs Practical		Enterobacteriaceae (part3)	Power Point	quizzes + report , Quarterly exam.
29	2 hrs. Theory 2 hrs Practical		Neisseriae spp.	Power Point	quizzes + report, Quarterly exam.
30	2 hrs. Theory 2 hrs Practical		virology	Power Point	quizzes + report, Quarterly exam.

11. Course Evaluation

Annual pursuit: 7 % marks

- Final clinical exam: 20% marks

12. Learning and Teaching Resources

Required textbooks (curricular books, if any	Oral microbiology, William,A. Mosby,1982
Main references (sources)	❖ .Samaranayaka,L.,Kuby Immunology Eighth Edition ©2019 ❖ Punt,J.,Sanford,S.,Jones,P.,Owen,J.:Essential Microbiology for Dentistry 5th Edition (2018)
Recommended books and references (scientific journals, reports...)	❖Mdj Clinical Immunology A Virology
Electronic References, Websites	www.kcom.edu/faculty /chamberlian /courses .htm http://www.ncbi.nlm.nih.gov/books/bv Electronic library , wesby University international sites

Course Description Form

1. Course Name:	
Pharmacology	
2. Course Code: DEN11319	
3. Semester / Year:2025-2026	
Annual	
4. Description Preparation Date:	
10/8/2025	
5. Available Attendance Forms:	
Weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
60 hours (Theoretical) + 60 hours (Practical). (Two theoretical hours and two practical hours week)	
7. Course administrator's name (mention all, if more than one name)	
Name: Istabrek Saeed abbas Email: istabraq.alsultany@alzahu.edu.iq	
8. Course Objectives	
Course Objectives	To learn dental students about medications and their effect on human body systems
9. Teaching and Learning Strategies	
Strategy	The teaching strategy for the "pharmacology" course relies on a mix of interactive and technological methods. It aims to enhance students' academic and practical skills, enabling them to understand the fundamentals of medical biology and apply them in dental practices. These strategies include: 1. Active Learning 2. Blended Learning 3. Experiential Learning 4. Collaborative Learning 5. Continuous Assessment 6. Academic Guidance and Direct Interaction 7. Utilizing Modern Teaching Methods 8. Self-Assessment

10.Course structure

Hours	Subject name	Required learning outputs	Learning method	Assessment method
2	Pharmacology: General concepts	Pharmacokinetics Pharmacodynamics	Power Point	Quiz
2	Autonomic nervous system	Cholinergic agonist Cholinergic antagonist	Power point	Quiz
2	Adrenergic system	Adrenergic agonist Adrenergic antagonist	Power point	Quiz
2	Antihypertensive drugs	Beta blockers Diuretics	Power point	Quiz
2	Vasodilator Drugs	Nitrate Ca channel blocker ACE inhibitors	Power Point	Quiz
2	Management of angina and heart failure	Management of angina and heart failure	Power Point	Quiz
2	Anticoagulants, antiplatelet and anti-hyperlipidemic drugs	Anticoagulants Antiplatelet Anti-hyperlipidemic drugs	Power Point	Quiz
	Mid examination		Power Point	Quiz
2	Introduction the pharmacology of CNS drugs	Definition of CNS Sedative drugs Hypnotics drugs	Power Point	Quiz
2	CNS drugs	Antiseizures drugs Antipsychotic Antidepressant drugs	Power point	Quiz
2	Local and general anaesthetics	Local general anaesthetics	Power Point	Quiz
2	Drug of abuse and opioid analgesics	Opioid analgesics NSAID analgesic	Power Point	Quiz
2	steroidal anti-inflammatory drugs	Indications of steroids	Power Point	Quiz
2	Drugs acting on respiratory system	Respiratory diseases Respiratory drugs	Power Point	Quiz
2	Managements of diabetes mellitus	Types of DM Drugs of DM	Power Point	Quiz

2	Drugs affecting GIT	Anti-emetic Anti-diarrhea Anti acide	Power Point	Quiz
2	Orodental Prescription		Power Point	Quiz
2	Principles of antimicrobial therapy	Classifications of Antibiotics	Power Point	Quiz
2	Antibiotics	Cell wall inhibitors	Power Point	Quiz
2	Antibiotics	Protein synthesis inhibitors	Power Point	Quiz
2	Antibiotics	Quinolones, Folic acid antagonists	Power Point	Quiz
2	Antibiotics	Antimycobacterial	Power Point	Quiz
2	Antibiotics resistance	Mechanisms of resistance	Power Point	Quiz
2	Antifungal, antiviral and antiprotozoal drugs		Power Point	Quiz
2	Sex hormone and contraceptive	Sex hormone Contraceptive	Power Point	Quiz
2	Thyroid hormones and anti-thyroid drugs	Thyroid hormones Anti-thyroid drugs	Power Point	Quiz
2	Anticancer drugs	Classifications of chemotherapy	Power Point	Quiz
2	Dental Pharmacology	Drugs and chemicals used in dental clinic	Power point	Quiz
2	Anticaries	Drugs used in prevention of dental plaque	Power point	Quiz
2	Essential emergency drugs in dental clinic		Power Point	Quiz
Final exam				

Course Description Form

1. Course Name:
Conservative Dentistry (dental anatomy)
2. Course Code:
DEN 11104
3. Semester / Year: 2025-2026
Annual
4. Description Preparation Date:
15/8/2025
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours (Theoretical) + 60 hours (Practical). /60 units
7. Course administrator's name (mention all, if more than one name)
Name: l a m e e s h a m i d H a b e e b - A h m e e d j a b e r a b u b Email:hamidhabeeb79@gmail.com - ahmed.jaber@alzahu.edu.iq
8. Course Objectives

Course Objectives	Knowledge of the details about form,function &physiology of deciduous& permanent teeth , in addition to know the material and instruments used to carve the teeth. In the lab
9. Teaching and Learning Strategies	
Strategy	Using modern electronic means in addition to sources and references related to dental anatomy, including carving of different teeth, in addition to video clips and practical experiments to achieve a complete understanding of all details of deciduous &permanent teeth.

10. Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1+2	2theiory +4 practice	**Introduction &nomenclature**	Learning the nomenclature of dental anatomy	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).

3	1theory+ 2 practice	**Numbering systems**	Learning types of numbering systems.	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
4+5	2theory+ 4 practice	**Anatomical landmarks1&2**	Learning the details of landmarks in teeth	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
6	1theory+ 2 practice	**Permanent maxillary incisors**	Learning the details about form,function&morphology of the teeth.	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
7	1theory+ 2 practice	**Permanent mandibular incisors**	Learning the details about form,function&morphology of the teeth.	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
9+8	1theory+ 2 practice	**Permanent maxillary& mandibular canines**	Learning the details about form,function&morphology of the teeth.	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
10	2theory+ 2practic e	**Deciduous dentition**	Learning the details about form,function&morphology of the deciduous teeth .	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).

11	1theory+ 2 practice	**Anatomy of pulp cavity**	Learning the details of pulp tissue	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
12	1theory+ 2 practice	**Permanent maxillary premolars(1st premolars)**	Learning the details about form,function&morphology of the teeth	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
13	1theory+ 2 practice	**Permanent maxillary premolars(2nd premolars)**	Learning the details about form,function&morphology of the teeth	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
14	1theory+ 2 practice	**Permanent mandibular premolars(1st premolars)**	Learning the details about form,function&morphology of the teeth	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
15	2theory+ 4 practice	**Permanent mandibular premolars(2nd premolars)**	Learning the details about form,function&morphology of the teeth	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
16	1theory+2 practice	**Permanent maxillary molars(1st molars)**	Learning the details about form,function&morphology of the teeth	Power Point lec.+	Theoretical and practical

				clinical work	exams (weekly and monthly).
17	1theory+ 2 practice	**Permanent maxillary molars(2nd molars**	Learning the details about form,function&morphology of the teeth	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
18	1theory+ 2practice	**Permanent mandibular molars**	Learning the details about form,function&morphology of the teeth	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
19		**Tooth development &eruption**	Knowledge the information about formation ,eruption&occlusion of the teeth		
20	1theory+ 2 practice	**Comparative dental anatomy**	Compare the form,function &occlusion of human teeth with other animals	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).

11. Course evaluation	
Daily, quarterly, semi-annual and final theoretical exams + practical application (wax carving). in the college's lab.	
12.Text book and references	
Wheelers dental anatomy, physiology& occlusion	Refrencess
Scientific journals in the field of dentistry Internet sites ..... University of alzahrawi e-learning site	

Course Description Form

1. Course Name:	
Conservative Dentistry	
2. Course Code: **DEN11421**	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
15.8.2025	
5. Available Attendance Forms:	
Weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) + 60 hours (Practical). /60 units	
7. Course administrator's name (mention all, if more than one name)	
Name: o s a m a a b d - a l k a d h e m a l i Email: osamaalhelu6@gmail.com	
8. Course Objectives	
Course Objectives	It includes the theoretical and practical aspects of how to diagnose tooth decay and treat it with different dental fillings, while introducing the student to the characteristics of the materials used and mentioning the latest developments in the field of fillings and dental aesthetics.
9. Teaching and Learning Strategies	
Strategy	Using modern electronic means in addition to sources and references related to dental treatment sciences, fillings, and root fillings, in addition to video clips and practical experiments to achieve a complete understanding of the vocabulary and practical application on patients in private dental treatment clinics in accordance with international standards.

10. Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1+2	**2theiory +4 practical**	**Patient evaluation, diagnosis, and treatment planning**	**Learning the right way for diagnosis**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly

					and monthly).
3	**1theory+ 2 practice**	**Biologic Considerations of Enamel structure and its Clinical Significance in Practice of Operative Dentistry**	**Learning enamel tissue and properties**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
4+5	**2theory+ 4 practice**	**Biologic Considerations of Dentin and its Clinical Significance in Restorative dentistry**	**Learning dentin and comparison bet. Enamel and dentin**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
6	**1theory+ 2 practice**	**Caries , classification,dignosis**	**Learning the dental caries and its classifications, diagnosis with different methods**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
7	**1theory+ 2 practice**	**Caries management, and prevention**	**Learning how to manage dental caries**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
8	**1theory+ 2 practice**	**Pulpal irritants and inflammatory conditions of the pulp**	**Learning the possible irritant to the pulpal tissue**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
9+10	**2theory+ 4 practice**	**Restorative dentistry and pulpal health**	**Learning how to restore the different pulpal conditions**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).

11	**1theory+ 2 practice**	**Management of deep seated caries**	**Learning the management of deep caries with different strategies**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
12	**1theory+ 2 practice**	**Direct tooth-colored restoration for posterior teeth**	**Learning the composite properties and its placements**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
13	**1theory+ 2 practice**	**Non-carious lesion**	**Learning the etiology of non carious lesions, and managments**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
14	**1theory+ 2 practice**	**Dental laser**	**Learning the laser properties**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
15+16	**2theory+ 4 practice**	**Application of dental laser in conservative dentistry**	**Learning laser application in dentistry**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
17+18	**2theory+ 4 practice**	**Indirect tooth-colored restoration**	**Learning the advantages of indirect restorations**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).

19	**1theory+ 2 practice**	**Techniques of posterior composite inlay and onlay**	**Learning the different techniques for fabrication of indirect composite resto.**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
20+21	**2theory+ 4 practice**	**Ceramic veneers, inlay and onlays, clinical procedures**	**Learning the properties of ceramic resto, method of tooth prep.**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
22	**1theory+ 2 practice**	**Fluoride releasing materials**	**Learning the advantages and comparison of different fluoride releasing materiales**	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).

Endodontic					
Week	**Hours**	**Subject name**	**Required learning outputs**	**Learning method**	**Assessment method**
23	**1 theoretical 2 practical**	**Objective of endodontic treatment**	Know terminology and principle of endodontics	Power Point lec.+ clinical work	Quiz & practical evaluation
24	**1 theoretical 2 practical**	**Basic Phases of Treatment**	Know the steps of endodontic treatment and the interference between them	Power Point lec.+ clinical work	Quiz & practical evaluation
25	**1 theoretical 2 practical**	**Pulp pathologies**	Know the different health and pathological statuses of the pulp and their effect on treatment	Power Point lec.+ clinical work	Quiz & practical evaluation
26	**1 theoretical 2 practical**	**Classification of periapical diseases**	Know the different types of periapical pathology, their causes, symptoms and treatment	Power Point lec.+ clinical work	Quiz & practical evaluation

27	**1 theoretical 2 practical**	**Access Opening Preparation**	Know how to prepare ideal access cavity for different types of teeth and its effect on other phases and treatment outcome	Power Point lec.+ clinical work	Quiz & practical evaluation
28	**1 theoretical 2 practical**	**Endodontic Instruments**	Know different diagnostic, shaping and obturation instruments	Power Point lec.+ clinical work	Quiz & practical evaluation
29	**1 theoretical 2 practical**	**Roentgenography in Endodontics**	Know the role of X-ray in different phases of endodontic treatment	Power Point lec.+ clinical work	Quiz & practical evaluation
30	**1 theoretical 2 practical**	**Root canal preparation**	Know the principles and different strategies of shaping the root canals and preparing them for obturation	Power Point lec.+ clinical work	Quiz & practical evaluation

11. Course evaluation

Daily, quarterly, semi-annual and final theoretical exams + practical application on patients and extracted teeth in the college's educational clinics

12. Text book and references

Textbook of Operative Dentistry 4th.edition **Fundamentals of Operative Dentistry: A Contemporary Approach/ 3rd edition** **Dental Composite Materials for Direct Restorations** **Cohen's pathways of the pulp, eleventh edition** **Ingle's endodontics 7**	
Scientific journals in the field of dentistry Internet sites ..... University of alzahrawi e-learning site	

Course Description Form

1. Course Name:
Conservative Dentistry
2. Course Code:
DEN 11321
3. Semester / Year: 2025-2026
Annual
4. Description Preparation Date:
15/8/2025
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours (Theoretical) + 60 hours (Practical). /60 units
7. Course administrator's name (mention all, if more than one name)
Name: w a s a n a b d - a l k a d h u m h a s a n Email: was an.abd@alzahu.edu.iq Name: sundus mohammad ali Email: sundus.mohammad@alzahu.edu.iq

8. **Course Objectives**	
Course Objectives	It includes the theoretical and practical side of how to deal with different types and places of tooth decay by training on the work of different models and shapes to prepare teeth made of acrylic material and how to apply insulating materials and various fillings.
9. **Teaching and Learning Strategies**	
Strategy	The use of modern electronic means in addition to sources and references for dental treatment sciences and fillings, in addition to videos and practical experiments to achieve a full understanding of vocabulary and practical application on Phantom Lab dolls (treatment laboratory).

10.Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1+2	2 theory+ 2 practical	Definition of operative dentistry	Knowledge of dental terms for dental fillings	Power Point lec. + laboratory work	Theoretical and practical exams (weekly and monthly).

3	1theory+ 2 practice	Dental instruments (hand and rotary)	Knowledge of manual and mechanical dental tools required to make fillings	Power Point lec. + labora Power Point lec. + laboratory work tory work	Theoretical and practical exams (weekly and monthly).
4+5	2theory+ 4 practice	Amalgam cavity preparation for Class I	Gain knowledge about making amalgam filling for teeth for grade (1) background	Power Point lec. + laboratory work	Theoretical and practical exams (weekly and monthly).
6	1theory+ 2 practice	Continuation for Amalgam cavity preparation for Class I	Gain knowledge about making amalgam filling for teeth for grade (1) background	Power Point lec. + laboratory work	Theoretical and practical exams (weekly and monthly).
7	1theory+ 2 practice	Amalgam cavity preparation for Class II	Gain knowledge about making amalgam filling for teeth for grade (2) background	Power Point lec. + laboratory work	Theoretical and practical exams (weekly and monthly).
8	1theory+ 2 practice	Continuation for Amalgam cavity preparation for Class II (MOD)	Gain knowledge about making amalgam filling for teeth for grade (2) background	Power Point lec. + laboratory work	Theoretical and practical exams (weekly and monthly).
9+10	2theory+ 4 practice	Amalgam cavity preparation for class V	Gain knowledge about making amalgam filling for teeth for a grade (5) background.	Power Point lec. + laboratory work	Theoretical and practical exams (weekly and monthly).
11	1theory+ 2 practice	Cavity liners & dental bases (part 1+part 2)	Knowledge the properties and components of insulating materials used under filling and how to manipulate them.	Power Point lec. + laboratory work	Theoretical and practical exams (weekly and monthly).
12	1theory+ 2 practice	Dental amalgam alloys(materials)	Knowledge the properties & component of dental amalgam &how to manipulate them.	Power Point lec. + laboratory work	Theoretical and practical exams (weekly and monthly).

13	1theory+ 2 practice	Complex amalgam restoration	How to make complex cavity preparation for amalgam filling in compares with simple type.	Power Point lec. + laboratory work	Theoretical and practical exams (weekly and monthly).
14	1theory+ 2 practice	Failures in amalgam restorations	Knowledge the causes of amalgam filling failure & the routes of preventions and treatments.	Power Point lec. + laboratory work	Theoretical and practical exams (weekly and monthly).
15	2theory+ 4 practice	Tooth colored restorations (dental composite)	Knowledge the dental properties, types and manipulation of each type of dental composite fillings.	Power Point lec. + laboratory work	Theoretical and practical exams (weekly and monthly).
17+16	2theory+ 4 practice	Cavity preparation for anterior teeth	Steps & tricks for making the filling of anterior teeth.	Power Point lec. + laboratory work	Theoretical and practical exams (weekly and monthly).
18	1 Theoretical + 2 Practical (Phantom Lab)	Sterilization of operative instruments	Teaching students what sterilization is, knowing its types, and how to properly sterilize various tools used in fillings.	PowerPoint	Quiz Theoretical and practical exams (weekly and monthly).
19	1 Theoretical + 2 Practical (Phantom Lab)	Sterilization of operative instruments	Teaching students what sterilization is, knowing its types, and how to properly sterilize various tools used in fillings.	PowerPoint	Theoretical and practical exams (weekly and monthly).
20	1 Theoretical + 2 Practical (Phantom Lab)	Amalgam cavity preparations for class III and class V	Teaching students how to prepare teeth for fillings in a scientifically correct manner.	PowerPoint	Theoretical and practical exams (weekly and monthly).
11. Course evaluation					

Daily, quarterly, semi-annual and final theoretical exams + practical application on acrylic teeth and extracted teeth in the college's educational lab.
12.Text book and references
Sturdevant's art and science of operative dentistry 7th edition pdf Fundamentals of Fixed Prosthodontics, 2012, Quintessence Pub. SHILLINGBURG, H. T. & SATHER, D. A. Contemporary Fixed Prosthodontics, 2016 Elsevier. ROSENSTIEL, S. F., LAND, M. F. FUJIMOTO, J. Textbook of Operative Dentistry 4th.edition Fundamentals of Operative Dentistry: A Contemporary Approach/ 3rd edition

Course Description Form

1. Course Name:	
Conservative Dentistry (Crown and Bridge)	
2. Course Code: **DEN 11325**	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
15/8/2025	
5. Available Attendance Forms:	
Weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) + 60 hours (Practical). /60 units	
7. Course administrator's name (mention all, if more than one name)	
Name: w a s a n a b d - a l r u d h a h a s a n Email: was an.abd@alzahu.edu.iq Name: sundus mohammad ali Email: sundus.mohammad@alzahu.edu.iq	
8. Course Objectives	
Course Objectives	Knowledge of the basic rules of planning and making of crown and bridge, in addition to know the material and instruments used to construct the fixed restoration. In addition, learning the lab procedures.
9. Teaching and Learning Strategies	
Strategy	Using modern electronic means in addition to sources and references related to dental treatment sciences, including crowns and bridges (fixed prostheses), in addition to video clips and practical experiments to achieve a complete understanding of the vocabulary and practical application on (phantom heads) in the special phantom laboratory for dental treatment in accordance with international standards.

10.Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1+2	2theiory +4 practice	Introduction to crown and bridge	Learning the nomenclature of crown and bridge	Power Point lec.+ clinical work	Theoretical and practical exams (weekly

					and monthly).
3	1theory+ 2 practice	Finishing line of preparation	Learning types, position of finish line	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
4+5	2theory+ 4 practice	Principles of tooth preparation	Learning the principles of preparation to get success result	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
6	1theory+ 2 practice	Full metal crown	Learning the indication, contraindication, of full metal crown	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
7	1theory+ 2 practice	Metal-Ceramic crown	Learning the indication, contraindication, of ceramic-metal crown	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
8	1theory+ 2 practice	All ceramic crown	Learning the indication, contraindication, of ceramic crown	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
9+10	2theory+ 4 practice	Partial crown	Learning the indication, contraindication, of partial crown	Power Point lec.+ clinical	Theoretical and practical exams

				work	(weekly and monthly).
11	1theory+ 2 practice	Post crown	Learning the indication, contraindication, of post crown, method of prep.	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
12	1theory+ 2 practice	Impression for crown and bridge	Learning the material and techniques of impression	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
13	1theory+ 2 practice	Gingival retraction	Learning the objective and techniques of gingival retraction	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
14	1theory+ 2 practice	Provisional restoration	Learning the objective and techniques of temporary restoration	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
15+16	2theory+ 4 practice	Waxing	Learning the objective and techniques of waxing	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).

17+18	2theory+ 4 practice	Working cast and die	Learning the material and techniques of making cast and die	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
19	1theory+ 2 practice	Investing, Casting , finishing and polishing	Learning the different techniques for fabrication of cast crown	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
20+21	2theory+ 4 practice	Try in and cementation	Learning the procedure of try in step and material used for cementation	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
22	1theory+ 2 practice	Advanced procedures (CAD/CAM)	Learning the meaning, advantages, of CAD/CAMand comparison of digital and conventional impression	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).

11. Course evaluation	
Daily, semester, mid-year and final theoretical exams + practical application on the mannequin in the laboratory	
12.Text book and references	
Contemporary Fixed prosthodontics/ 4th edition **Fundamentals of fixed prosthodontics/ 3rd edition**	
Scientific journals in the field of dentistry **Internet sites ..... University of alzahrawi e-learning site**	

Course Description Form

1. Course Name:

Conservative Dentistry

2. Course Code: DEN11521

3. Semester / Year: 2025-2026

Annual

4. Description Preparation Date:

15/8/2025

5. Available Attendance Forms:

Weekly

6. Number of Credit Hours (Total) / Number of Units (Total)

60 hours (Theoretical) + 60 hours (Practical) (90 units)

7. Course administrator's name (mention all, if more than one name)

Name: lamees hamid habeeb
Email: hamidhabeeb79@gmail.com

8. Course Objectives

Course Objectives	To teach the students the theoretical and practical aspects of endodontics. Explain the theoretical and practical aspects of the detailed diagnostic and therapeutic steps of root canal treatment in addition to the devices, instruments and materials, microbiology and tooth discoloration

9. Teaching and Learning Strategies

Strategy	Using modern electronic means in addition to sources and references related to dental treatment sciences and root fillings, in addition to video clips and practical experiments to achieve a complete understanding of the vocabulary and practical application on patients in private dental treatment clinics in accordance with international standards

10. Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	1 theoretical 2 practical	**Endodontic diagnosis**	Know signs and symptoms and methods of diagnosis in addition to instruments and devices used	Power Point lec.+	Quiz & practical evaluation

				clinical	
2	1 theoretical 2 practical	**Pain control in Endodontics**	Know how to control painful conditions of the pulp during and after treatment sessions	Power Point lec.+ clinical work	Quiz & practical evaluation
3	1 theoretical 2 practical	**Endodontic radiography**	Know the role of X-ray in different phases of endodontic treatment	Power Point lec.+ clinical work	Quiz & practical evaluation
4	1 theoretical 2 practical	**Working length Determination**	Know the methods of measuring the length of the teeth and its influence on success of treatment	Power Point lec.+ clinical work	Quiz & practical evaluation
5 + 6	2 theoretical 4 practical	**Microbiology**	Know microbial species involved in pulpal and periapical pathology	Power Point lec.	Quiz & practical evaluation
7 + 8	2 theoretical 4 practical	**Intracanal instruments**	Know different root canal shaping instruments, their evolution, generations, properties and uses	Power Point lec.+ clinical work	Quiz & practical evaluation
9 +10	2 theoretical 4 practical	**Obturation of the root canal system**	Know the materials, instruments and methods of ideal obturation, and its importance for success of treatment	Power Point lec.+ clinical work	Quiz & practical evaluation
11	1 theoretical 2 practical	**Endodontic Emergency Treatment**	Know the emergency conditions that the dentist might face and how to manage them	Power Point lec.+ clinical work	Quiz & practical evaluation
12	1 theoretical 2 practical	**Restoration of Endodontically Treated Teeth**	Know what makes endodontically teeth need special care and how to manage and restore them	Power Point lec.+ clinical work	Quiz & practical evaluation
13	1 theoretical 2 practical	**Endodontic-Periodontal Relations**	Know pathological conditions that involve the pulp and periodontal structures, classify them and how to manage them	Power Point lec.+ clinical work	Quiz & practical evaluation

14 + 15	2 theoretical 4 practical	**Tooth discoloration and bleaching.**	Know the causes, signs, and treatment of different types of teeth discoloration	Power Point lec.	Quiz & practical evaluation
11. Course evaluation					
Daily, quarterly, semi-annual and final theoretical exams + practical application on extracted teeth in the college's educational clinics					
12. Text book and references					
	Cohen's pathways of the pulp, eleventh edition **Ingle's endodontics 7**				
	Scientific journals in the field of Endodontics				

Course Description Form

1. Course Name:	
General anatomy	
2. Course Code: DEN 11101	
3. Semester / Year:	
Annual	
4. Description Preparation Date:	
2025-2026	
5. Available Attendance Forms:	
weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) + 60 hours (Practical). (One theoretical hour and two practical hours week)	
7. Course administrator's name (mention all, if more than one name)	
Name: Nawfal Hasan Abbas Email: nawfal.h@uokerbala.edu.iq Name: osama abd-alkadhem ali Email: osamaalhelu6@gmail.com	
8. Course Objectives	
Course Objectives	1. Introducing the student to the body parts and their impact on his work as a dentist. 2. Enabling the student to deal correctly with normal cases and emergency cases that may occur during work. 3. Learning how to prepare the patient and deal with patients before starting medical intervention. 4. Explaining all normal cases from the development of the fetus to the stage of puberty.
9. Teaching and Learning Strategies	

Strategy	Theoretical and practical education. The teaching method changes according to the student's perception and interaction with the lecture. It may be the discussion method, the interrogation method, or the inference and deduction method... or it may be all of the methods at the same time, in addition to using the dissection room to increase the student's understanding and perception.

10. Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	3	**Theoretical:** Introduction to Human Anatomy Descriptive Anatomic Terms. **Practical:** Introduction to anatomy.		Power Point	Quiz
2	3	**Theoretical:** Basic Structures: Skin, Fasciae, Muscle, Joints, Ligament, Bursae. **Practical:** Basic structures part 1 (Skin, Fasciae, Muscle, Joints, Ligament, Bursae).		Power Point	Quiz
3 & 4	6	**Theoretical:** Basic Structures: Bone, Cartilage, Blood Vessels, Lymphatic System. **Practical:** Basic structures part 2 (bone,Cartilage, Blood Vessels, Lymphatic System) and classification of human skeleton.		Power Point	Quiz
5	3	**Theoretical:** Basic Structures: Nervous System, Mucous Membranes, Serous Membranes. **Practical:** Basic structures part 3(Nervous System, Mucous Membranes, Serous Membranes)		Power Point	Quiz
6 & 7	6	**Theoretical:** Skeletal system of the body: Skull :Cranial Bones. **Practical:**		Power Point	Quiz

		Frontal Bone, Parietal bones, Occipital bone, Temporal bones			
8 & 9	**6**	**Theoretical:** Skeletal system of the body: Skull : Facial Bones. **Practical:** Sphenoid bone, Ethmoid bone, Zygomatic bones,Maxillae, Nasal bones ,Lacrimal bones, Vomer,Palatine bones,Inferior Conchae, mandible		Power Point	Quiz
10 & 11	**6**	**Theoretical:** The Cranial Cavity Major Foramina and Fissures locations and structures pass through, Neonatal Skull **Practical:** Cranial cavity, Major Foramina and Fissures locations and structures pass through the skull		Power Point	Quiz
12 & 13	**6**	**Theoretical:** Skeleton of the Orbital Region, Openings into the Orbital Cavity □ Skeleton of the External Nose, nasal cavity, Paranasal Sinuses □ Auditory ossicles Hyoid bone **Practical:** Orbit nasal cavity Auditory ossicles , Hyoid bone		Power Point	Quiz
14& 15	**6**	**Theoretical:** The Vertebral Column. **Practical:** Vertebral column		Power Point	Quiz
16& 17	**6**	**Theoretical:** Structure of the Thoracic Wall Joints of the Chest Wall Suprapleural Membrane Diaphragm Surface Anatomy **Practical:**		Power Point	Quiz

		Structure of the Thoracic cage (Sternum ,Ribs, Costal Cartilages**)**			
18 & 19	**6**	**Theoretical:** Thoracic cavity: Mediastinum, Pleurae, Trachea, Bronchi, Lungs **Practical:** Thoracic cavity (Mediastinum, Pleurae, Trachea, Bronchi), lungs		Power Point	Quiz
20 & 21	**6**	**Theoretical:** Pericardium, Heart, Large arteries, veins and nerves of Thorax **Practical:** Anatomy of heart Major arteries, veins and nerves of thorax		Power Point	Quiz
22 & 23 & 24	**6**	**Theoretical:** □ Bones of the Shoulder (Pectoral girdle) girdles □ Bones of the Upper extremities **Practical:** Bones of the Shoulder (Pectoral girdle) girdles Bones of the Upper extremities		Power Point	Quiz
25 & 26 & 27	**9**	**Theoretical:** Bones of the Pelvic girdle Bones of the Lower extremities **Practical:** Bones of the Pelvic girdle Bones of the Lower extremities		Power Point	Quiz
28 & 29 &30	**9**	**Theoretical:** Abdominal cavity and organs **Practical:** Abdominal cavity and organs		Power Point	Quiz

11. Course assessment:	
First course 20%, second course 20%, final exam 60%.	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Contemporary Oral and Maxillofacial Surgery 6th 2014
Main references (sources)	Books: Snell anatomy.

Internet and research gate articles sources	Web: Springer nature, Willey, Elsevier.

Course Description Form

1. Course Name:	
General anatomy	
2. Course Code: DEN 11201	
3. Semester / Year:	
Annual	
4. Description Preparation Date:	
2025-2026	
5. Available Attendance Forms:	
weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) + 60 hours (Practical). (One theoretical hour and two practical hours week)	
7. Course administrator's name (mention all, if more than one name)	
Name: Nawfal Hasan Abbas Email: nawfal.h@uokerbala.edu.iq	
8. Course Objectives	
Course Objectives	1. Introducing the student to the body parts and their impact on his work as a dentist. 2. Enabling the student to deal correctly with normal cases and emergency cases that may occur during work. 3. Learning how to prepare the patient and deal with patients before starting medical intervention. 4. 4. Explaining all normal cases from the development of the fetus to the stage of puberty.
9. Teaching and Learning Strategies	
Strategy	Theoretical and practical education. The teaching method changes according to the student's perception and interaction with the lecture. It may be the discussion method, the interrogation method, or the inference and deduction method... or it may be all of the methods at the same time, in addition to using the dissection room to increase the student's understanding and perception.

10.Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method

1 & 2	**2**	**Theoretical:** Introduction to Human Anatomy Descriptive Anatomic Terms. **Practical:** Introduction to anatomy.		Power Point	Quiz, course and final exams
3 & 4	**2**	**Theoretical:** Basic Structures: Skin, Fasciae, Muscle, Joints, Ligament, Bursae. **Practical:** Basic structures part 1 (Skin, Fasciae, Muscle, Joints, Ligament, Bursae).		Power Point	Quiz, course and final exams
5	**1**	**Theoretical:** Basic Structures: Bone, Cartilage, Blood Vessels, Lymphatic System. **Practical:** Basic structures part 2 (bone, Cartilage, Blood Vessels, Lymphatic System) and classification of human skeleton.		Power Point	Quiz, course and final exams
6	**1**	**Theoretical:** Basic Structures: Nervous System, Mucous Membranes, Serous Membranes. **Practical:** Basic structures part 3(Nervous System, Mucous Membranes, Serous Membranes)		Power Point	Quiz, course and final exams
7 & 8	**2**	**Theoretical:** Skeletal system of the body: Skull: Cranial Bones. **Practical:** Frontal Bone, Parietal bones, Occipital bone¸ Temporal bones		Power Point	Quiz, course and final exams
9 & 10	**2**	**Theoretical:** Skeletal system of the body: Skull: Facial Bones. **Practical:** Sphenoid bone, Ethmoid bone, Zygomatic bones, Maxillae, Nasal bones ,Lacrimal bones, Vomer, Palatine bones, Inferior Conchae, mandible		Power Point	Quiz, course and final exams
11	**1**	**Theoretical:** The Cranial Cavity Major Foramina and Fissures locations and		Power Point	Quiz, course and final

		structures pass through, Neonatal Skull **Practical:** Cranial cavity, Major Foramina and Fissures locations and structures pass through the skull			exams
12	**1**	**Theoretical:** Skeleton of the Orbital Region, Openings into the Orbital Cavity □ Skeleton of the External Nose, nasal cavity, Paranasal Sinuses □ Auditory ossicles Hyoid bone **Practical:** Orbit nasal cavity Auditory ossicles, Hyoid bone		Power Point	Quiz, course and final exams
12 & 14	**2**	**Theoretical:** The Vertebral Column. **Practical:** Vertebral column		Power Point	Quiz, course and final exams
15	**1**	**Theoretical:** Structure of the Thoracic Wall Joints of the Chest Wall Suprapleural Membrane Diaphragm Surface Anatomy **Practical:** Structure of the Thoracic cage (Sternum, Ribs, Costal Cartilages**)**		Power Point	Quiz, course and final exams
16 & 17	**2**	**Theoretical:** Thoracic cavity: Mediastinum, Pleurae, Trachea, Bronchi, Lungs **Practical:** Thoracic cavity (Mediastinum, Pleurae, Trachea, Bronchi), lungs		Power Point	Quiz, course and final exams
18 & 19	**2**	**Theoretical:** Pericardium, Heart, Large arteries, veins and		Power Point	Quiz, course

		nerves of Thorax **Practical:** Anatomy of heart Major arteries, veins and nerves of thorax			and final exams
20 & 21	**2**	**Theoretical:** Bones of the Shoulder (Pectoral girdle) girdles Bones of the Upper extremities **Practical:** Bones of the Shoulder (Pectoral girdle) girdles Bones of the Upper extremities		Power Point	Quiz, course and final exams
22	**1**	**Theoretical:** Bones of the Pelvic girdle Bones of the Lower extremities **Practical:** Bones of the Pelvic girdle Bones of the Lower extremities		Power Point	Quiz, course and final exams
23 & 24	**2**	**Theoretical:** Abdominal cavity and organs **Practical:** Abdominal cavity and organs		Power Point	Quiz, course and final exams
25 & 26	**2**	Arteries of the neck Common Carotid Artery Carotid Sinus Carotid Body External Carotid Artery Internal Carotid Artery Subclavian Arteries (3 parts) Circle of Willis		Power Point	Quiz, course and final exams
27	**1**	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		Power Point	Quiz, course and final exams

28	**1**	Cranial nerves □ Introduction □ Functional Components □ Summary of cranial nerves		Power Point	Quiz, course and final exams
29	**1**	Pharynx □ Muscles of the Pharynx □ Pharynx divisions □ Palatine Tonsils □ Waldeyer's Ring of Lymphoid Tissue		Power Point	Quiz, course and final exams
30	**1**	Larynx □ Cartilages of the Larynx □ Membranes and Ligaments of the Larynx □ Inlet of the Larynx □ Laryngeal Folds □ Muscles of the Larynx □ Nerve & blood Supply of the Larynx		Power Point	Quiz, course and final exams

11. Course assessment:
First course 20%, second course 20%, final exam 60%.

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Contemporary Oral and Maxillofacial Surgery 6th 2014
Main references (sources)	Books: Snell anatomy.
Internet and research gate articles sources	Web: Springer nature, Willey, Elsevier.

Course Description Form

1. Course Name:	
Oral Surgery	
2. Course Code: DEN11324	
3. Semester / Year:	
Annual	
4. Description Preparation Date:	
2025-2026	
5. Available Attendance Forms:	
Lectures (Theory) + Labs (Practical, Weekly)	
6. Number of Credit Hours (Total) / Number of Units (Total)	
Theory:1 h/wk. Laboratory:2 h/wk. (1 theoretical hour and two practical hours per week)	
7. Course administrator's name (mention all, if more than one name)	
Name: Samer amori Jassem **Email:** samir1986amorry@gmail.com Name: Asma mohammad mhana Email: asmaa.muhana@alzahu.edu.iq	
8. Course Objectives	
Course Objectives	-Knowledge of principles of oral surgery and how to deal with pathients starting from diagnosis till the start of minor oral surgical procedures inside the clinic and under local anesthesia and in the second part the local anesthesia and their principles to deal with the complications of these subjects
9. Teaching and Learning Strategies	
Strategy	9. Use PowerPoint lectures. 10. Method of debate and discussion. 11. Education in laboratories to acquire scientific skills. 12. Reports and projects. 13. Student groups and Workshops. 14. Scientific trips. 15. Oral discussions

10.Course Structure (Theory)					
Week	**Hours**	**Subject Title**	**Required learning outputs**	**Teaching Method**	**Assessment Method**
First Semester					
1	1 hr . Theory	Introduction	Diagnosis in oral surgery	Power Point	Quiz
2	1 hr . Theory	Introduction	Diagnosis in oral surgery	Power Point	Quiz
3	1 hr . Theory	Aseptic techniques	Infection Control in Surgical Practice	Power Point	Quiz
4	1 hr . Theory	Maintenance of Sterility	Infection Control in Surgical Practice	Power Point	Quiz
5	1 hr . Theory	Extraction of teeth (exodontia).	Extraction of teeth and Contra indications of extraction	Power Point	Quiz
6	1 hr . Theory	Contra-indications of teeth extraction	Extraction of teeth and Contra indications of extraction	Power Point	Quiz
7	2 Hrs. Theory	Position of the operator.	General arrangement for extraction and Dental forceps (types)	Power Point	Quiz
8	1 hr . Theory	Forceps for the mandibular teeth.	General arrangement for extraction and Dental forceps (types)	Power Point	Quiz
9	1 hr . Theory	Handling of the forceps.	Techniques of forceps extraction and post-operative instructions	Power Point	Quiz
10	1 hr . Theory	Point of application.	Elevators	Power Point	Quiz
11	1 hr . Theory	Clinical uses of elevators.	Elevators	Power Point	Quiz
12	1 hr . Theory	complications	Complications of dental extraction	Power Point	Quiz

13	1 hr . Theory	complications	Complications of dental extraction	Power Point	Quiz
14	1 hr . Theory	Instruments of basic oral surgery.	Basic surgical instruments	Power Point	Quiz
15	1 hr . Theory	Neurophysiology	Introduction to local anesthesia	Power Point	Quiz
Second Semester					
1	1 Hrs. Theory	Pharmacokinetics of local anesthetics	Pharmacology of local anesthesia	Power Point	Quiz
2	1 Hrs. Theory	Specific agents	Pharmacology of local anesthesia	Power Point	Quiz
3	1 hr . Theory	Trigeminal nerve:	Surgical anatomy in local anesthesia	Power Point	Quiz
4	1 hr . Theory	Osteology of the maxilla Osteology of the mandible	Surgical anatomy in local anesthesia	Power Point	Quiz
5	1 hr . Theory	Armamentarium	Instruments of local anesthesia	Power Point	Quiz
6	1 hr . Theory	Basic injection techniques	Techniques of local anesthesia	Power Point	Quiz
7	1 hr . Theory	local anesthesia procedures	Techniques of local anesthesia	Power Point	Quiz
8	1 hr . Theory	Supplemental injection techniques	Techniques of local anesthesia	Power Point	Quiz
9	1 hr . Theory	Local Complications	Complications of local anesthesia	Power Point	Quiz
10	1 hr . Theory	Postanesthetic intraoral lesions	Complications of local anesthesia	Power Point	Quiz
11	1 hr . Theory	Systemic complications	Complications of local anesthesia	Power Point	Quiz
12	1 hr . Theory	computer controlled local anesthetic delivery	Advances in local anesthesia	Power Point	Quiz

13	1 hr . Theory	Sedation techniques	Conscious sedation	Power Point	Quiz
14	1 hr . Theory	Types of general anesthesia used in dentistry	Fundamentals of general anesthesia	Power Point	Quiz
15	1 hr . Theory	Overview of medical emergencies	Medical emergencies during dental treatment	Power Point	Quiz

10.Course Structure (Practical)					
Week	**Hours**	**Required learning outputs**	**Subject Title**	**Teaching Method**	**Assessment Method**
First Semester					
1-15	15 Hrs. Practical	All same theoretical subjects	All same theoretical subjects	Power Points	Quiz
Second Semester					
1-15	15 Hrs. Practical	All same theoretical subjects in second semester	All same theoretical subjects in second semester	Power Point+ seminars	Quiz

11. Course Evaluation

- 50 Marks along the year: divided as :

First course: 25 Theoretical including two exams, homework, reports, quizzes + 8 marks in practical part including quizzes, reports, Homework

Second course: 25 Theoretical including two exams, homework, reports, quizzes + 8 marks in practical part including quizzes, reports, homework

- 20 Marks: Practical Final exam
- 30 Marks: Theoretical Final Exam

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Contemporary Oral and Maxillofacial Surgery 6th 2014
Main references (sources)	Internet and research gate articles sources

Course Description Form

1. Course Name:	
Oral and Maxillofacial surgery	
2. Course Code: DEN11424	
3. Semester / Year:	
Annual	
4. Description Preparation Date:	
2025-2026	
5. Available Attendance Forms:	
Lectures (Theory) + clinical (Practical, Weekly)	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) +120 hours (clinical). (one theoretical hour and four practical hours /week)	
7. Course administrator's name (mention all, if more than one name)	
Name: Haider jehad kheder **Email:** Hader_000222@yahoo.com	
8. Course Objectives	
Course Objectives	-Knowledge of oral surgery principles , how to study such subjects, details of each subjects and the influence of property on clinical aspect; knew how to deal with simple and surgical extraction , how to deal and provide management for patient with chronic disease (medically compromised patient) and how to manage intra and post- operative surgical complications.
9. Teaching and Learning Strategies	
Strategy	1. Use PowerPoint lectures. 2. Method of debate and discussion. 3. Education in clinic to acquire scientific skills. 4. Reports and projects. 5. Student groups and work shop 6. Scientific trips. 7. Oral discussions

10.Course Structure (Theory)					
Week	**Hours**	**Subject Title**	**Required learning outputs**	**Teaching Method**	**Assessment Method**
First Semester					
1	1 hr. Theory	**Cardiovascular diseases**	Hypertension, Ischemic heart diseases, Heart failure	Power Point	Quiz
2	1 hr. Theory	Cardiac arrhythmia Rheumatic fever and rheumatic heart disease Infective endocarditis Congenital heart disease	Dental management Oral manifestations	Power Point	Quiz
3	1 hr. Theory	**Bleeding disorder**	Hemophilia ✓ Von Willebrand's disease ✓ Thrombocytopenia ➢ Blood dyscrasias ➢ Disorders of the RBCs • Anemia and polycythemia • Dental management ➢ WBCs Disorders • Leukemia, Lymphoma, Burkitt's Lymphoma and Multiple Myloma	Power Point	Quiz
4	1 hr. Theory	**Endocrinology**	Thyroid diseases • Dental management of hyper- and hypothyroidism • Oral complications and manifestations ➢ Adrenal insufficiency • Dental management of Adrenocortical insufficiency and adrenal crisis • Dental management of Adrenocortical hyperfunction • Oral complications and manifestations ➢ Diabetes Mellitus	Power Point	Quiz

			• Dental management of the patient with diabetes mellitus		
5	1 hr. Theory	**Pulmonary diseases**	Chronic obstructive pulmonary diseases (COPD) • Dental management • Oral complications and manifestations ➢ Asthma • Dental management • Management of asthmatic attack • Oral complications and manifestations ➢ Tuberculosis • Dental management • Oral complications and manifestations	Power Point	Quiz
6	1 hr. Theor y	**Liver Diseases**	**Viral hepatitis** • Dental management • Oral manifestations and complications ➢ **Alcoholic liver disease** • Dental management • Oral complications and manifestations	Power Point	Quiz
7	1 hr. Theory	**Chronic kidney disease and dialysis**	Chronic kidney disease • Dental management ✓ Patients receiving conservative care ✓ Dialysis ✓ Renal transplant • Oral complications and manifestations	Power Point	Quiz
8	1 hr. Theory	**Neurologic disorders**	Epilepsy • Dental management • Oral complications and manifestations	Power Point	Quiz

			➢ Cerebrovascular accidents (stroke) • Medical management • Dental management		
9	1 hr. Theory	**Pregnancy**	Dental management • Medical considerations ✓ Dental radiographs ✓ Drugs in pregnancy • Oral manifestations and complications Treatment timing	Power Point	Quiz
10	1 hr. Theory	**AIDS and HIV infection**	Oral manifestations • Dental managements: ✓ Asymptomatic patient. ✓ Symptomatic patient. ✓ Patient with severe symptoms	Power Point	Quiz
11	1 Hr. Theory	**Rheumatologic and connective tissue disorders**	Rheumatoid arthritis ✓ Dental management ✓ Oral manifestations and complications • Dental management of patients with prosthetic joint	Power Point	Quiz
12	1 Hr. Theory	**Allergy**	Dental management • Oral complications and manifestations	Power Point	Quiz
13	1 Hr. Theory	**Patients on radiotherapy and chemotherapy**	Patients on radiotherapy ✓ Radiation effects on normal tissues in the path of the external beam ✓ Dental Management • Patients on chemotherapy ✓ The effect of chemotherapy on normal tissues ✓ Dental management	Power Point	Quiz
14 +15	3 Hrs. Theory	**Odontogenic infections and fascial space infections**	Odontogenic Infections • Spread of odontogenic infections • The factors that influence the spread of odontogenic infections	Power Point	Quiz

			Fascial space infections • Infection of spaces in relation to the lower jaw • Infections of spaces in relation to the upper jaw • Cavernous sinus thrombosis Principles of treatment of odontogenic infections • Principles for the use of appropriate antibiotics • Sinus formation • Necrotizing fasciitis		
Second Semester					
1	1 Hr. Theory	**Principles of Flaps, suturing and management of difficult extraction**	Flaps in oral cavity • Incision • Flap design • Types of Mucoperiosteal Flaps • Flap reflection ➢ Suturing • Suture Materials • Needles • Needle Holder • Tissue Forceps Suture Scissor • Principles of suturing • Suturing Techniques	Power Point	Quiz
2	1 Hr. Theory	**Management of difficult extraction**	The main indications for surgical extraction of teeth are • Steps of surgical extraction • Indications for leaving root fragments • Multiple Extractions • Extraction sequencing	Power Point	Quiz
3	1 Hr. Theory	**Principles of management of impacted teeth**	Definition and stages of eruption • Impacted lower third molars ✓ Indications for removal of impacted lower third molars ✓ Classification of impacted lower third molars ✓ Clinical examination	Power Point	Quiz

			✓ Radiographic examination and assessment ✓ Surgical extraction of lower third molar ✓ Complications ✓ Other lines of treatment		
4	1 Hr. Theory	**Impacted upper third molars**	Surgical extraction ✓ Complications • Impacted maxillary canine ✓ Classification ✓ Clinical examination ✓ Radiographic examination and assessment ✓ Options of treatment	Power Point	Quiz
5	1 Hr. Theory	**Impacted mandibular canines**	Impacted lower premolars • Impacted maxillary premolars • Impacted first and second molars • Buried deciduous molars • Supernumerary teeth • Dilacerated incisors	Power Point	Quiz
6	1 Hr. Theory	**Surgical aids to orthodontics**	Corticotomy assisted orthodontic treatment and labial • Labial frenectomy. • Temporary skeletal anchorage	Power Point	Quiz
7 +8	2 Hrs. Theory	**Principles of endodontic surgery**	Definition • Indications for periapical surgery • Contraindications for periapical surgery • Important considerations in periapical surgery • Factors Associated with Success and Failures in Periapical Surgery Surgical procedure • Determination of success • Microsurgical techniqueTo perform biopsy or not	Power Point	Quiz

9	1Hr. Theory	**Osteomyelitis and osteonecrosis of the jaw**	Osteomyelitis • Definition. • Classification • Etiology and pathogenesis • Clinical presentation • Diagnostic imaging • Microbiology • Treatment: surgical, antimicrobial and hyperbaric oxygen • Other types of osteomyelitis: infantile, focal and diffuse sclerosing and Garre's sclerosing osteomyelitis	Power Point	Quiz
10	1 Hr. Theory	**Radiation induced osteomyelitis and osteoradionecrosis**	Definition • Etiology • Stages • Treatment • Prevention ➢ Medication related osteonecrosis of the jaw • Definition • Pathophysiology • Clinical presentation and staging • Imaging • Treatment • Prevention	Power Point	Quiz
11+12	2 Hrs. Theory	**Dental Implants: Basic Concepts and Techniques**	Implant Geometry (Macrodesign) • Implant Surface Characteristics (Microdesign) • Hard Tissue Interface • Soft Tissue–Implant Interface • Biomechanical Considerations • Preoperative Assessment and Treatment Planning (hard tissue evaluation, soft tissue evaluation, radiographic examination) Surgical Treatment Planning Considerations • Final Treatment Planning	Power Point	Quiz

			• Basic Implant Surgical Procedures • One-Stage versus Two-Stage Implant Placement Surgery • Implant Stability • Complications • Implant Components • Defining implant outcomes		
13	1 Hr. Theory	**Biopsy in oral and maxillofacial surgery**	Medical History • History of the lesion • Examination •Biopsy Principles • Contraindication • Excisional Biopsy • Incisional Biopsy • Surgical technique Differential Diagnosis	Power Point	Quiz
14	1Hr. Theory	**Diagnostic imaging in oral and maxillofacial surgery**	Classification: Invasive and Non-invasive • Types of non-invasive imaging • Conventional radiography (Plain x-ray) • Ultrasonography (USG): • Computed tomography scanning (CT scan): Spiral CT, Cone Beam CT (CBCT) • Magnetic resonance imaging (MRI) • MRI vs. CT scan • Radionuclide (scintigraphy or skeletal scan) • Positron emission tomography (PET) Scan • PET-CT • Single Photon Emission Computed Tomography (SPECT) scan	Power Point	Quiz

10.Course Structure (Practical)

Week	Hours	Required learning outputs	Subject Title	Teaching Method	Assessment Method
First Semester					
1-15	60 Hrs. Practical			Dental extraction	Case sheet
Second Semester					
1-15	60 Hrs. Practical			Dental extraction	Case sheet

11. Course Evaluation

- 20 Marks for each semester (first and second semester (courses)

First course: 12.5 marks Theoretical including two exams, homework, reports, quizzes + 7.5 marks in practical part.

Second course: 12.5 marks Theoretical including two exams, homework, reports, quizzes + 7.5 marks in practical part.

- 20 Marks: Practical Final exam
- 40 Marks: Theoretical Final Exam

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Contemporary oral and maxillofacial surgery
Electronic References, Websites	Journals of oral and maxillofacial surgery

Course Description Form

1. Course Name:	
General surgery	
2. Course Code: DEN11426	
3. Semester / Year:	
Annual	
4. Description Preparation Date:	
2025-2026	
5. Available Attendance Forms:	
weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) + 60 hours (Practical). (One theoretical hour and two practical hours week)	
7. Course administrator's name (mention all, if more than one name)	
Name: Reeman maki abd-al-ameer Email: reman.alsaffar@alzahu.edu.iq	
8. Course Objectives	
Course Objectives	Introducing the student to the general surgery and its impact on his work as a dentist.
9. Teaching and Learning Strategies	
Strategy	Theoretical and practical education. The teaching method changes according to the student's perception and interaction with the lecture. It may be the discussion method, the interrogation method, or the inference and deduction method... or it may be all of the methods at the same time, in addition to using the dissection room to increase the student's understanding and perception.

10.Course structure

Week	**Hours**	**Subject name**	**Required learning outputs**	**Learning method**	**Assessment method**
1	1	Case history		Power Point	Quiz
2	1	Clinical examination		Power Point	Quiz
3 & 4	2	Surgical wound and infections		Power Point	Quiz
5 & 6	2	Wound healing		Power Point	Quiz
7& 8	2	Hemorrhage and blood transfusion		Power Point	Quiz
9 & 10	2	Fracture and dislocation of bones		Power Point	Quiz
11	1	Head injuries		Power Point	Quiz
12 & 13	2	Parenteral feeding		Power Point	Quiz
14& 15	2	Fluid and electrolytes balance		Power Point	Quiz
16& 17	2	Surgical resuscitation and medical emergencies		Power Point	Quiz
18 & 19	2	Differential diagnosis of swelling in the neck		Power Point	Quiz
20 & 21	2	Diseases of the nose and Para nasal sinuses		Power Point	Quiz
22 & 23	2	Diseases of pharynx and larynx and esophagus		Power Point	Quiz
24 & 25	2	General anesthesia, pain management and postoperative care		Power Point	Quiz
26 & 27	2	Chest trauma and diseases		Power Point	Quiz
28 & 29	2	Thyroid gland and goiter		Power point	quiz

30	1	Tumors, Cyst, Ulcer & fistula		Power point	quiz

11. Course Evaluation	
First course 20%, second course 20%, final exam 60%.	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	1. Baily and Love's short practice of surgery 25th edition 2008. 2. Schwarz principles of surgery.
Electronic References, Websites	Springer nature, Willey, Elsevier.

Course Description Form

1. Course Name:
Periodontics
2. Course Code: DEN11430
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2026
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours (Theoretical) + 60 hours (Practical). (Two theoretical hours and two practical hours week)
7. Course administrator's name (mention all, if more than one name)
Name: Asmaa Mohammad mhana Email:asmaa.muhana@alzahu.edu.iq
8. Course Objectives

Course Objectives	A. To examine the patients suffering from diseases of the gingiva, alveolar bone, and other periodontal diseases. B. To diagnose diseases of the gingiva, alveolar bone, and other periodontal diseases. **C.** Prevention of periodontal diseases by giving the patients the awareness and instructions to protect his/her oral cavity from periodontal diseases and maintain good oral hygiene.
9. Teaching and Learning Strategies	
Strategy	1-Use of PowerPoint lectures. 2-Discussion method. 3-Clinic.

10.Course structure/ Theory

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	**4**	Terms & definitions frequently used in periodontology Anatomy		Lecture/ Using PowerPoint lectures / Discussion and	Written, quarterly, or monthly

		of the periodontium Oral mucosa		discussion method / Using smart screens and blackboards in presenting scientific material / clinic.	written tests / grades granted for daily entries / oral examination / grades for attendance / daily exams planned or sudden.
5	**3**	Classification of periodontal diseases and conditions (2017)		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and blackboards in presenting scientific material / clinic.	Written, quarterly, or monthly written tests / grades granted for daily entries / oral examination / grades for attendance / daily exams planned or sudden.
8	**4**	Etiology of periodontal disease		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and blackboards in presenting scientific material / clinic.	Written, quarterly, or monthly written tests / grades granted for daily entries / oral examination / grades for attendance / daily exams planned or sudden.
12	**1**	Dental calculus		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and	Written, quarterly, or monthly written tests / grades granted for daily entries /

				blackboards in presenting scientific material / clinic.	oral examination / grades for attendance / daily exams planned or sudden.
13	**2**	Etiology of periodontal disease		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and blackboards in presenting scientific material / clinic.	Written, quarterly, or monthly written tests / grades granted for daily entries / oral examination / grades for attendance / daily exams planned or sudden.
15	**1**	Impact of periodontal infection on systemic health		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and blackboards in presenting scientific material / clinic.	Written, quarterly, or monthly written tests / grades granted for daily entries / oral examination / grades for attendance / daily exams planned or sudden.
16	**1**	Periodontal indices		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and blackboards in presenting scientific material / clinic.	Written, quarterly, or monthly written tests / grades granted for daily entries / oral examination / grades for attendance /

					daily exams planned or sudden.
17	**1**	The periodontal pocket		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and blackboards in presenting scientific material / clinic.	Written, quarterly, or monthly written tests / grades granted for daily entries / oral examination / grades for attendance / daily exams planned or sudden.
18	**4**	Treatment plan guidelines		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and blackboards in presenting scientific material / clinic.	Written, quarterly, or monthly written tests / grades granted for daily entries / oral examination / grades for attendance / daily exams planned or sudden.
22	**1**	Periodontal instruments and sharpening		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and blackboards in presenting scientific material / clinic.	Written, quarterly, or monthly written tests / grades granted for daily entries / oral examination / grades for attendance / daily exams planned or sudden.

23	**1**	Breath Malodor (Halitosis)		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and blackboards in presenting scientific material / clinic.	Written, quarterly, or monthly written tests / grades granted for daily entries / oral examination / grades for attendance / daily exams planned or sudden.
24	**1**	Systemic anti-infective therapy for periodontal diseases		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and blackboards in presenting scientific material / clinic.	Written, quarterly, or monthly written tests / grades granted for daily entries / oral examination / grades for attendance / daily exams planned or sudden.

10.Course structure/ Practical					
Week	**Hours**	**Subject name**	**Required learning outputs**	**Learning method**	**Assessment method**
1	3	How to fill a periodontal case sheet		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and blackboards in presenting scientific material / clinic	Written, quarterly, or monthly written tests / grades granted for daily entries / oral examination / grades for attendance / daily exams planned or sudden.
2	3	Motivation and Oral hygiene Instrucyion		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and blackboards in presenting	Written, quarterly, or monthly written tests / grades granted for daily entries / oral examination / grades

				scientific material / clinic	for attendance / daily exams planned or sudden.
3	3	Periodntal instruments scaling		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and blackboards in presenting scientific material / clinic	Written, quarterly, or monthly written tests / grades granted for daily entries / oral examination / grades for attendance / daily exams planned or sudden.
30-4	3	Scaling on Patients		Lecture/ Using PowerPoint lectures / Discussion and discussion method / Using smart screens and blackboards in presenting scientific material / clinic	Assessment by case sheet of patients

11. Course Evaluation	
15 marks: mid-year exam 25 marks: Annual quest 60 marks: final year exam	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	❖ Neoman MG., H.H.Takei, F.A.Carranza. Carranza's clinical periodontology, 13th edition. Saunders, 2018.
Main references (sources) Recommended books and references (scientific journals, reports...)	❖ Jan Lindhe. Clinical Periodontology and implant dentistry. 7th edition, Blackwell Munksgaard, 2021. ❖ Jill S. Neild- Gehrig. Fundamentals of Periodontal Instrumentation & Advanced Root Instrumentation, 7th edition. Lippincott Williams & Wilkins, 2012. ❖ Journal of periodontology (United States) ❖ Journal of periodontal research (Denmark) ❖ Journal of American dental association (United States)
Electronic References, Websites	❖ www.google.com ❖ http://onlinelibrary.wiley.com/ ❖ http://www.sciencedirect.com/

Clinical requirement

Clinical requirement	**Type of treatment**
3 h \week 90 h\year	Scaling & polishing min.= 2000 points

Course Description Form

1. Course Name:
General medicine
2. Course Code: DEN11425
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2026
5. Available Attendance Forms:
weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours (Theoretical). (One theoretical hour week)
7. Course administrator's name (mention all, if more than one name)
Name: Reeman maki abd-al-ameer Email: reman.alsaffar@alzahu.edu.iq
8. Course Objectives

Course Objectives	1. Providing students with comprehensive knowledge of internal medicine sciences in terms of examining pathological cases. 2. Identifying the most important internal diseases in the body, whether viral, bacterial, fungal, etc., and gaining the necessary experience in identifying the locations of organs and systems. 3. Knowing the terms between internal medical sciences on the one hand and any other place or any other entity such as physiology, drugs, toxins, diseases, and surgery on the other hand and how to implement this knowledge in other applied sciences

9. Teaching and Learning Strategies	
Strategy	Theoretical and practical education. The teaching method changes according to the student's perception and interaction with the lecture. It may be the discussion method, the interrogation method, or the inference and deduction method... or it may be all of the methods at the same time, in addition to using the dissection room to increase the student's understanding and perception.

10. Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method

1	**1**	Diabetes Mellitus 1		Power Point	Quiz, course and final exams
2	**1**	Diabetes Mellitus 1		Power Point	Quiz, course and final exams
3	**1**	White Blood Cells Disorders 1		Power Point	Quiz, course and final exams
4	**1**	White Blood Cells Disorders 1		Power Point	Quiz, course and final exams
5	**1**	Hemostasis and Bleeding Disorders 1		Power Point	Quiz, course and final exams
6	**1**	Hemostasis and Bleeding Disorders **2**		Power Point	Quiz, course and final exams
7	**1**	Adrenal Gland Disorders 1		Power Point	Quiz, course and final exams
8	**1**	Adrenal Gland Disorders 2		Power Point	Quiz, course and final exams
9	**1**	Gastrointestinal Diseases		Power Point	Quiz, course and final exams
10	**1**	Peptic Ulcer Disease 1		Power Point	Quiz, course and final exams
11	**1**	Peptic Ulcer Disease 2		Power Point	Quiz, course and final exams
12	**1**	Intestine		Power Point	Quiz, course and final exams
13	**1**	Inflammatory Bowel Disease 1		Power Point	Quiz, course and final exams
14	**1**	Inflammatory Bowel Disease 2		Power Point	Quiz, course and final exams
15	**1**	Pseudomembranous Colitis		Power Point	Quiz, course and final exams
16	**1**	Hypertension		Power Point	Quiz, course and final exams
17	**1**	Infective Endocarditis		Power Point	Quiz, course and final exams
18	**1**	Ischemic Heart Disease		Power Point	Quiz, course and final exams
19	**1**	Heart Failure		Power Point	Quiz, course and final exams

20	**1**	Cardiac Arrhythmias		Power Point	Quiz, course and final exams
21	**1**	Thyroid Diseases		Power Point	Quiz, course and final exams
22	**1**	Kidney Diseases		Power Point	Quiz, course and final exams
23	**1**	Immunologic Diseases		Power Point	Quiz, course and final exams
24	**1**	Liver Diseases		Power Point	Quiz, course and final exams
25	**1**	Pulmonary Diseases		Power Point	Quiz, course and final exams
26	**1**	Red Blood Cells Disorders		Power Point	Quiz, course and final exams
27	**1**	Drug and Alcohol Abuse		Power Point	Quiz, course and final exams
28	**1**	Psychiatric Disorders		Power Point	Quiz, course and final exams
29	**1**	Anxiety and Eating Disorders		Power Point	Quiz, course and final exams
30	**1**	Anxiety and Eating Disorders		Power Point	Quiz, course and final exams

10. Course assessment:

First course 20%, second course 20%, final exam 60%.

11. References:

	1-Kumar and Clark's Clinical Medicine 2-Davidson's Principles and Practice of Medicine.
	Springer nature, Willey, Elsevier.

Course Description Form

1. Course Name:	
Oral surgery	
2. Course Code: **DEN11525**	
3. Semester / Year:	
Annual	
4. Description Preparation Date:	
2025-2026	
5. Available Attendance Forms:	
weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) + 120 hours (Practical). (one theoretical hours and six practical **hours** week)	
7. Course administrator's name (mention all, if more than one name)	
Name: Haider jehad kheder Email: Hader_000222@yahoo.com	
8. Course Objectives	
Course Objectives	provides the student with basic knowledge about oral and maxillofacial surgery as they relate to the general practitioner of dentistry. This course is an overview of the specialty of oral and maxillofacial surgery. The student is introduced to the surgical management of congenital and acquired abnormalities of the oral structures and associated parts
9. Teaching and Learning Strategies	
Strategy	Upon completing this course, students will be able to: - management of odontogenic infections, cysts and tumours of the oral tissues, as well as the role of the dentist in the early diagnosis and in the care of head and neck cancer patients. He is trained in the diagnosis and management of facial fractures, particularly emergency care as far as the general practitioner is concerned.

10. Course structure

Week	**Hours**	**Subject name**	**Required learning outputs**	**Learning method**	**Assessment method**
30	1	**Oral surgery**		**Theory clinical**	

1				Power Point	Quiz
2				Power Point	Quiz
3				Power Point	Quiz

Course Description Form

1. Course Name:	
Periodontics	
2. Course Code: DEN11530	
3. Semester / Year:	
Annual	
4. Description Preparation Date:	
2025-2026	
5. Available Attendance Forms:	
weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) + 60 hours (Practical). (one theoretical hour and two practical hours week)	
7. Course administrator's name (mention all, if more than one name)	
Name:israa hadi hashem Email: israa.hadi@alzahu.edu.iq	
8. Course Objectives	
Course Objectives	Develop a comprehensive understanding of advanced periodontal concepts, including etiology, pathogenesis, and clinical manifestations of periodontal and peri-implant diseases. evaluate cases and design appropriate preventive, non-surgical, and surgical interventions. understand the indications, contraindications, and outcomes of periodontal surgeries.
9. Teaching and Learning Strategies	
Strategy	Use PowerPoint presentations to explain complex concepts like the pathogenesis of periodontitis or surgical techniques. Incorporate clinical photographs, radiographs to enhance understanding of periodontal disease processes and treatment outcomes. Use clinic time for discussions, problem-solving, and Q&A sessions.

10. Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	1	**Periodontal examination and diagnosis** **Overall appraisal of the patient**	Medical history Dental history: Chief complaint	Power Point	Quiz
2	1	Bone loss and patterns of bone destruction	**Bone destruction caused by the extension of gingival inflammation:** **Histopathology** **Rate of bone loss**	Power Point	Quiz
3	1	Advanced diagnosis	**Normal interdental bone** **Radiographic techniques** **Bone Loss:** **Amount** **Distribution**	Power Point	Quiz
4	1	Advanced diagnosis	**Objectives of diagnosis** **Advances in periodontal probing** **Generations of periodontal probes:**	Power Point	Quiz
5	1	**Periodontal response to external forces**	**Occlusion** **Assessment of occlusion** **Adaptive capacity of the periodontium to occlusal forces**	Power Point	Quiz
6	1	**Immunology**	**Innate immunity**	Power Point	Quiz
7	1	**Immunology**	**Adaptive immunity**	Power Point	Quiz
8	1	**Tooth mobility**	**Physiologic mobility** **Pathologic mobility**	Power Point	Quiz
9	1	**Epidemiology of periodontal diseases**	**Measuring the occurrence of conditions or diseases:** **Prevalence**	Power Point	Quiz

			Risk		
10	**1**	**Determination of prognosis**	**Definitions** **Types of prognosis**	Power Point	Quiz
11	**1**	**Interrelationships of periodontal disease and therapy with other dental disciplines**	**Restorative interrelationships** **Biologic considerations:** **Margin placement and**	Power Point	Quiz
12	**1**	**Periodontal surgery. General**	**principles** **Rationale for periodontal surgery** **Indications** **Contraindication**	Power Point	Quiz
13	**1**	**Sonic and ultrasonic instrumentation and irrigation**	**Power-driven instruments:**	Power Point	Quiz
14	**1**	**Gingivectomy and local excision**	**Gingivectomy**	Power Point	Quiz
15	**1**	**Flap surgery**	**Objectives, indication, and contraindications**	Power Point	Quiz
16	**1**	**Mucogingival and aesthetic surgery**	**Techniques to increase attached gingiva:** **Gingival augmentation apical to recession:**	Power Point	Quiz
17	**1**	**Furcation: involvement and treatment**	**Anatomy of furcation area** **Root complex**	Power Point	Quiz
18	**1**	**Laser therapy**	**Laser physics and biologic interactions**	Power Point	Quiz
19	**1**	**Locally delivered, controlled-release antimicrobials**	**Objectives**	Power Point	Quiz
20	**1**	**Management of medically compromised patients**	**Cardiovascular diseases:** **Hypertension** **Angina pectoris**	Power Point	Quiz

21	**1**	**Management of medically compromised patients**	**Endocrine/metabolic disorders:** **Diabetes mellitus**	Power Point	Quiz
22	**1**	**Gingival crevicular fluid (GCF)**	**Introduction** **Permeability of junctional and sulcular epithelia** **Function**	Power Point	Quiz
23	**1**	**Dentin hypersensitivity**	**Introduction** **Epidemiology** **Etiology**	Power Point	Quiz
24	**1**	**Tissue regeneration. General principles**	**Periodontal Wound Healing** **Wound healing: Outcomes and definitions**	Power Point	Quiz
25	**1**	**Regenerative periodontal therapy**	**Regenerative capacity of bone cells**	Power Point	Quiz
26	**1**	**Reconstructive surgical techniques:**	**Non- bone graft associated new attachment:**	Power Point	Quiz
27	**1**	**Advanced regenerative approaches**	**Enamel matrix Derivatives** **Acellular dermal matrix**	Power Point	Quiz
28	**1**	**Oral implantology**	**Peri-implant anatomy and Peri-implant diseases natural tooth**	Power Point	Quiz
29	**1**	**Oral implantology**	**Implant-related complications and failure**	Power Point	Quiz
30	**1**	**Oral implantology**	**Supportive implant treatment**	Power Point	Quiz

Course Description Form

1. Course Name:	
Dental materials	
2. Course Code: DEN 11210	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
15/8/2025	
5. Available Attendance Forms:	
weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (one theoretical hours week)	
7. Course administrator's name (mention all, if more than one name)	
Name:sundus mohammad ali **Email:sundus.mohammad@alzahu.edu.iq**	
8. Course Objectives	
Course Objectives	Defining the various and numerous materials used in the field of dentistry, which are used in various branches of dentistry (prosthodontic, restorative dentistry, and orthodontics). In addition to introducing students to the best ways to use these materials to obtain the best results. Also, how to deal with different problems and medical conditions and how to find solutions by choosing the right materials for each case.
9. Teaching and Learning Strategies	
Strategy	In order for the student to be able to be familiar with all the materials used in the field of dentistry, this course studies the materials in terms of their chemical and physical properties, their components, and the method of using them to obtain the best results. The student will also be able to find solutions to the medical problems he faces by using the available materials correctly.

10.Course structure					
Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method

1	1	Introduction and physical properties of dental material	Introduction to dental materials □ Physical, chemical and biological properties of dental materials	Power Point	Quiz
2	1	Mechanical properties	Mechanical properties	Power Point	Quiz
3	1	Gypsum materials	Definition, requirement, types, □ gypsum bonded investment □ phosphate bonded investment □ ethyl silicate bonded	Power Point	Quiz
4	1	Gypsum materials		Power Point	Quiz
5	1	Impression materials	Definition □ Ideal properties of impression materials □ Classification of impression materials ✓ Non elastic impression materials ➢ Impression plaster ➢ Impression compound ➢ Zinc oxide - eugenol ✓ Elastomeric impression material	Power Point	Quiz
6	1	Impression materials		Power Point	Quiz
7	1	Impression materials		Power Point	Quiz
8	1	Impression materials		Power Point	Quiz
9	1	Impression materials		Power Point	Quiz
10	1	Waxes	□ Definition, □ Requirements, □ classification of wax according to origin & melting point, □ classification of wax according to uses, properties of dental waxes.	Power Point	Quiz
11	1	waxes		Power Point	Quiz
12	1	Polymers	Polymers and polymerization □ Definition of polymer, co-polymer, cross-link polymer and Degree of polymerization	Power Point	Quiz
13	1	Polymers		Power Point	Quiz

			Factors which control structure and properties of polymer Types of polymerization Heat activated acrylic Chemically activated resin resin compared to heat activated resins Polymers used in dentistry Processing errors		
14	1	Investment materials	factors affecting setting time, setting expansion, strength, storage and manipulation of gypsum products, and hygroscopic expansion	Power Point	Quiz
15	1	Cement materials	Classification of dental cements Definition Requirements	Power Point	Quiz
16	1	Temporary filling	Definition indication Types Requirements	Power Point	Quiz
17	1	Metal and metal alloy	Metallic denture base materials ✓ Types of metal and metal alloys ✓ Definition of alloy ✓ Requirement of casting alloy ✓ Application of dental alloy ✓ classification of metal ✓ classification of dental alloy ✓ gold foil (advantage, disadvantages)	Power Point	Quiz
18	1	Metal and metal alloy		Power Point	Quiz
19	1	Metal and metal alloy		Power Point	Quiz
20	1	Metal and metal alloy		Power Point	Quiz
21	1	Filling materials	Direct filling material Definition Factors causing loss of tooth substance	Power Point	Quiz
22	1	Filling materials		Power Point	Quiz

23	1	Filling materials	□ Requirement of an ideal filling material. □ Classification of filling material □ Anterior filling materials Disadvantages Composite filling materials composition and structure Types of composite □ Posterior filling materials Dental amalgam □ Classification of amalgam alloys □ Properties of set amalgam □ Shaping and finishing □ Mercury toxicity	Power Point	Quiz
24	1	Filling materials		Power Point	Quiz
25	1	Preventive materials	Types of Preventive materials	Power Point	Quiz
26	1	Root canal filling materials (obturating materials)	Root canal filling materials (obturating materials)	Power Point	Quiz
27	1	Finishing and polishing material		Power Point	Quiz
28	1	Relining material	Definition □ Types □ Requirements □ Indication □ Soft liners □ Types □ Requirements □ Indication □ Properties	Power Point	Quiz
29	1	Implant materials	Implant materials	Power Point	Quiz
30	1	Maxillofacial materials	Maxillofacial materials	Power Point	Quiz

11.Course Evaluation

• Midyear written exam: 15 marks • Annual pursuit: 25 marks • Final clinical exam: 20 marks • Final written exam; 40 marks	
12.Learning and Teaching Resources	
Required textbooks (curricular books, if any)	1. Craig's restorative dental materials. 2. Philips dental material.
Main references (sources)	1. Seminars. 2. Virtual Library.
Recommended books and references (scientific journals, reports...)	1. Journal of prosthetic dentistry. 2. Journal of IDA.
Electronic References, Websites	Iraq Virtual Science Library (IVSL)

Course Description Form

1. Course Name: Prosthodontics
2. Course Code: DEN 11211
3. Semester / Year: 2025-2026
Annual
4.Description Preparation Date: **15/8/2025**
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours (Theoretical) + 60 hours (Practical). (Two theoretical hours and two practical hours week)
7. Course administrator's name (mention all, if more than one name)
Name: safa abbas mohammad Email: safa.abbas@alzahu.edu.iq
8. Course Objectives

Course Objectives	• Introducing the replacement of missing teeth in general • Introducing the most important terms used in explaining the course • Clinical and practical steps for making complete dentures
9. Teaching and Learning Strategies	
Strategy	• Presenting the theoretical material and explaining it in detail through PowerPoint and educational videos • Use questions and brainstorming • Urging the student to think and solve problems by giving encouraging grades for each additional scientific participation during the practical laboratory • Create a competitive spirit through questions and homework

10.Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	1	Introduction Complete denture, Definitions, Objective of complete denture General consideration in complete denture construction		Lecture (power-point)	quiz every 2 weeks

		Complete denture component parts.			
2	1	Upper anatomical landmarks Supporting structures Limiting structures Relief areas		Lecture (power-point)	quiz every 2 weeks
3	1	Mandibular arch anatomical landmarks Supporting structures Limiting structures Relief areas		Lecture (power-point)	quiz every 2 weeks
4	1	Complete denture impression ion tray - Definition Parts of the impression tray Types of tray Stock tray – Definition Types of stock trays Factors effect in selection of stock tray		Lecture (power-point)	quiz every 2 weeks
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.		Lecture (power-point)	quiz every 2 weeks
6	1	Secondary impression - Definition Master cast- Definition Materials used for final impression Technique used for making final impression Boxing an impression and making the casts		Lecture (power-point)	quiz every 2 weeks
7	1	Temporomandibular joint (TMJ) Definition Ligaments Muscles. Mandibular axes and mandibular movements Knowledge of mandibular movements Mandibular movements		Lecture (power-point)	quiz every 2 weeks
8+9	2	Maxillomandibular relation vertical Method of recording rest vertical dimension Method of recording occlusal vertical dimension Pre – extraction records Methods without pre – extraction record		Lecture (power-point)	quiz every 2 weeks

10		Horizontal jaw relation centric and eccentric jaw relation		Lecture (power-point)	quiz every 2 weeks
11	1	Dental articulators Classification & Digital computerized articulator programming) Dental articulator Definition Functions of articulator Requirements of articulator Types of articulators. Face-bow Definition Parts and types of face – bow		Lecture (power-point)	quiz every 2 weeks
12	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		Lecture (power-point)	quiz every 2 weeks
13+14	2	Selection of anterior teeth The factors of shade, Size and form of anterior teeth		Lecture (power-point)	quiz every 2 weeks
15+16	2	Arrangement of anterior teeth Guideline of artificial teeth arrangement. Arrangement of anterior teeth Arrangement of upper and lower anterior teeth		Lecture (power-point)	quiz every 2 weeks
17	1	Selection of posterior teeth		Lecture (power-point)	quiz every 2 weeks
18+19	2	Arrangement Of Posterior Teeth Curve of Spee Compensatory curves Arrangement of lower posterior teeth Arrangement of upper posterior teeth Common errors in arrangement of teeth		Lecture (power-point)	quiz every 2 weeks
20+21	2	Occlusion in complete denture Centric occlusion Centric relation. Eccentric occlusion		Lecture (power-point)	quiz every 2 weeks
22+23	2	Waxing and Carving Complete Denture Definition Requirements of waxing the polish surfaces		Lecture (power-point)	quiz every 2 weeks

24+25	2	Processing of The Denture Flasking techniques, wax elimination, packing, curing, deflasking		Lecture (power-point)	quiz every 2 weeks
26+27	2	Occlusal Correction Selective Grinding Correction of occlusal errors Disadvantages of intra – oral correction Advantages of extra – oral correction.		Lecture (power-point)	quiz every 2 weeks
28	1	Finishing And Polishing of Complete Denture		Lecture (power-point)	quiz every 2 weeks
29	1	Repair of Complete Denture		Lecture (power-point)	quiz every 2 weeks
30	1	Relining and rebasing		Lecture (power-point)	quiz every 2 weeks

10.Course structure (practical aspect)					
Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	2	Introduction to prosthodontics definitions		Lecture (power-point)	Quizzes and practice evaluation
2+3	4	Preparation of primary casts from plaster		Lecture (power-point)	Quizzes and practice evaluation
4	1	Demonstration on stock trays and primary impression		Lecture (power-point)	Quizzes and practice evaluation
5+6	4	Demonstration and construction of special trays		Lecture (power-point)	Quizzes and practice evaluation
7	2	Finishing of special tray, border molding, boxing		Lecture (power-point)	Quizzes and practice evaluation
8	2	Upper and lower record base construction		Lecture (power-point)	Quizzes and practice evaluation
9	2	Finishing of record base		Lecture (power-point)	Quizzes and practice evaluation
10+11	4	Demonstration and construction of Occlusal rim		Lecture (power-point)	Quizzes and practice evaluation

12	2	Types of articulators, using fox bite, using face bow		Lecture (power-point)	Quizzes and practice evaluation
13	2	Mounting on articulator		Lecture (power-point)	Quizzes and practice evaluation
14+15+16	6	Arrangement of anterior teeth		Lecture (power-point)	Quizzes and practice evaluation
17+18+19	6	Arrangement of posterior teeth		Lecture (power-point)	Quizzes and practice evaluation
20+21	4	Waxing and carving of trial denture		Lecture (power-point)	Quizzes and practice evaluation
22+23	4	Flasking, wax elimination		Lecture (power-point)	Quizzes and practice evaluation
24+25	4	Packing and curing, deflasking		Lecture (power-point)	Quizzes and practice evaluation
26+27	4	Finishing and polishing		Lecture (power-point)	Quizzes and practice evaluation
28+29	4	Types of denture repair		Lecture (power-point)	Quizzes and practice evaluation
30	2	Relining and rebasing		Lecture (power-point)	Quizzes and practice evaluation

11.Course Evaluation

- Midyear written exam: 15 marks
- Annual pursuit: 25 marks
- Final clinical exam: 20 marks
- Final written exam; 40 marks

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	1. Textbook of complete denture 6th edition updated 2009. 2. Dental laboratory technology for removable prosthodontics. 3. Textbook of complete denture 6th edition updated 2009 Dental laboratory technology for removable prosthodontics
Main references (sources)	1. Textbook of complete denture 6th edition updated 2009. 2. Dental laboratory technology for removable prosthodontics.

Recommended books and references (scientific journals, reports...)	Journal of prosthetic dentistry.
Electronic References, Websites	Iraq Virtual Science Library (IVSL) Dental Clinics of north America • Articles • S. Yamashita, M. Shimizu, and H. Katada, “A newly proposed method to predict optimum occlusal vertical dimension,” Journal of Prosthodontics, vol. 24, no. 4, pp. 287–290, 2015.

Course Description Form

1. Course Name:
Prosthodontics
2. Course Code: DEN11311
3. Semester / Year: 2025-2026
Annual
4. Description Preparation Date:
13/8/2025
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours (Theoretical) + 60 hours (Practical). (one theoretical hour and two practical hours per week)
7. Course administrator's name (mention all, if more than one name)
Name: safa abbas mohammad **Email: safa.abbas@alzahu.edu.iq**
8. Course Objectives

Course Objectives	This course aims to provide students with all information related to partial denture.
9. Teaching and Learning Strategies	
Strategy	Cognitive strategy (explaining the topic), meta cognitive strategy, and social affective strategy, in addition to active learning strategy such as brain storming. In practice, the learning strategy include using models and simulation, training and using computers to show the photos and videos.

10.Course structure (theoretical)

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	**1**	Introduction to removable partial dentures		Power Point	Weekly quiz
2	**1**	Classification of partially edentulous arches		Power Point	Weekly quiz

4&3	**2**	Surveying		Power Point	Weekly quiz
5	**1**	Components of removable partial dentures		Power Point	Weekly quiz
6	**1**	Maxillary major connectors		Power Point	Weekly quiz
7	**1**	Mandibular major connectors		Power Point	Weekly quiz
8	**1**	Minor connectors		Power Point	Weekly quiz
9	**1**	Rests & rest seats		Power Point	Weekly quiz
10	**1**	Retention & removable partial denture retainers		Power Point	Weekly quiz
11	**1**	Extra coronal direct retainers (types of clasp assemblies)		Power Point	Weekly quiz
12	**1**	Intra coronal direct retainers (internal attachments , precision attachments)		Power Point	Weekly quiz
13	**1**	Stress breakers (stress equilizers)		Power Point	Weekly quiz
15& 14	**2**	Indirect retainers		Power Point	Weekly quiz
16	**1**	Laboratory procedures in RPD construction : block out & relief		Power Point	Weekly quiz
17	**1**	Laboratory procedures in RPD construction : duplication & refractory cast construction		Power Point	Weekly quiz
18	**1**	Laboratory procedures in RPD construction: wax pattern		Power Point	Weekly quiz
19	**1**	Laboratory procedures in RPD construction: casting & finishing		Power Point	Weekly quiz
20	**1**	Denture base in RPD		Power Point	Weekly quiz
21	**1**	Record bases, occlusion rims, mounting & arrangement of teeth		Power Point	Weekly quiz

23&22	**2**	Biomechanics of RPD		Power Point	Weekly quiz
25&24	**2**	Principles of RPD design		Power Point	Weekly quiz
26	**1**	Clinical phases of RPD construction		Power Point	Weekly quiz
27	**1**	Acrylic RPD		Power Point	Weekly quiz
28	**1**	Flexible RPD		Power Point	Weekly quiz
29	**1**	Repair & addition to RPD		Power Point	Weekly quiz
30	**1**	Digitally designed & fabrication process of RPD framework using CAD/CAM system		Power Point	Weekly quiz

10.Course structure (Practical)

Week	**Hours**	**Subject name**	**Required learning outputs**	**Learning method**	**Assessment method**
1	2	Introduction to removable partial dentures		Models & simulation	Assessing the work
2	2	Kennedy Classification		Models & simulation	Assessing the work
3	2	Cast trimming		Models & simulation	Assessing the work
4&5	4	Surveying		Models & simulation	Assessing the work
6&7	4	Wire bending		Models & simulation	Assessing the work
8	2	Acrylic removable partial denture design		Models & simulation	Assessing the work
9&10	4	Acrylic removable partial denture laboratory procedures		Models & simulation	Assessing the work

11	2	Flexible partial denture design		Models & simulation	Assessing the work
12, 13, &14	6	Flexible partial denture laboratory procedures		Models & simulation	Assessing the work
15 &16	4	Principles of 2D design for the RPD		Models & simulation	Assessing the work
17	2	Principles of drawing 2D design for the RPD		Models & simulation	Assessing the work
18, 19, &20	6	2D design for maxillary & mandibular arch		Models & simulation	Assessing the work
21 &22	4	Drawing RPD 3D design		Models & simulation	Assessing the work
23	2	Types of rests		Models & simulation	Assessing the work
24	2	Rest seat preparation		Models & simulation	Assessing the work
25&26	4	Block out & relief		Models & simulation	Assessing the work
27	2	Duplication of the master cast		Models & simulation	Assessing the work
28&29	4	Wax pattern for RPD framework		Models & simulation	Assessing the work
30	2	Framework fabrication		Models & simulation	Assessing the work

11. Course evaluation

A grade out of 100 is distributed to the tasks assigned to the student, such as daily and monthly exams, oral and written exams, reports, etc….
40% annual course includes daily and monthly exams, 20% practical exam, 40% final theoretical exam.

12. Teaching and learning references

Text books	Carr, A.B., Brown, D.T. (2011) McCracken's Removable Partial Prosthodontics.12th ed. St. Louis, Missouri: Mosby, Inc., Elsevier Tne.
Electronic references, websites	Phoenix, R.D., Cagna, D.R., Defreest, C.F. (2008). Stewart's Clinical Removable Partial Prosthodontics. Phoenix, 4" ed, Quintessence Publishing Co, Inc.

Course Description Form

1. Course Name:	
Prosthodontics	
2. Course Code:	
433PR	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
11/8/2025	
5. Available Attendance Forms:	
weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) + 60 hours (Practical). (One theoretical hours and two practical hours week)	
7. Course administrator's name (mention all, if more than one name)	
Name: Aseel Fatlawee Kumail **Email: aseelfatlawee@gmail.com**	
8. Course Objectives	
Course Objectives	Knowledge of prosthetic principles clinical and laboratory fabrication of removable complete denture
9. Teaching and Learning Strategies	
Strategy	Theoretically and laboratory steps of fabrication of removable complete denture and training of making artificial replacement of removable complete denture.

10.Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	1	Anatomy and physiology as related to dental prosthesis(osteology)	To know the Anatomy and physiology as related to dental prosthesis(osteology)	Power Point	Quiz &clinic
2	1	Anatomy and physiology as related to dental prosthesis (Myology)	know the Anatomy and physiology as related to dental prosthesis (Myology)	Power Point	Quiz

3	**1**	Diagnosis and treatment plan for RPD	Learn how can Diagnosis and treatment plan for RPD	Power Point	Quiz & clinic
4	**1**	To be continued Diagnosis and treatment	Learn how can Diagnosis and treatment plan for RPD	Power Point	Quiz &clinic
5	**1**	Preparation of the mouth to receive an RPD	Learn Preparation of the mouth to receive an RPD	Power Point	Quiz & clinic
6	**1**	Preparation of the mouth to receive an RPD (Continued).	Learn Preparation of the mouth to receive an RPD	Power Point	Quiz & clinic
7	**1**	Classification of impression technique	Learn how can Classify the impression technique	Power Point	Quiz & clinic
8	**1**	Classification of impression technique (To be continue)	Learn how can Classify the impression technique	Power Point	Quiz& clinic
9	**1**	Designing Support	Learn how Designing Support	Power Point	Quiz
10	**1**	Fitting the removable partial denture framework	Learn Fitting the removable partial denture framework	Power Point	Quiz
11	**1**	Occlusal Relationship for Removable Partial Denture	Learn Occlusal Relationship for Removable Partial Denture	Power Point	Quiz& clinic
12	**1**	Jaw relation in RPD	Learn how can take Jaw relation in RPD	Power Point	Quiz& clinic
13		Trial RPD	Learn how we can do Trial RPD	Power Point	Quiz& clinic
14	**1**	Initial placement and adjustment of RPD	Learn how we can do Initial placement and adjustment of RPD	Power Point	Quiz& clinic
15	**1**	Pre- prosthetic surgery	To know the type of Pre-prosthetic surgery	Power Point	Quiz
16	**1**	Pre-prosthetic Surgical Considerations (Continued).	To know the type of Pre-prosthetic surgery	Power Point	Quiz
17	**1**	Diagnosis and treatment plan CD	Learn how can Diagnosis and treatment plan CD	Power Point	Quiz& clinic
18	**1**	To be continued diagnosis and treatment plan for CD	Learn how can Diagnosis and treatment plan CD	Power Point	Quiz& clinic

19	**1**	Impression in CD	Learn how can take Impression in CD	Power Point	Quiz& clinic
20	**1**	TMJ and mandibular movement.	Know the TMJ and mandibular movement.	Power Point	Quiz
21	**1**	Digital RPD	Know the Digital RPD	Power Point	Quiz
22	**1**	Vertical jaw relation	Learn the Vertical jaw relation	Power Point	Quiz& clinic
23	**1**	Horizontal jaw relation (Centric occlusion)	Learn the Horizontal jaw relation (Centric occlusion)	Power Point	Quiz& clinic
24	**1**	Try in stage in CD	Learn how can take Try in stage in CD	Power Point	Quiz& clinic
25	**1**	Insertion of CD	Learn the steps of Insertion of CD	Power Point	Quiz& clinic
26	**1**	Adjustments of CD	Learn how we can do Adjustments of CD	Power Point	Quiz& clinic
27	**1**	Post insertion complications in CD	Know the Post insertion complications in CD	Power Point	Quiz
28	**1**	relining and rebasing of CD	Learn how we can do relining and rebasing of CD	Power Point	Quiz
29	**1**	Repair of fractured RPD	Learn how we can Repair of fractured RPD	Power Point	Quiz& clinic
30	**1**	Esthetic denture materials	Know the Esthetic denture materials	Power Point	Quiz

11.Course Evaluation

- Midyear written exam: 15 marks
- Annual pursuit: 25 marks
- Final clinical exam: 20 marks
- Final written exam; 40 marks

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	• Carr, A.B. and Brown, D.T., 2010. McCracken's removable partial prosthodontics-e-book. Elsevier Health Sciences . • Phoenix, R.D., Cagna, D.R. and DeFreest, C.F., 2012.

Course Description Form

1. Course Name:	
prosthodontic	
2. Course Code: DEN11511	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
11/8/2025	
5. Available Attendance Forms:	
weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) + 60 hours (Practical). (One theoretical hours and two practical hours week)	
7. Course administrator's name (mention all, if more than one name)	
Name: Aseel Fatlawee Kumail **Email: aseelfatlawee@gmail.com**	
8. Course Objectives	
Course Objectives	Theoretical and practical training in complete and immediate denture construction, and dental implantology for patients with tooth loss due to aging, diseases, or accidents. Additionally, students learn conventional and modified impression techniques and dental implant placement under supervision**.**
9. Teaching and Learning Strategies	
Strategy	Teaching students about dental impression materials, removable dentures, and comprehensive treatment for patients with tooth loss. Also, explaining the relationship between dentures, speech, and jaw joint problems, and discussing dental implant types and their importance in preserving jawbone integrity.

10. Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	**1**	Occlusion in complete denture	Learn about occlusion in complete denture	Power point	Clinical application and quiz
2	**1**	Occlusion in complete denture	Learn about occlusion in complete denture	Power point	Clinical application and quiz
3	**1**	Retention ,stability and support	Learn about Retention ,stability and support	Power point	Clinical application and quiz
4	**1**	Retention ,stability and support	Learn about Retention ,stability and support	Power point	Clinical application and quiz
5	**1**	Post insertion problem	Learn how to overcome the Post insertion problem	Power point	Clinical application and quiz
6	**1**	Post insertion problem	Learn how to overcome the Post insertion problem	Power point	Clinical application and quiz
7	**1**	Complication of complete denture	Learn how to overcome the Complication of complete denture	Power point	Clinical application and quiz
8	**1**	Complication of complete denture	Learn how to overcome the Complication of complete denture	Power point	Clinical application and quiz
9	**1**	Immediate denture	Learn how to make Immediate denture	Power point	Clinical application and quiz
10	**1**	Immediate denture	Learn how to make Immediate denture	Power point	Clinical application and quiz
11	**1**	Classification system of c. denture	Learn how to classify CD patient	Power point	Clinical application and quiz

12	**1**	Classification system of c. denture	Learn how to classify CD patient	Power point	Clinical application and quiz
13	**1**	Posterior palatal seal area	Learn how to seal CD palatal	Power point	Clinical application and quiz
14	**1**	Posterior palatal seal area	Learn how to seal CD palatal	Power point	Clinical application and quiz
15	**1**	Single CD	Learn student about combination syndrome	Power point	Clinical application and quiz
16	**1**	Single CD	Learn student about combination syndrome	Power point	Clinical application and quiz
17	**1**	Geriatric dentistry	Learn how to diagnose and management patient	Power point	Clinical application and quiz
18	**1**	Maxillofacial prosthesis	Learn student about obturator	Power point	Clinical application and quiz
19	**1**	Maxillofacial prosthesis	Learn student about obturator	Power point	Clinical application and quiz
20	**1**	Residual ridge resorption	Learn how to treat ridge resorption	Power point	Clinical application and quiz
21	**1**	Residual ridge resorption	Learn how to treat ridge resorption	Power point	Clinical application and quiz
22	**1**	Dental implant	Learn student about dental implantation	Power point	Clinical application and quiz
23	**1**	Dental implant	Learn student about dental implantation	Power point	Clinical application and

					quiz
24	**1**	Esthetic In CD	Learn how to deal with patient from esthetic view	Power point	Clinical application and quiz
25	**1**	Ideal material for dental implant	Learn about titanium and dental material	Power point	Clinical application and quiz
26	**1**	Copy denture	Learn how to make new denture from old denture	Power point	Clinical application and quiz
27	**1**	Over denture	Learn how to benefit from root in complete denture	Power point	Clinical application and quiz
28	**1**	Neutral zone	Learn how to retain denture in neutral zone	Power point	Clinical application and quiz
29	**1**	Attachment in over denture	Learn how to make mechanical attachment by dental implant	Power point	Clinical application and quiz
30	**1**	Attachment in over denture	Learn how to make mechanical attachment by dental implant	Power point	Clinical application and quiz

Course Description Form

1. Course Name:	
Community Dentistry	
2. Course Code: DEN 11320	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
12/8/2025	
5. Available Attendance Forms:	
Weekly as theoretical lectures and practical lab	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) + 60 hours (Practical). (1 theoretical hours and two practical hours week)	
7. Course administrator's name (mention all, if more than one name)	
Name: Abrar Ali Ahmed **Email: dent.abrar1994@alzahu.edu.iq**	
8. Course Objectives	
Course Objectives	It aims to introduce students to the principles of public health and the role of dentistry in promoting oral and dental health at the individual and community levels. The course highlights the analysis of factors affecting oral health, methods of preventing oral diseases, and designing health awareness programs. It also focuses on developing scientific research skills and understanding health policies related to dentistry to improve community care.
9. Teaching and Learning Strategies	
Strategy	Strategies are based on interactive lectures to present theoretical information in attractive ways, project-based learning to analyze real health problems and propose practical solutions, enhancing learning through discussion and exchange of ideas. In addition to practical and field training to apply knowledge in real environments and visit health centers and local communities to study health needs. Education also includes laboratory work to simulate health conditions with the aim of linking the theoretical aspect with the practical.

10.Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	1	Dental public health	Learn about the community dentistry and tools of dental public health	Power point	Quiz
2	1	Dental public care	Learn how to plan dental care for patient and community	Power point	quiz
3	1	Epidemiology	Learn about the epidemiology and it objectives and how to measure it	Power point	quiz
4	1	Epidemiological studies	Learn about the types of studies and how to choose the right one	Power point	Clinical work and quiz
5	1	Experimental studies	Learn about the Experimental studies	Power point	Quiz
6	1	Epidemiology of dental caries	Definition of dental caries - Epidemiology -Etiological factors of dental caries - Factors affecting epidemiology of dental caries	Power point	Quiz
7	1	Epidemiology of Periodontal Disease	-Periodontal Diseases definition -Structure of the periodontal tissues -Epidemiology -Etiology of periodontal disease	Power point	Quiz
8	1	Epidemiology of Oral Cancer	Learn about the types of cancers and it etiology and the prevention level.	Power point	Quiz
9	1	Dental indices	Learn about Index, Uses of dental index, Classification of indices	Power point	Quiz
10	1	Indices used for assessment of dental caries	Learn about DMF index, Principles in recording DMF index, Calculation of DMFT/DMFS	Power point	Quiz
11	1	Indices used for assessment of periodontal disease	Learn about Gingival inflammation indices and Periodontal indices	Power point	Quiz

12	1	Dental fluorosis	Learn about Indices for assessment of dental fluorosis	Power point	Quiz
13	1	Biostatistics	Learn about Types of data, Methods of Data Collection, Sampling Technique, Types of sample design	Power point	Quiz
14	1	Data presentation	Learn about Methods of data presentation, The tabulation of data	Power point	Quiz
15	1	Measures of central tendency & dispersion	Learn how to Measures of central tendency and Measures of dispersion	Power point	Quiz
16	1	Fluoridation as a public health measure	Learn about the Sources of Fluoride, Water fluoridation, Types of fluoride	Power point	Quiz
17	1	Fluoridation Mechanism and Effects	Learn about Anti-caries effects of fluoride and Side effects of fluoride	Power point	Quiz
18	1	Occupational hazards in dentistry	Learn about -Biological health hazards. -Physical hazards -Chemical hazards	Power point	Quiz
19	1	Environment and health	Learn about Physical, Biological and Psychological environment	Power point	Quiz
20	1	Effects of air pollution on health	Learn about Prevention and control of air pollution, Effects of radiation and Noise pollution	Power point	Quiz
21	1	School Dental Health Program	Learn about Purpose of School Health Program and Guidelines for an ideal school dental program	Power point	Quiz
22	1	Treatment need and demand	Learn about Need and Factors affecting dental demands	Power point	Quiz
23	1	Dental manpower	Learn about Dental health manpower planning and Steps in dental health manpower planning	Power point	Quiz
24	1	Ethics in dentistry	Learn about ethics and Ethical principles	Power point	Quiz
25	1	Oral health care for special populations	Learn about oral health of Elderly people, Pregnant women and Patients with special health care needs	Power point	Quiz

26	1	Forensic dentistry	Learn about the application of forensic dentistry like Bit marks And Person identification.	Power point	Quiz
	1	Dental auxiliary personal	Learn about Dental auxiliary classification	Power point	Quiz
	1	Primary health care	Learn about Principles of Primary health care and Community dental health services	Power point	Quiz
	1	Infection control	Learn about Concept of disease transmission and Transmission of infectious diseases	Power point	Quiz
	1	Dental health education	Learn about Aims of health education and Objective of health education	Power point	Quiz

11-Course Evaluation	
• Midyear written exam: 15 marks • Annual pursuit: 25 marks • Final clinical exam: 20 marks • Final written exam; 40 marks	
12-Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Harris NO, Garcia-Godoy F. Primary Preventive Denti 6th edition, Publisher: Julie Levin Alexander, 2004.
Main references (sources)	Hiremath SS. Textbook of Preventive and Commu Dentistry. Elsevier, New Delhi India, 2007.
Recommended books and references (scientific journals, reports…)	1. Community Dental Health Journal 2. Journal of Int Soc Prevent Community Dent
Electronic References, Websites	onlinelibrary.wiley.com/journal

Course Description Form

1. Course Name:
Orthodontic
2. Course Code: DEN11428
3. Semester / Year: 2025-2026
Annual
4. Description Preparation Date:
11/8/2025
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours (Theoretical) + 60 hours (Practical). (One theoretical hours and two practical hours week)
7. Course administrator's name (mention all, if more than one name)
Name: Tiba Sajad Mohsen teeba.sajad@alzahu.edu.iq
8. Course Objectives

Course Objectives	Theoretical and practical education for dental, facial and jaws examinations for patients suffering from malocclusion as well as cosmetic problems. In addition, teach them how to design a treatment plan and definition of types of orthodontic appliances. As well as treating the patients seeking orthodontic treatment by the students under our supervision.
9. Teaching and Learning Strategies	
Strategy	The definition of different types of orthodontic appliances and the theoretical and practical explanation of the steps to treat patients suffering from malocclusion. In addition to the definition of the problems that can be encountered during the work of orthodontic appliances and how to avoid them and ways to correct them if they occur and the identification of materials and tools that can be used and help to do a perfect work.

10.Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method

1	**1**	**Introduction** - Definition of orthodontics -Definition of occlusion, normal, ideal and malocclusion	Learn on to terms of orthodontics	**Power point**	**quiz**
2	**1**	- Six keys of normal occlusion Aims of orthodontic treatment	Learn the methods of examination	**Power point**	**Quiz**
3	**1**	- Important orthodontic definitions Classification of malocclusion	Learn how to diagnose the classification of malocclusion	**Power point**	**quiz**
4	**1**	**Growth and development** - Definitions of growth, development and maturity Stages of development (ovum till birth)	Learn about medical terms of growth and development	**Power point**	**Quiz**
5	**1**	- Theories of bone growth Definitions of growth site, growth center, displacement, and drift	Information about theories on growth and development	**Power point**	**Quiz**
6	**1**	- Growth curve and maximum growth spurt Prenatal and postnatal growth and development of hard tissues	Learn about mode of growth in skeleton in human beings prenatal and postnatal	**Power point**	**Quiz**
7	**1**	- Prenatal and postnatal growth and development of soft tissues Developmental anomalies	Information about soft tissue growth and anomalies	**Power point**	**Quiz**
8	**1**	- Jaw rotation Compensation and adaptation	Information about the direction of growth	**Power point**	**Quiz**
9	**1**	-Principle of genetics in relation to malocclusion	Learn on the principles of genetic	**Power point**	**Quiz**
10	**1**	Development of occlusion a. new born oral cavity. b. deciduous dentition stage- dental changes until 6 years	Information about occlusion in new born and deciduous dentition	**Power point**	**Quiz**
11	**1**	c. Early mixed dentition stage - eruption of first molars and incisors. d. Late mixed dentition stage - eruption of canines and premolars Permanent dentition - eruption second	Information about occlusion in mixed dentition	**Power point**	**Quiz**

		and third molars.			
12	**1**	**Deciduous and permanent dentition** a-Stages of tooth development: (Formation, calcification and root completion)	Information about occlusion in permanent dentition	**Power point**	**Quiz**
13	**1**	b-Tooth eruption (stages and theories): Sequences and timing	Information about tooth development stages	**Power point**	**Quiz**
14	**1**	**Tooth movement** a. Tissue changes associated with tooth movement: i. Histology of periodontium ii. Theories of tooth movement b. Accelerated tooth movement.	Learn about mechanism of bone remodeling	**Power point**	**Quiz**
15	**1**	c. Biomechanics i. Force (application, type, magnitude, duration and direction) ii. Center of resistance and rotation, moment of force and moment of couple. iii. Types of tooth movement iv. Rate of tooth movement and factors affecting it.	Information about amount of the force and how to apply	**Power point**	**Quiz**
16	**1**	d. iatrogenic effect of tooth movement (pain, mobility, pulp effect, root resorption, white spot lesions).	Learn about side effect of orthodontic treatment	**Power point**	**Quiz**
17	**1**	Etiology of malocclusion:	Information of etiological factors	**Power point**	**Quiz**
18	**1**	-Classification of etiological factors a. General factors i. Skeletal factors	Learn about the causes of malocclusion in general and skeletal	**Power point**	**Quiz**
19	**1**	ii. Soft tissue factors	Learn about the causes of malocclusion in soft tissues	**Power point**	**Quiz**

20	**1**	iii. dental factors	Learn about the causes of malocclusion dentally	**Power point**	**Quiz**
21	**1**	b. Local factors (definitions without treatment)	Learn about the causes of malocclusion locally	**Power point**	**Quiz**
22	**1**	Orthodontic appliances a. Overview: i. passive orthodontic appliances (habit breaker, retainer and space maintainer) ii. ii. active orthodontic appliances (removable, fixed, orthopedic and myofunctional, and combination) iii. Other active appliances: space regainer, Invisalign	Information about the types of orthodontic appliances	**Power point**	**Quiz**
23	**1**	b. Removable Orthodontic Appliance: i. Properties of various components (SS wire, acrylic) ii. Components: 1) active components (springs, screws and elastics) 2) retentive components (clasps) 3) acrylic base plate and bite planes 4) anchorage	Learning about components of removable orthodontic appliances	**Power point and laboratory work**	**Quiz**
24	**1**	iii. Design of a removable orthodontic appliance iv. Construction of a removable orthodontic appliance v. Soldering and welding vi. Post-insertion instructions and guidelines	Learn about how to construct the orthodontic appliance in labratorary	**Power point and laboratory work**	**Quiz**
25	**1**	c. Fixed orthodontic appliance: Types, components, advantages, limitation.	Information about fixed orthodontic appliances	**Power point**	**Quiz**

26	**1**	*continue* Fixed orthodontic appliance: biomechanics, banding vs. bonding, lin orthodontics.	Information about fixed orthodontic appliances	**Power point**	**Quiz**
27	**1**	**Anchorage**: definition, indications, types, extra-oral, TADs.	Information about terms of anchorage	**Power point**	**Quiz**
28	**1**	d. Orthopedic and Myofunctional appliance: Types, components, advantages, limitation, mode of action	Learn about the myofunctional appliance	**Power point**	**Quiz**
29	**1**	*continue* Orthopedic and Myofunctional appliance: Types, components, advantages, limitation, mode of action	Learn about the myofunctional appliance types and mode of action	**Power point**	**Quiz**
30	**1**	f. Retention and retainers Retention (definition, reason, time) Retainers (Hawley, clear overlay, positioners, permanent fixation, precision)	Information about retention and types of it in orthodontic	**Power point**	**Quiz**

11- Course Evaluation

- Midyear written exam: 15 marks
- Annual pursuit: 25 marks
- Final clinical exam: 20 marks
- Final written exam; 40 marks

12- Learning and Teaching Resources

Required textbooks (curricular books, if any)	An Introduction to Orthodontics. 5TH. Edition Simon Littlewoods and Laura Mitchell.2019
Main references (sources)	Orthodontics: principles and practice /2nd. Edition 2017
Recommended books and references (scientific journals, reports...)	American journal of orthodontics and dent facial orthopedic, 2. Angle orthodontics, journal of clinical orthodontics
Electronic References, Websites	Google .com

Course Description Form

1. Course Name:	
Orthodontic	
2. Course Code: DEN11528	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
11/8/2025	
5. Available Attendance Forms:	
Weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) + 60 hours (Practical). (One theoretical hours and two practical hours week)	
7. Course administrator's name (mention all, if more than one name)	
Name: karar Hamid Ali **Email:karar.hameed@alzahu.edu.iq**	
8. Course Objectives	
Course Objectives	Theoretical and practical education for dental, facial and jaws examinations for patients suffering from malocclusion as well as cosmetic problems. In addition, teach them how to design a treatment plan and definition of types of orthodontic appliances. As well as treating the patients seeking orthodontic treatment by the students under our supervision.
9. Teaching and Learning Strategies	
Strategy	The definition of different types of orthodontic appliances and the theoretical and practical explanation of the steps to treat patients suffering from malocclusion. In addition to the definition of the problems that can be encountered during the work of orthodontic appliances and how to avoid them and ways to correct them if they occur and the identification of materials and tools that can be used and help to do a perfect work.

10. Course structure					
Week	**Hours**	**Subject name**	**Required learning outputs**	**Learning method**	**Assessment method**

1	**1**	Diagnosis and Clinical examination	Learn how to diagnose examine malocclusion	Power point and direct clinical work	Quiz
2	**1**	Face examination in 3 dimensions	Learn how to examine the face in all dimensions	Power point and direct clinical work	Clinical work and quiz
3	**1**	Diagnostic records	Learn the benefits of diagnostic records	Power point and direct clinical work	Quiz
4	**1**	Cephalometric Orthopantomography	Learn the general guidelines of using x-ray in orthodontic diagnosis	Power point and direct clinical work	Direct work on cephalogr ame
5	**1**	Study models	Learn the benefits using study models in orthodontic diagnosis	Power point and direct clinical wo.	Lap work and quiz
6	**1**	Photography 3D imaging	Learn how to do photography and 3D imaging in scientific ways	Power point and direct clinical work	Direct work in clinic
7	**1**	Treatment planning	Learn how to get a definite treatment plan from data collected	Power point	Quiz
8	**1**	Space analysis, Bolton's ratio	Learn how to Analysis the space available and space required	Power point and direct clinical work	Direct work in lap
9	**1**	Teeth extraction in orthodontics	Learn when and where we can do tooth extraction and why	Power point	Quiz
10	**1**	Treatment of Medically compromised patients	Learn how to treat medically compromised patients	Power point	Quiz
11	**1**	Oral habits and their management	Learn how to treat patient with bad oral habit, its etiology and their effects	Power point	Quiz
12	**1**	Treatment of Class I malocclusion	Learn how to diagnose and management cl I malocclusion	Power point	Quiz
13	**1**	Treatment of Class II div 1 malocclusion	Learn how to diagnose and management cl II div 1 malocclusion	Power point	Quiz
14	**1**	Treatment of Class II div 2 malocclusion	Learn how to diagnose and management cl II div 2 malocclusion	Power point	Quiz
15	**1**	Treatment of Class III malocclusion	Learn how to diagnose and management cl III malocclusion	Power point	Quiz

16	**1**	Microimplant Anchorage in Orthodontics	Learn the types and uses of microimplant anchorage	Power point	Quiz
17	**1**	Crossbite	Learn how to diagnose and management crossbite	Power point	Quiz
18	**1**	Open bite	Learn how to diagnose and management open bite	Power point	Quiz
19	**1**	Treatment of common local factors:	Learn how to diagnose common local factors of malocclusion and the management of each of them	Power point	Quiz
20	**1**	Treatment of adults-Periodontal problems	Learn how to treat malocclusion in adult patient and the associated problems	Power point	Quiz
21	**1**	Orthognathic surgery	Learn how to diagnose and treat patient severe skeletal malocclusion	Power point	Quiz
22	**1**	Retention	Learn how to retain the final results of treatment, types of retainer and their uses	Power point	Quiz
23	**1**	Anchorage	Learn the types of anchorage and when we must used	Power point and direct work on typo dent	Quiz
24	**1**	Mixed dentition problems	Learn how to deal with mixed dentition problems	Power point	Quiz
25	**1**	Facial esthetics	Learn how to diagnose and use the deferent methods to get the facial esthetics	Power point	Quiz
26	**1**	Canines	Learn the guidelines in diagnosis and management impacted canine	Power point	Quiz
27	**1**	Maxillary expansion	Learn the types of maxillary expansion and when we should use each type	Power point	Quiz
28	**1**	Cleft lip and palate	Learn how to diagnose and management deferent types of cleft lip and palate	Power point	Quiz
29	**1**	*Continue..* cleft lip and palate	Learn how to diagnose and management deferent types of cleft lip and palate	Power point	Quiz
30	**1**	Digital orthodontics	Learn how to use the digital orthodontics to enhance the outcome of orthodontic treatment	Power point	Quiz

11. Course evaluation			
	Practical	Theory	Total
First	7.5	12.5	20
Second	7.5	12.5	20
Final exam	20	40	60
Total	35	65	100

12- Learning and Teaching Resources	
Required textbooks (curricular books, if any)	An Introduction to Orthodontics 2023
Main references (sources)	T D foster Text book of orthodontist 1985, 2nd ed.
Recommended books and references (scientific journals, reports...)	American journal of orthodontics and dentofa orthopedics.
Electronic references	Textbook of Orthodontics (Singh, 2019) Contemporary Orthodontics, 6th Edition Recent researches from the Scopus and Clarivate data base

Course Description Form

1. Course Name:	
Pediatric dentistry	
2. Course Code: DEN11429	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
11/8/2025	
5. Available Attendance Forms:	
Daily at theoretical lectures and clinical practice	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) + 75 hours (Practical). (1 theoretical hours and 2.5 practical hours week)	
7. Course administrator's name (mention all, if more than one name)	
Name: Rihab Abd-al-Hussain **Email:** rihab.ali@alzahu.edu.iq	
8. Course Objectives	
Course Objectives	Providing students with the basic concepts of pediatric dentistry, diagnostic methods, and providing appropriate treatment for each case through a correct understanding of the patient's medical history. It also aims to guide students and provide them with complete knowledge of all treatment methods and to choose the appropriate method and material for each patient in a scientific and safe manner.
9. Teaching and Learning Strategies	
Strategy	The following strategies are used to teach pediatric dentistry: Interactive learning, which involves engaging students in discussions and questions for a deeper understanding of the material; Case-based learning, which focuses on the analysis of realistic clinical cases to apply theoretical knowledge in practice; Practical training and supervision, to develop skills in clinical setting under direct supervision; and Problem-based learning, which encourages critical thinking and solving clinical challenges through teamwork. These strategies help prepare students for safe and effective practice in pediatric dentistry.

10.Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	1	Diagnosis and treatment planning	Learn how to do proper diagnosis	Power point and direct clinical work	Quiz
2	1	Preliminary medical and dental history	Learn to take history of patient	Power point and direct clinical work	Clinical work and quiz
3	1	Art and science of behavior management	Learn how to manage child behavior	Power point and direct clinical work	Clinical work and quiz
4	1	Non pharmacologic management of patient behavior	Learn hoe chose the right method to manage child behavior	Power point and direct clinical work	Clinical work and quiz
5	1	Pharmacologic management of patient behavior	Learn how chose the right pharmacologic method	Power point	Quiz
6	1	Sedation in pediatric dentistry	Learn about the sedative agent in dentistry	Power point	Quiz
7	1	Management of traumatic injuries to the teeth and supporting tissue of children	Learn to manage traumatic injuries to teeth	Power point	Quiz
8	1	Classification of injuries of the primary teeth and it effect on permanent teeth	Learn how to classify the injuries to teeth.	Power point	Quiz
9	1	Traumatic injuries of the primary teeth and it effect on the permanent teeth	Learn about the effect of the injury on the permanent teeth	Power point	Quiz
10	1	Treatment of injury of permanent teeth, emergency treatment, temporary restoration	Learn about injures of the permanent teeth	Power point	Quiz
11	1	Advance in pediatric dentistry: advance in diagnostic aids, advances in cavity preparation methods	Learn about the advance pediatric dentistry	Power point	Quiz
12	1	Advances in endodontics, advances in local anesthesia	Learn about advance in local anesthesia	Power point	Quiz
13	1	Advance in restorative materials, advance in surgical	Learn about advances in restorative procedure	Power point	Quiz

		procedures, miscellaneous			
14	1	Acquired disturbances of oral structures	Learn about acquired disturbance	Power point	Quiz
15	1	Developmental disturbance of oral structures	Learn about Developmental disturbance	Power point	Quiz
16	1	Gingivitis and periodontal disease in children	Learn about of Gingivitis and periodontal disease in children	Power point	Quiz
17	1	Acute candidacies(thrush), acute bacterial infection, chronic non specific gingivitis, gingival disease modified by systemic factors	Learn about Acute candidacies(thrush), acute bacterial infection	Power point	Quiz
18	1	Gingival lesions of genetic origin, ascorbic acid deficiency gingivitis	Learn about Gingival lesions	Power point	Quiz
19	1	Periodontal disease in children, early onset periodontitis, prepubertal periodontitis, localized juvenile periodontitis	Learn about Periodontal disease in children	Power point	Quiz
20	1	Papillon-lefever syndrome, gingival recession, extrinsic satin and deposits on teeth.	Learn about syndrome and g. recession and stain	Power point	Quiz
21	1	Management of space problems, planning for space maintenance, loss of primary incisors	Learn about space problems, and space maintenance	Power point	Quiz
22	1	Space maintenance for the first and second primary molar and the primary canine are, premature loss of second primary molar	Learn how to maintain the molar space	Power point	Quiz
23	1	Loss of second primary molar before eruption of the first permanent molar, areas of multiple primary molar loss	Learn how to manage multiple tooth loss	Power point	Quiz
24	1	Development of dental arch and occlusion	Learn about occlusion development	Power point	Quiz
25	1	Arch length analysis	Learn how analyses the arch length	Power point	Quiz
26	1	Dental problems of the disabled child	Learn about problems of the disabled child	Power point	Quiz
27	1	Mental disability, down syndrome, intellectual disability, learning disability	Learn about Mental disability, down syndrome, intellectual disability, learning	Power point	Quiz

			disability		
28	1	Fragile x syndrome, cerebral palsy, autism.	Learn Fragile x syndrome, cerebral palsy, autism	Power point	Quiz
29	1	Respiratory diseases, hearing loss, visual impairment, epilepsy	Learn Respiratory diseases, hearing loss, visual impairment, epilepsy	Power point	Quiz
30	1	Heart disease, hemophilia, sickle cell anemia, viral hepatitis, AIDS, children with systemic diseases	Learn Heart disease, hemophilia, sickle cell anemia, viral hepatitis, AIDS, children with systemic diseases	Power point	Quiz

11- Course Evaluation	
• Midyear written exam: 15 marks • Annual pursuit: 25 marks • Final clinical exam: 20 marks • Final written exam; 40 marks	
12- Learning and Teaching Resources	
Required textbooks (curricular books, if any)	McDonald and Avery Dentistry for the Child and Adolescent .2011 (Ninth Edition) ISBN 978-0-323- 28745-6, MOSBY ELSEVIER3251 Riverport LaneMaryland Heights, Missouri 63043.
Main references (sources)	Handbook of Pediatric Dentistry .2013Fourth edition 20 ISBN 9780723436959, British Library Cataloguing Publication Data
Recommended books and references (scientific journals, reports...)	European Journal of pediatric dentistry
Electronic References, Websites	Google .com

Course Description Form

1. Course Name:	
Preventive Dentistry	
2. Course Code: DEN11523	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
13/8/2025	
5. Available Attendance Forms:	
Weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) + 75 **hours (Practical). (One theoretical hours and two and half hours week practical)**	
7. Course administrator's name (mention all, if more than one name)	
Name: Rihab Abd-al-Hussain **Email: rihab.ali@alzahu.edu.iq**	
8. Course Objectives	
Course Objectives	Theoretical and practical education on the steps of dental examination for children and patients with special needs. Learn to treat various cases of fillings, extractions, and other children's dental treatments, and learn ways to protect teeth from decay and apply fluoride and preventive fillings.
9. Teaching and Learning Strategies	
Strategy	Introducing the types of materials and different treatment methods and theoretical and practical explanation of the different steps of treating children's teeth. In addition to introducing the problems that may be encountered while working and dealing with children, how to avoid them, and ways to correct them if they occur, and introducing the materials and tools that can be used that help in mastering the work.

10.Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	**1**	Prevention of oral diseases (introduction)		Power point	Quiz
2	**1**	Dental caries development		Power point	Clinical work and quiz
3	**1**	Diagnosis of dental caries		Power point	Quiz
4	**1**	Fluoride in Dentistry		Power point	Direct work on patient
5	**1**	Fluorides in prevention and controlling dental caries		Power point	Quiz
6	**1**	Topical fluoride therapy Professionally applied fluoride		Power point	Direct work in clinic
7	**1**	Topical fluoride therapy :Self- applied fluoride		Power point	Quiz
8	**1**	Safety and toxicity of fluoride		Power point	Direct work on patient
9	**1**	Dental sealants		Power point	Direct work on patient
10	**1**	New approach in restorative dentistry		Power point	Quiz
11	**1**	Microbiology of dental caries		Power point	Quiz
12	**1**	Saliva and host defense mechanism		Power point	Quiz
13	**1**	Caries risk assessment		Power point	Direct work on patient
14	**1**	infection control		Power point	Quiz
15	**1**	Oral hygiene measures (Mechanical)		Power point	Quiz
16	**1**	Oral hygiene measures (Chemical)		Power point	Quiz
17	**1**	Diet and dental caries		Power point	Quiz
18	**1**	Non- sugar sweeteners		Power point	Quiz
19	**1**	Dietary counseling in dental practice		Power point	Quiz
20	**1**	Nutrition and dental health		Power point	Quiz
21	**1**	Prevention of periodontal disease and oral cancer by nutrition		Power point	Quiz
22	**1**	Probiotics and dental health		Power point	Quiz
23	**1**	Diagnosis and prevention of dental erosion		Power point	Quiz

24	**1**	Prevention of malocclusion		Power point	Quiz
25	**1**	preventive measure for population with developmental disabilities		Power point	Quiz
26	**1**	preventive treatment strategies for medically compromised populations		Power point	Quiz
27	**1**	Ozone in the prevention of dental diseases		Power point	Quiz
28	**1**	Geriatric dentistry		Power point	Quiz
29	**1**	Implant care		Power point	Quiz
30	**1**	Protection of the dentition		Power point	Quiz

11- Course Evaluation

- Midyear written exam: 15 marks
- Annual pursuit: 25 marks
- Final clinical exam: 20 marks
- Final written exam; 40 marks

12- Learning and Teaching Resources

Required textbooks (curricular books, if any)	Harris NO, Garcia-Godoy F. Primary Preventive Dentistry edition, Publisher: Julie Levin Alexander, 2004.
Main references (sources)	Hiremath SS. Textbook of Preventive and Community Dentistry. Elsevier, New Delhi India, 2007.
Recommended books and references (scientific journals, reports...)	1. Community Dental Health Journal 2. Journal of Int Soc Prevent Communit Dent
Electronic References, Websites	onlinelibrary.wiley.com/**journal**

Course Description Form

1. Course Name:	
Oral Histology and Embryology	
2. Course Code:	
DEN 11216 DEN 11212	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
15/8/2025	
5. Available Attendance Forms:	
Lectures (Theory) + Labs (Practical, Weekly)	
6. Number of Credit Hours (Total) / Number of Units (Total)	
60 hours (Theoretical) + 60 hours (Practical). (Two theoretical hours and three practical hours week) FOR Emberyology 60 hours (Theoretical) + 60 hours (Practical). (Two theoretical hours and three practical hours week) FOR Oral Pathology	
7. Course administrator's name (mention all, if more than one name)	
Name: Mohammad Ihsan Abd Mohammad **Email:** miach680@gmail.com	
8. Course Objectives	
Course Objectives	6-Enabling students to learn about the structure of the tooth and the biological processes associated with its development. 7-Enabling student to know about the developmental anomalies of tooth structures. 8-Clinical considerations about each tooth structure had 9-Having the knowledge about how each structure forms from the primitive cells till final structure.
9. Teaching and Learning Strategies	
Strategy	16. Use PowerPoint lectures. 17. Method of debate and discussion. 18. Education in laboratories to acquire scientific skills. 19. Reports and projects. 20. Student groups and

	Workshops. 21. Scientific trips. 22. Oral discussions

10.Course Structure (Theory)					
Week	**Hours**	**Required learning outputs**	**Subject Title**	**Teaching Method**	**Assessment Method**
First Semester					
1	2 Hrs. Theory	**Emberyology 1st week of development**	**1st week of development**	Power Point	Quiz
2	2 Hrs. Theory	**Emberyology 2nd week of development**	**2nd week of development**	Power Point	Quiz
3	2 Hrs. Theory	**Embryology 3rd week of development**	**3rd week of development**	Power Point	Quiz
4	2 Hrs. Theory	**Emberyology 4th week of development**	**4th week of development**	Power Point	Quiz
5	2 Hrs. Theory	**Emberyology pharyngeal arches**	**pharyngeal arches**	Power Point	Quiz
6	2Hrs. Theory	**Embryology Facial, nasal and palatal development**	**Facial, nasal and palatal development**	Power Point	Quiz
7	2 Hrs. Theory	**Oral Histology tooth development (part1)**	**Tooth development (part1)**	Power Point	Quiz
8	2 Hrs. Theory	**Oral Histology tooth development (part2)**	**Tooth development (part2)**	Power Point	Quiz
9	2 Hrs. Theory	**Oral Histology Dentin structure**	**Dentin structure**	Power Point	Quiz
10	2 Hrs. Theory	**Oral Histology Dentinigenesis**	**Dntinogenesis**	Power Point	Quiz
11	2 Hrs. Theory	**Oral Histology dentin structure**	**dentin structure**	Power Point	Quiz

12	2 Hrs. Theory	**Oral Histology Amelogenesis**	**Amelogenesis**	Power Point	Quiz
13	2 Hrs. Theory	**Oral Histology Enamel structure**	**Enamel structure**	Power Point	Quiz
14	2 Hrs. Theory	**Oral Histology pulp**	**pulp**	Power Point	Quiz
15	2 Hrs. Theory	**Oral Histology Cementum**	**Cementum**	Power Point	Quiz
Second Semester					
1	2 Hrs. Theory	**Oral Histology Alveolar bone**	**Alveolar bone**	Power Point	Quiz
2	2 Hrs. Theory	**Oral Histology oral mucosa(part1)**	**oral mucosa(part1)**	Power Point	Quiz
3	2 Hrs. Theory	**Oral Histology oral mucosa(part2)**	**oral mucosa(part2)**	Power Point	Quiz
4	2 Hrs. Theory	**Oral Histology salivary gland**	**salivary gland**	Power Point	Quiz
5	2 Hrs. Theory	**Oral Histology periodontal ligament**	**periodontal ligament**	Power Point	Quiz
6	2 Hrs. Theory	**Oral Histology eruption of teeth**	**eruption of teeth**	Power Point	Quiz
7	2 Hrs. Theory	**Oral Histology shedding of teeth**	**shedding of teeth**	Power Point	Quiz
8	2 Hrs. Theory	**Oral Histology maxillary sinus**	**maxillary sinus**	Power Point	Quiz

10.Course Structure (Practical)					
Week	**Hours**	**Required learning outputs**	**Subject Title**	**Teaching Method**	**Assessment Method**
First Semester					
1-8	16 Hrs. Practical	Same topics of theoretical subjects	Same topics	Power Point	Quiz
11. Course Evaluation					

	Practical	Theoretical	Total
First Course	8	12	20
Second Course	8	12	20
Final exam	20	40	60
Total	36	64	100
Notes: Theoretical including two exams, homework, reports, quizzes + 8 marks in practical part including quizzes, reports, Homework			

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Ten Cate's Oral Histology Development, Structure, and Function ANTONIO NANCI, 9th ed
Main references (sources)	Ten Cate's Oral Histology Development, Structure, and Function ANTONIO NANCI, 9th ed
Recommended books and references (scientific journals, reports...)	Orban's Oral Histology and Embryology G. S. Kumar Essentials of Oral Histology and Embryology: A Clinical Approach, 6th Edition
Electronic References, Websites	nature

Course Description Form

1. Course Name:

Dental Radiology

2. Course Code: DEN 11322

3. Semester / Year: 2025-2026

Annual

4. Description Preparation Date:

15/8/2025

5. Available Attendance Forms:

Weekly

6. Number of Credit Hours (Total) / Number of Units (Total)

30 hours (Theoretical) + 60 hours (Practical). (one theoretical hours and two practical hours week) (four credit)

7. Course administrator's name (mention all, if more than one name)

Name: Zahra abd-alrazaq hasan
Email: zahraa.a.alameeri@alzahu.edu.iq

8. Course Objectives

Course Objectives	Include the theoretical and practical side of using deferent x-ray machine and how a dentist make a diagnosis of deferent type disease affecting teeth a periodontal tissue around the tooth, with complete knowledge of the biological effect of radiation on human body.

9. Teaching and Learning Strategies

Strategy	Practical training on patient for taking a periapical radiograph divided into the incisors, canine, premolar and molar of upper and lower jaw, also for taking panoramic radiograph and cephalometric in addition to cone beam C.T.

10. Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1.	**1**	1-Atomic Structure (Introduction)	**Learning the atomic configuration**	Power Point	Quiz
2.	**1**	2-x-ray machine	**Learning the component of x-ray machine**	Power Point	Quiz

3.	**1**	3-Dental X-Ray Film	**Learning the component of radiographic film**	Power Point	Quiz
4.	**1**	4-5-Radiation Characteristics	**Learning the characteristic of the film and x-ray beam**	Power Point	Quiz
5.	**1**	4-5-Radiation Characteristics	**Learning the characteristic of the film and x-ray beam**	Power Point	Quiz
6.	**1**	6-7-Radiation Biology	**Learning the biological effect of radiation**	Power Point	Quiz
7.	**1**	6-7-Radiation Biology	**Learning the biological effect of radiation**	Power Point	Quiz
8.	**1**	9-digital radiography	**Learning digital imaging works**	Power Point	Quiz
9.	**1**	10- Patient's management	**management of pt. Child, contrast media & localization technique**	Power Point	Quiz
10.	**1**	11- Cephalometric imaging	**Learning technique, indications, evaluation of the Image**	Power Point	Quiz
11.	**1**	12- Panoramic radiography	**principals, technique ,position and interpretation**	Power Point	Quiz
12.	**1**	Craniofacial imaging	**types , indication and interpretation**	Power Point	Quiz
13.	**1**	CBCT	**principles, components, strength and limitations**	Power Point	Quiz
14.	**1**	CBCT	**clinical applications in maxillofacial region, anatomy and interpretations**	Power Point	Quiz
15.	**1**	Radiographic anatomy part1	**teeth, supporting dental structures, maxilla and mid facial bones)**	Power Point	Quiz
16.	**1**	Radiographic anatomy part 2	**mandible, Tmj, base of skull, air way, restorative materials)**	Power Point	Quiz
17.	**1**	Advanced imaging modalities	**CT, MRI AND ULTRASOUND**	Power Point	Quiz
18.	**1**	Radiography &Implantology	**modalities, indications**	Power Point	Quiz

19.	**1**	Infection control	**infection control in radiography clinic, protection of pt., protection of workers**	Power Point	Quiz
20.	**1**	Prescribing diagnostic imaging	**radiologic examination and guide lines for ordering imaging)**	Power Point	Quiz
21.	**1**	Radiographically interpretations of common diseases	**interpretation of dental caries, and periodontal disease**	Power Point	Quiz
22.	**1**	Cysts of the jaw	**odontogenic and non-odontogenic cysts**	Power Point	Quiz
23.	**1**	Dental anomalies	**acquired and developmental**	Power Point	Quiz
24.	**1**	Inflammatory conditions of the jaws	**periapical infectious disease, osteomyelitis, pericoronitis)**	Power Point	Quiz
25.	**1**	Trauma	**Dento-alveolar trauma , dental fractures and bone fractures**	Power Point	Quiz
26.	**1**	TMJ abnormalities	**anatomy of TMJ, application)**	Power Point	Quiz
27.	**1**	Salivary gland disease	**imaging modalities, interpretation**	Power Point	Quiz
28.	**1**	Craniofacial anomalies	**Cleft lip and palate**	Power Point	Quiz
29.	**1**	Computed tomography	**indications ,strength, limitations**	Power Point	Quiz

Course Description Form

1. Course Name:	
General Pathology	
2. Course Code: DEN 11323	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
15/8/2025	
5. Available Attendance Forms:	
Attending a weekly lecture in the classroom for the theoretical subject and attending 2hours per week for the practical subject.	
6. Number of Credit Hours (Total) / Number of Units (Total)	
60 hours (Theoretical) + 60 hours (Practical). (two theoretical hour and two practical hours week)	
7. Course administrator's name (mention all, if more than one name)	
Name: Amar essa mahdi Email: ammarn729@alzahu.edu.iq	
8. Course Objectives	
Course Objectives	Teaching students about the basic principles of pathology, the pathogenesis of various diseases, and the tissue and cellular changes that accompany the occurrence of various diseases.
9. Teaching and Learning Strategies	
Strategy	Teaching students about the types of diseases through theoretical lectures and linking them with the tissue changes that students learn in the practical laboratory..

10. Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	2	Introduction to pathology Types of biopsy Pathological techniques		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases
2-3	4	Cell injury		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases
4-5	4	inflammation		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases
6	2	Deposition and pigmentation		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases
7-8	4	Repair & healing		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases
9	2	Infectious diseases		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases
10-11	4	Hemodynamics disturbances		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases
12-13	4	Immunopathology		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases
14-16	6	Tumors		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases
17-18	4	Genetics		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases
19-20	4	hematopathology		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases
21-22	4	Bleeding disorders		Power point presentation and small group teaching in clinic with	Theoretical exams, seminars and

				clinical cases	clinical cases
23	2	Pathology of radiation		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases
24-25	4	Pathology of respiratory system		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases
26-27	4	Pathology of Gastrointestinal tract		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases
28-30	6	Pathology of liver, gall bladder and pancreas		Power point presentation and small group teaching in clinic with clinical cases	Theoretical exams, seminars and clinical cases

Course Description Form

1. Course Name:	
Oral and Maxillofacial Pathology	
2. Course Code: DEN11427	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
15/8/2025	
5. Available Attendance Forms:	
Lectures (Theory) + Labs (Practical, Weekly)	
6. Number of Credit Hours (Total) / Number of Units (Total)	
60 hours (Theoretical) + 60 hours (Practical). (Two theoretical hours and three practical hours week)	
7. Course administrator's name (mention all, if more than one name)	
Name: Mohammad Ihsan Abd Mohammad **Email: miach680@gmail.com**	
8. Course Objectives	
Course Objectives	-Knowledge of oral Pathology basics, how to study such subjects, details of each subjects and the influence of property on clinical aspect; knew the histopathological details; diagnosis and clinical presentations and treatment.
9. Teaching and Learning Strategies	
Strategy	1. Use PowerPoint lectures. 2. Method of debate and discussion. 3. Education in laboratories to acquire scientific skills. 4. Reports and projects. 5. Student groups and Workshops. 6. Scientific trips. 7. Oral discussions

10.Course Structure (Theory)					
Week	**Hours**	**Required learning outputs**	**Subject Title**	**Teaching Method**	**Assessment Method**
First Semester					
1	2 Hrs. Theory	Introduction	Introduction to Pathology	Power Point	Quiz
2	2 Hrs. Theory	Normal physiology of the body	Healing	Power Point	Quiz
3	2 Hrs. Theory	**Biopsy**	Biopsy	Power Point	Quiz
4	2 Hrs. Theory	**Dental caries**(causes,patho-physiology,histopathology)	Dental caries	Power Point	Quiz
5	2 Hrs. Theory	**PulpPathology**(causes,pathophysiology, histopathology)	Pulp Pathology	Power Point	Quiz
6	2Hrs. Theory	**PeriapicalPathology**(causes,pathophysiology, histopathology)	Periapical Pathology	Power Point	Quiz
7	2 Hrs. Theory	Bone infection(causes,histopathology)	Bone infection	Power Point	Quiz
8	2 Hrs. Theory	**Fibro osseos lesions**(types,differential diagnosis, histopathological features)	Fibro osseos lesions	Power Point	Quiz
9	2 Hrs. Theory	**Endocrine and metabolic disturbance**	**Endocrine and metabolic disturbance**	Power Point	Quiz
10	2 Hrs. Theory	**Developmental anomalies**	**Developmental anomalies**	Power Point	Quiz
11	2 Hrs. Theory	**Bone neoplasm(types,clinical and histopathology of each)**	**Bone neoplasm**	Power Point	Quiz
12	2 Hrs. Theory	**Cyst of the jaw(developmental)**	**Cyst of the jaw(developmental)**	Power Point	Quiz
13	2 Hrs. Theory	**Odontogenic tumors**	**Odontogenic tumors**	Power Point	Quiz

14	2 Hrs. Theory	**Oral mucosal lesions**	**Oral mucosal lesions**	Power Point	Quiz
15	2 Hrs. Theory	**White lesion**	**White lesion**	Power Point	Quiz
Second Semester					
1	1 Hrs. Theory	**Vesiculo-bullous lesions**	**Vesiculo-bullous lesions**	Power Point	Quiz
2	1 Hrs. Theory	**Disease of salivary gland(benign)**	**Disease of salivary gland(benign)**	Power Point	Quiz
3	2 Hrs. Theory	**Tumors of salivary glands**	**Tumors of salivary glands**	Power Point	Quiz
4	2 Hrs. Theory	**Benign tumors and tumor like lesions**	**Benign tumors and tumor like lesions**	Power Point	Quiz
5	2 Hrs. Theory	**Oral manifestation of systemic disease(clinical and histopathology)**	**Oral manifestation of systemic disease(clinical and histopathology))**	Power Point	Quiz
6	2 Hrs. Theory	**Forensic odontology**	**Forensic odontology**	Power Point	Quiz
7	2 Hrs. Theory	**Heamatopoitic malignancy**	**Heamatopoitic malignancy**	Power Point	Quiz
8	2 Hrs. Theory	**Disease of the tongue**	**Disease of the tongue**	Power Point	Quiz
9	2 Hrs. Theory	**Oral cytopathology**	**Oral cytopathology**	Power Point	Quiz
10	2 Hrs. Theory	**Pigmented lesions**	**Pigmented lesions**	Power Point	Quiz
11	2 Hrs. Theory	**TMJ pathology**	**TMJ pathology**	Power Point	Quiz
12	2 Hrs. Theory	**Langerhan's diseases**	**Langerhan's diseases**	Power Point	Quiz
13	2 Hrs. Theory	**Facial Pain and Neuromuscular Diseases**	**Facial Pain and Neuromuscular Diseases**	Power Point	Quiz
14	2 Hrs. Theory	**Bacterial Infections**	**Bacterial Infections**	Power Point	Quiz
15	2 Hrs. Theory	**Fungal and Protozoal Diseases**	**Fungal and Protozoal Diseases**	Power Point	Quiz

10.Course Structure (Practical)

Week	Hours	Required learning outputs	Subject Title	Teaching Method	Assessment Method
First Semester					
1-15	30 Hrs. Practical	All same theoretical subjects	All same theoretical subjects	Power Points	Quiz
Second Semester					
1-15	30 Hrs. Practical	All same theoretical subjects in second semester	All same theoretical subjects in second semester	Power Point+ slides under microscopic examination and seminars	Quiz

11. Course Evaluation

- 15 Marks: Mid-year exam
- 25 Marks along the year : divided as :

First course: 12 Theoretical including two exams, homework, reports, quizzes + 8 marks in practical part including quizzes, reports, Homework

Second course : 12 Theoretical including two exams, homework, reports, quizzes + 8 marks in practical part including quizzes, reports, homework

- 20 Marks : Practical Final exam
- 40 Marks: Theoretical Final Exam

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Nevills'oral and maxillofacial pathology fourth edition
Main references (sources)	❖ Oral Pathology clinical pathological correlation Regezi Sciubba Jordan
Recommended books and references (scientific journals, reports...)	Contemporary Oral and Maxillofacial Pathology J. Philip Sapp Lewis R. Eversol Gegrge P. Wysocki
Electronic References, Websites	Journal of oral pathology and medecin

Course Description Form

1. Course Name:

Oral Medicine

2. Course Code: DEN11531

3. Semester / Year: 2025-2026

Annual

4. Description Preparation Date:

15/8/2025

5. Available Attendance Forms:

Attending a weekly lecture in the classroom for the theoretical subject and attending six clinics per week for the practical subject.

6. Number of Credit Hours (Total) / Number of Units (Total)

30 hours (Theoretical) + 60 hours (Practical). (One theoretical hour and two practical hours week)

7. Course administrator's name (mention all, if more than one name)

Name: Ahmed jabber abub
Email: ahmed.jaber@alzahu.edu.iq

8. Course Objectives

Course Objectives	Teaching the student the pathological conditions affect mouth, face, tongue, salivary glands, and temporomandibular joint and their relationship with diseases of internal medicine, dermatology, ear, nose, throat, and neurology in theoretical lectures and diagnosing these diseases in educational clinics, while finding effective solutions and treatments for these patients who visit the educational clinics at the College of Dentistry, University of Karbala.

9. Teaching and Learning Strategies

Strategy	Teaching the students about the types of diseases affecting the mouth, face and jaws, modern diagnostic methods, modern treatment methods, and how to find future solutions for diagnosis and treatment.

10. Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment

					method
1	**2**	**Principle of oral diagnosis**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
2	**1**	**Oral ulceration**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
3	**2**	**Orofacial pain and neuralgia**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
4	**1**	**Infectious diseases (viral infection)**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
5	**1**	**Infectious diseases (Bacterial and fungal infection)**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
6	**1**	**Burning mouth syndrome**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
7	**2**	**Salivary gland diseases**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
8	**1**	**Non-infective stomatitis (vesiculobullous diseases)**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**

9	**1**	**Non-infective stomatitis (oral ulceration not precede by vesiculation)**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
10	**2**	**Pain killer**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
11	**2**	**Temporomandibular joint disorder (Part one)**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
12	**2**	**Temporomandibular joint disorder (Part two)**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
13	**1**	**Lip diseases**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
14	**1**	**Oral pigmented lesions**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
15	**2**	**Antibiotic in dentistry**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
16	**2**	**Emergencies in dental clinic**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
17	**2**	**Oral manifestations in haematological diseases**		**Power point presentation and small group teaching in clinic**	**Theoretical exams, semina**

				with clinical cases	**rs and clinical cases**
18	**2**	**Oral cancer**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
19	**2**	**White and red lesions in oral cavity**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**
20	**1**	**Occupational hazards in dentistry**		**Power point presentation and small group teaching in clinic with clinical cases**	**Theoretical exams, seminars and clinical cases**