

Course Description Form

1. Course Name:	
General anatomy	
2. Course Code: ZUDE0101	
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 <u>Name:</u> osama abd-alkadhem ali <u>Email:</u> 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.
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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.
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Course Description Form

1. Course Name:	Medical chemistry
2. Course Code: ZUDE0102	
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 Determining the risks of chemicals Linking medicinal chemistry to dentistry--
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9. Teaching and Learning Strategies

Strategy	Delivering the lecture in PowerPoint format – Showing explanatory videos – Directing students websites – Using the discussion method in the hall to follow up and know the students' ideas
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10. Course structure

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment
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	Qu
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	Qu
3	2H	Fluid and electrolyte	definition Fluid and electrolyte	Using Power Point with asking question and presentation Lecture –specific videos	Qu
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	Learn student about Alcohols, Phenols, Ethers and Thiols (preparation, reactions	Using Power Point with asking question and presentation Lecture –specific videos	

		(preparation, reactions)			
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 Nucleic acids	Learn student about Dioxy and ribo Nucleic acids and and different between two Dioxy and Ribo	Using Power Point with asking question and presentation Lecture –specific videos	
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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: ZUDE0103	
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 - 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 Hrs Practical	Terminology and modeling	Learn the terminology of medical physics	Power Point	Quiz
2	2 Hrs Theory 2 Hrs Practical	measurements	Learn about the medical Measurement	Power Point	Quiz
3	2 Hrs Theory 2 Hrs Practical	Static forces	Learn the type of levers with medical examples.	Power Point	Quiz
4	2 Hrs Theory 2 Hrs Practical	Dynamic forces	Applications of Newton's second law.	Power Point	Quiz
5	2 Hrs Theory 2 Hrs Practical	Physics of the skeleton	Learn Mechanical properties of bone	Power Point	Quiz
6	2 Hrs Theory 2 Hrs Practical	Stress-strain curve and, young modulus.	Applications of young modulus.	Power Point	Quiz
7	2 Hrs Theory 2 Hrs Practical	Heat and cold in medicine	Learn Physical basis of heat in medicine.	Power Point	Quiz
8	2 Hrs Theory 2 Hrs Practical	Heat therapy	Learn the application & Thermograph physics.	Power Point	Quiz
9	2 Hrs Theory 2 Hrs Practical	Energy	Learn the Energy change in the body.	Power Point	Quiz
10	2 Hrs Theory 2 Hrs Practical	Work and power of the body.	Learn the Efficiency heat losses from the body.	Power Point	Quiz
11	2 Hrs Theory 2 Hrs Practical	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 transmission 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 medicine	Power Point	Quiz
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: ZUDE0104

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 immunocytes	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 & meiosis	Transport across cell membrane	Power Point	Quiz
2	1 Hrs. Theory	Learn metabolism	Cellular metabolism	Power Point	Quiz
3	2 Hrs. Theory	Learn chemical structure of nucleic 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 parasite	Cellular interaction (transient interaction)	Power Point	Quiz
7	2 Hrs. Theory	Learn life cycle and features of parasite	Introduction to biotechnology	Power Point	Quiz
8	2 Hrs. Theory	Learn life cycle and features of parasite	Introduction to parasitology	Power Point	Quiz
9	2 Hrs. Theory	Learn life cycle and features of parasite	Protozoa: sarcodina	Power Point	Quiz
10	2 Hrs. Theory	Learn life cycle and features of parasite	Protozoa: flagellata	Power Point	Quiz
11	2 Hrs. Theory	Learn life cycle and features of parasite	Protozoa: ciliata and 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
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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 Trichomonas 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	Ancylostoma 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 parasitology eight edition (2018) 2- Textbook of Histology, (2020) by Leslie P. Gartner, Elsevier Health Sciences, Medical - 704 pages. 3- CELL BIOLOGY, Third edition. (2017) Thomas. D; William .C; Jennifer. 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:					
Conservative Dentistry (dental anatomy)					
2. Course Code:					
ZUDE0105					
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	Learning the students 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	2 theory +4 practice	Introduction & nomenclature	Learning the nomenclature of dental anatomy	Power Point lec.+ clinical	Theoretical and practical exams

				work	(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+ 2practice e	Deciduous dentition	Learning the details about form,function&morphology of the deciduous	Power Point lec.+	Theoretical and practical

			teeth .	clinical work	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&morph ology of the teeth	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
17	1theory+ 2 practice	Permanent maxillary molars(2nd molars)	Learning the details about form,function&morph ology of the teeth	Power Point lec.+ clinical work	Theoretical and practical exams (weekly and monthly).
18	1theory+ 2practic e	Permanent mandibular molars	Learning the details about form,function&morph ology 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

Wheeler's 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:	
English language /Medical terminology	
2. Course Code: ZUDE0106	
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	Hou rs	Required learning outputs	Subject Title	Teaching Method	Assessment Method
First Semester					
1	1		Prefixes & suffixes	Power Point Slides	Daily, semester, mid-year and final exams
2	1		integumentary system	Power Point Slides	Daily, semester, mid-year and final exams
3	1		Muscular system	Power Point Slides	Daily, semester, mid-year and final exams
4	1		Respiratory system	Power Point Slides	Daily, semester, mid-year and final exams
5	1		Digestive system	Power Point Slides	Daily, semester, mid-year and final exams
6	1		Nervous system	Power Point Slides	Daily, semester, mid-year and final exams
7	1		Cardiovascular system	Power Point Slides	Daily, semester, mid-year and final exams
8	1		Blood and Lymph	Power Point Slides	Daily, semester, mid-year and final exams
9	1		Immune system	Power Point Slides	Daily, semester, mid-year and final exams
10	1		Endocrine system	Power Point Slides	Daily, semester, mid-year and final exams
11	1		Five sense	Power Point Slides	Daily, semester, mid-year and final exams
12	1		Genitourinary system	Power Point Slides	Daily, semester, mid-year and final exams
13	1		(Dental terminology (part I	Power Point Slides	Daily, semester, mid-year and final exams
14	1		Dental terminology (part II	Power Point Slides	Daily, semester, mid-year and final exams
15	1		(Dental terminology (part III	Power Point Slides	Daily, semester, mid-year and final exams
16	1		Small Talk	Power Point Slides	Daily, semester, mid-year and final exams
17	1		Common Mistakes	Power Point Slides	Daily, semester, mid-year and final exams

18	1		Passive voice	Power Point Slides	Daily, semester, mid-year and final exams
19	1		Direct and indirect speech	Power Point Slides	Daily, semester, mid-year and final exams
20	1		Synonyms in English	Power Point Slides	Daily, semester, mid-year and final exams
21	1		Adjectives	Power Point Slides	Daily, semester, mid-year and final exams
22	1		Integrating a quotation into an essay	Power Point Slides	Daily, semester, mid-year and final exams
23	1		Prepositions in English Grammar with Examples	Power Point Slides	Daily, semester, mid-year and final exams
24	1		Idioms and Phrases	Power Point Slides	Daily, semester, mid-year and final exams
25	1		Writing assignment	Power Point Slides	Daily, semester, mid-year and final exams
26	1		Pronunciation rules	Power Point Slides	Daily, semester, mid-year and final exams
27	1		Tenses	Power Point Slides	Daily, semester, mid-year and final exams
28	1		Synonyms and Antonyms	Power Point Slides	Daily, semester, mid-year and final exams
29	1		Paraphrasing	Power Point Slides	Daily, semester, mid-year and final exams
30	1		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:	
Computer Sciences	
2. Course Code: ZUDE0107	
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
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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	Power Point Slides	Pre-Mid-Term, Post-Mid-Term

			- Difference between the World Wide Web and the Internet Security and the Internet		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. - Add new slides to a presentation	Power Point Slides	Pre-Mid-Term, Post-Mid-Term and Final Exams
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 - Dropbox	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:	
Human rights	
2. Course code: ZUDE0108	
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 . 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: ZUDE0109	
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 anatomy
2. Course Code: ZUDE0201
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. Teaching the students to the body parts and their impact on his work as a dentist. 2. Enabling the students 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 & 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,		Power Point	Quiz, course and final exams

		Joints, Ligament, Bursae).			
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 structures pass through, Neonatal Skull Practical: Cranial cavity, Major Foramina and Fissures locations and structures pass through the skull		Power Point	Quiz, course and final 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 nerves of Thorax Practical: Anatomy of heart Major arteries, veins and nerves of thorax		Power Point	Quiz, course and final exams
20 & 21	2	Theoretical: ☐ Bones of the Shoulder (Pectoral girdle) girdles		Power Point	Quiz, course and final

		☐ Bones of the Upper extremities Practical: Bones of the Shoulder (Pectoral girdle) girdles Bones of the Upper extremities			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		Power Point	Quiz, course and final exams

		☐ Waldeyer's Ring of Lymphoid Tissue			
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: Prosthodontics
2. Course Code: ZUDE0202
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 ☐ Objective of complete denture ☐ General consideration in complete denture construction ☐ Complete denture component parts	Lecture (power-point)	quiz every 2 weeks
2	1	Anatomical landmarks	Anatomical landmarks ☐ Maxillary arch anatomical landmarks ☐ Supporting structures ☐ Limiting structures ☐ Relief areas	Lecture (power-point)	quiz every 2 weeks

3	1	Anatomical landmarks	Anatomical landmarks ☐ Mandibular arch anatomical landmarks ☐ Supporting structures ☐ Limiting structures ☐ Relief areas	Lecture (power-point)	quiz every 2 weeks
4	1	Complete Denture Impression	Impression tray - Definition ☐ Parts of the impression tray ☐ Types of tray ☐ Stock tray – Definition ☐ Types of stock trays ☐ Factors effect in selection of stock tray	Lecture (power-point)	quiz every 2 weeks
5	1	Complete Denture Impression.	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	Complete Denture Impression	Dental impression - Definition ☐ Complete denture impression - Definition ☐ Objective of impression making ☐ Primary impression - Definition ☐ Materials used for making primary impression ☐ Primary cast - Definition ☐ Production of study cast ☐ Secondary impression - Definition ☐ Master cast- Definition ☐ Materials used for final impression ☐ Technique used for	Lecture (power-point)	quiz every 2 weeks

			making final impression ☐ Boxing an impression and making the casts ☐ Advantages of boxing ☐ Common fault in impression making		
7	1	Record Base	Record base - Definition ☐ Requirements of record base ☐ Types of materials used in construction of record base	Lecture (power-point)	quiz every 2 weeks
8	1	Occlusion Rims	Occlusion rims - Definition ☐ Requirements of occlusion rim ☐ Materials used in construction of occlusion rim ☐ Measurements of maxillary occlusion rim ☐ Measurements of mandibular occlusion rim ☐ Uses of occlusion rim ☐ Occlusal plane ☐ Fox – bite	Lecture (power-point)	quiz every 2 weeks
9		Anatomy And Physiology Of Temporomandibular Joint	Temporomandibular joint (TMJ) – Definition ☐ Ligaments ☐ Muscles		
10		Anatomy And Physiology Of Temporomandibular Joint	Mandibular axes and mandibular movements ☐ Knowledge of mandibular movements ☐ Mandibular movements	Lecture (power-point)	quiz every 2 weeks
11	1	Maxillomandibular Relation	Types of jaw relation ☐ Vertical jaw relation ☐ Rest position ☐ Inter – occlusal distance ☐ Importance of vertical dimension ☐ Increased vertical	Lecture (power-point)	quiz every 2 weeks

			dimension ☐ Decreased vertical dimension		
12	1	Methods Of Recording Vertical Relation	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
13	1	Horizontal Jaw Relation	Centric jaw relation ☐ Importance of centric jaw relation ☐ Methods of recording jaw relation ☐ Factors that complicates centric jaw relation ☐ Methods of recording eccentric jaw relation	Lecture (power-point)	quiz every 2 weeks
14	1	Dental Articulators (Classification & Digital computerized articulator programming)	Dental articulator ☐ Definition ☐ Functions of articulator ☐ Requirements of articulator ☐ Types of articulator		
15	1	Face – Bow	Face- bow ☐ Definition ☐ Parts of face – bow ☐ Types of face – bow ☐ Important of the face – bow	Lecture (power-point)	quiz every 2 weeks
16	1	Mounting	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		
17	1	Selection Of Artificial Teeth	Selection of anterior teeth ☐ The factors of shade	Lecture (power-point)	quiz every 2 weeks

			selection ☐ Size selection a. Length b. Width ☐ Form selection ☐ Materials of anterior teeth ☐ Difference between acrylic and porcelain teeth		
18	1	Selection Of Posterior Teeth	Shade ☐ Bucco-lingual width ☐ Mesio-distal length ☐ Occluso-lingival height ☐ Occlusal form ☐ Advantages of cusp form teeth ☐ Advantages of non-cusp form teeth	Lecture (power-point)	quiz every 2 weeks
19	1	Arrangement Of Artificial Teeth	Guideline of artificial teeth arrangement ☐ Arrangement of anterior teeth ☐ Arrangement of upper anterior teeth		
20	1	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
21		Waxing And Carving	Waxing ☐ Definition ☐ Requirements of waxing the polish surfaces ☐ The procedure of waxing ☐ Establishing the posterior palatal seal area ☐ Procedure for carving of posterior palatal seal area ☐ Advantages of posterior palatal seal ☐ Esthetic consideration in complete denture		

22+ 23	2	Complete Denture Occlusion	Occlusion ☐ Occlusion of complete denture ☐ Centric occlusion ☐ Centric relation ☐ Eccentric occlusion ☐ Concepts of complete denture occlusion ☐ Try-in appointment	Lecture (power-point)	quiz every 2 weeks
24	1	Processing Of The Denture (Flasking)	Flasking of the denture ☐ Flasking techniques	Lecture (power-point)	quiz every 2 weeks
25	1	Occlusal Correction	Causes of errors in occlusion ☐ Selective grinding ☐ Correction of occlusal errors ☐ Disadvantages of intra – oral correction ☐ Advantages of extra – oral correction Rules for selective grinding		
26	1	Finishing And Polishing Of Complete Denture	Procedure of finishing ☐ Grinding and cutting instruments ☐ Polishing of complete denture ☐ Principles of polishing ☐ Procedures of polishing.	Lecture (power-point)	quiz every 2 weeks
27	1	Repair Of Complete Denture	Types of material used in repair ☐ Causes of denture fracture ☐ Types of repair ☐ Laboratory procedure for repairing fractured denture base		
28	1	Finishing And Polishing of Complete Denture	Replacement of broken or missing tooth ☐ Replacement of missing or lost part ☐ Requirement of repair	Lecture (power-point)	quiz every 2 weeks
29	1	Relining And Rebasing	Indication for relining or rebasing ☐ Relining ☐ Contraindications of relining and rebasing	Lecture (power-point)	quiz every 2 weeks

			☐ The impression techniques for relining and rebasing		
30	1	Relining and rebasing	Laboratory procedures for relining ☐ Rebasing ☐ The chair – side reline technique	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 Removable Partial Dentures		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:	
General Histology	
2. Course Code: ZUDE0203	
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.
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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 of 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:	
Medical Physiology	
2. Course Code: ZUDE0204	
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.
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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,	Power Point	Quiz

			polycythemia, Anemia, Destruction of R.B.C.s		
5	2 Hrs. Theory	White Blood Cells	Types of W.B.C. , Genesis of the leukocytes, Life span of the W.B.C, Phagocytosis, Inflammation, Leukemia's, Leukopenia	Power Point	Quiz
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, Erythroblastosis 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, Movement in the Large Intestine Digestion, Absorption, and Transport	Power Point	Quiz
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,	Power Point	Quiz

			Conductive system of Human Heart		
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 Venous Pulse, Regional Circulation, Electrocardiogram, Hemorrhage, Circulatory Shock and Heart Failure, Cardiovascular Adjustments during Exercise	Power Point	Quiz
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 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	Power Point	Quiz
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	Power Point	Quiz

			supply to urinary bladder and sphincters, Renal Function Tests, Relation between renal disease & oral health)		
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 Hormone Concentrations in the Blood	Power Point	Quiz
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 WBCs	Calculating the number of white blood cells using a slide for counting blood cells		Quiz
9	2 Hrs. Practical	Total Count of RBCs	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 clotting 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 blood glucose test	Describe the purpose of glucose testing and its importance in diagnosing diabetes and monitoring blood sugar levels.		Quiz

			2. Identify the types of glucose tests available and their clinical uses. 3. Understand normal and abnormal glucose levels and interpret results.		
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 and respiratory rate	Understand the purpose of measuring 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.		Quiz
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		Quiz

			abnormal vision test results and understand their implications.		
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 (11th 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

Course Description Form

1. Course Name:
Biochemistry
2. Course Code: ZUDE0205
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.
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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.
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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	Quiz

				Point	
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 Point	Quiz
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 crook

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:	
Oral Histology and Embryology	
2. Course Code:	
ZUDE0206 ZUDE0206	
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 Embryology	
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	-Enabling students to learn about the structure of the tooth and the biological processes associated with its development. -Enabling student to know about the developmental anomalies of tooth structures. -Clinical considerations about each tooth structure had -Having the knowledge about how each structure forms from the primitive cells till final structure.
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
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10.Course Structure (Theory)					
Week	Hours	Required learning outputs	Subject Title	Teaching Method	Assessment Method
First Semester					
1	2 Hrs. Theory	Embryology 1 st week of development	1 st week of development	Power Point	Quiz
2	2 Hrs. Theory	Embryology 2 nd week of development	2 nd week of development	Power Point	Quiz
3	2 Hrs. Theory	Embryology 3 rd week of development	3 rd week of development	Power Point	Quiz
4	2 Hrs. Theory	Embryology 4 th week of development	4 th week of development	Power Point	Quiz
5	2 Hrs. Theory	Embryology 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 Dentinogenesis	Dentinogenesis	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, 9 th ed		
Main references (sources)			Ten Cate's Oral Histology Development, Structure, and Function ANTONIO NANCI, 9 th 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 materials
2. Course Code: ZUDE0207
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	Learning the students 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,	Power Point	Quiz

4	1	Gypsum materials	☐ gypsum bonded investment ☐ phosphate bonded investment ☐ ethyl silicate bonded	Power Point	Quiz
5	1	Impression materials	Definition	Power Point	Quiz
6	1	Impression materials	☐ Ideal properties of impression materials ☐ Classification of impression materials	Power Point	Quiz
7	1	Impression materials	☒ Non elastic impression materials ➤ Impression plaster	Power Point	Quiz
8	1	Impression materials	➤ Impression compound ➤ Zinc oxide - eugenol	Power Point	Quiz
9	1	Impression materials	☒ Elastomeric impression material	Power Point	Quiz
10	1	Waxes	☐ Definition, ☐ Requirements,	Power Point	Quiz
11	1	Waxes	☐ classification of wax according to origin & melting point, ☐ classification of wax according to uses, properties of dental waxes.	Power Point	Quiz
12	1	Polymers	Polymers and polymerization	Power Point	Quiz
13	1	Polymers	☐ Definition of polymer, co-polymer, cross-link polymer and Degree of polymerization ☐ 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	Power Point	Quiz

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	Power Point	Quiz
18	1	Metal and metal alloy	☒ Definition of alloy ☒ Requirement of casting	Power Point	Quiz
19	1	Metal and metal alloy	☒ alloy ☒ Application of dental alloy ☒ classification of metal	Power Point	Quiz
20	1	Metal and metal alloy	☒ classification of dental alloy ☒ gold foil (advantage, disadvantages)	Power Point	Quiz
21	1	Filling materials	Direct filling material ☐ Definition	Power Point	Quiz
22	1	Filling materials	☐ Factors causing loss of tooth substance	Power Point	Quiz
23	1	Filling materials	☐ Requirement of an ideal filling material. ☐ Classification of filling material	Power Point	Quiz
24	1	Filling materials	☐ Anterior filling materials Disadvantages Composite filling materials composition and structure Types of composite ☐ Posterior filling materials Dental amalgam	Power Point	Quiz

			☐ Classification of amalgam alloys ☐ Properties of set amalgam ☐ Shaping and finishing ☐ Mercury toxicity		
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)

1. Course name	
crimes of the Baath regime in Iraq	
2. Course code ZUDE0208	
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 .7 is mentioned)	
Name:Shaker mrawih kathum Email shakrmrwah6@gmail.com	
8. course 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	
	▪ Study of the most important crimes committed by the Baath regime ▪ Revealing the nature of the crimes committed by the Baath regime ▪ An explanation of the most important of these crimes and their serious consequences that have affected all sectors without exception.

9. Course Structure					
Week	Hours	Required Learning	Unit or subject name	Learning method	Evaluation method

		Outcomes			
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

. Course Evaluation

30 marks for annual endeavor 70 + marks for final exam

. 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:	
Prosthodontics	
2. Course Code: ZUDE0301	
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	Partial dentures ☐ Removable partial denture (RPD) ☐ Objectives for RPD construction ☐ Causes of teeth loss ☐ Indications of removable	Power Point	Weekly quiz

			partial dentures ☐ Fixed partial denture ☐ Indications for fixed partial denture ☐ Dental implant therapy ☐ Contraindications for dental implant therapy ☐ Terminology and re-finishing		
2	1	Classification of partially edentulous arches	Need for classification. Requirements of an acceptable method of classification ☐ Removable partial dentures may be classified according to the type of support ☐ Removable partial dentures may be classified according to the type of material ☐ Removable partial dentures may be classified according to the type of treatment ☐ Classification based on arch configuration ☐ Kennedy – Applegate – Fiset classification system. ☐ Applegate's rules governing the application	Power Point	Weekly quiz

			of the Kennedy classification method		
3+4	2	Surveying	The ideal requirements for successful removable partial denture ☐ Purposes (Objective) of Surveying the Diagnostic Cast ☐ Advantages of single path of placement (insertion) ☐ Guiding planes ☐ Dental surveyor ☐ Types of dental surveyors ☐ Parts of dental surveyor (Ney type surveyor) ☐ Principles of surveying ☐ Types of undercuts established by surveying ☐ Factors that determine and affect the path of placement (insertion) and removal of the RPD	Power Point	Weekly quiz
5	1	Components of removable partial dentures	Main components of RPD ☐ Major connectors ☐ Requirements of major connectors ☐ Guidelines for design and location of major connectors ☐ Characteristics of major connectors	Power Point	Weekly quiz

6	1	Maxillary major connectors	☐ Special Structural Requirements for Maxillary Major Connectors ☐ Types of Maxillary Major Connector ☐ Single palatal bar ☐ Single palatal strap ☐ Anterior-posterior palatal bars ☐ Combination anterior and posterior palatal strap–type connector ☐ Palatal plate-type connector ☐ U-shaped palatal connector	Power Point	Weekly quiz
7	1	Mandibular major connectors	☐ Special structural requirements ☐ Types of mandibular major connectors ☐ Lingual bar ☐ Methods that may be used to determine the relative height of the floor of the mouth ☐ Lingual plate (linguoplate) ☐ The indications for the use of linguoplate ☐ Double lingual bar (lingual bar with cingulum bar) ☐	Power Point	Weekly quiz
8	1	Minor connectors	☐ Definition ☐ Functions ☐ Form & location ☐ Basic types of	Power Point	Weekly quiz

			minor connectors ☐ Tissue stops ☐ Finishing lines ☐ Reaction of Tissue to Metallic Coverage		
9	1	Rests & rest seats	☐ The purposes of the rest in general ☐ Occlusal Rest ☐ Extended Occlusal Rest ☐ Interproximal Occlusal Rest ☐ Internal Occlusal Rests ☐ Occlusal Rest Seat Preparation ☐ Occlusal Rests on Amalgam Restorations ☐ Occlusal Rest on Crowns ☐ Lingual Rests (Cingulum Rest) ☐ Incisal Rests and Rest Seats ☐ Implants as a Rest	Power Point	Weekly quiz
10	1	Retention & removable partial denture retainers	☐ Direct retainers ☐ Indirect retainers ☐ The extra coronal retainer	Power Point	Weekly quiz
11	1	Extra coronal direct retainers (types of clasp assemblies)	☐ Clasps designed without movement accommodation. ☐ Circumferential (Circle or Akers) clasp ☐ Ring-type clasp ☐ Embrasure (double Akers) clasp	Power Point	Weekly quiz

			☐ Back action clasp ☐ Multiple clasps ☐ Half-and-half Clasp ☐ Reverse-action clasp (Hairpin) ☐ Disadvantages of circumferential clasps in summary ☐ Clasps designed to accommodate distal extension functional movement ☐ RPI clasp ☐ Bar-type clasp assembly ☐ RPA clasp; Akers clasp ☐ Infra-bulge clasp ☐ Combination clasp		
12	1	Intra coronal direct retainers (internal attachments , precision attachments)	☐ Internal attachments ☐ Precision Attachments ☐ Some indications for precision attachments ☐ Some of the contraindications for precision attachments ☐ The main types of precision attachments ☐ Selection of an Attachment for a Removable Partial Denture	Power Point	Weekly quiz
13	1	Stress breakers (stress equilizers)	☐ Stress breakers ☐ Types of stress breakers	Power Point	Weekly quiz

14+15	2	Indirect retainers	☐ The main factors influencing the effectiveness of an indirect retainer ☐ The auxiliary functions of indirect retainers ☐ Forms of Indirect Retainers ☐ Auxiliary occlusal rest ☐ Lingual rest ☐ Incisal rest ☐ Canine extensions from occlusal rests ☐ Cingulum bars (continuous bars) and linguo-plates ☐ Modification areas ☐ Rugae support	Power Point	Weekly quiz
16	1	Laboratory procedures in RPD construction : block out & relief	☐ Blockout and relief ☐ Cast preparation ☐ Types of blockout of master cast ☐ Parallel blockout ☐ Shaped blockout ☐ Arbitrary blockout ☐ Relieving the master cast ☐ Purpose of relief ☐ Sites ☐ Tissue Stops	Power Point	Weekly quiz
17	1	Laboratory procedures in RPD construction : duplication & refractory cast construction	☐ Duplicating a stone cast ☐ Duplicating material and flask ☐ Impression ☐ Refractory cast	Power Point	Weekly quiz
18	1	Laboratory procedures in RPD construction: wax	☐ Waxing the framework	Power Point	Weekly quiz

		pattern	☐ Spruing ☐ General rules for spruing ☐ Investing the sprued pattern ☐ Purpose of investment ☐ Burnout		
19	1	Laboratory procedures in RPD construction: casting & finishing	☐ Casting ☐ Casting recovery ☐ Finishing the framework ☐ Sprue removal	Power Point	Weekly quiz
20	1	Denture base in RPD	☐ The primary function of denture base ☐ Types of denture base according to support ☐ Types of the denture base according to materials ☐ Advantages of metal denture base ☐ Disadvantages of metal denture base ☐ Design consideration of denture base ☐ Periodontal consideration of denture base design ☐ Types of artificial teeth	Power Point	Weekly quiz
21	1	Record bases, occlusion rims, mounting & arrangement of teeth	☐ Record bases ☐ Types of record bases according to materials constructed from it ☐ Occlusion rims ☐ Occlusion rims for static jaw relation records ☐ Occlusion rims for	Power Point	Weekly quiz

			recording functional or dynamic jaw relationship record ☐ Mounting casts on the Articulator ☐ Arrangement of artificial teeth to the opposing cast ☐ Principles that should be taken during arrangement of artificial teeth ☐ Laboratory procedure of arrangement teeth (Example)		
22+23	2	Biomechanics of RPD	☐ Biomechanical considerations ☐ Possible movements of partial dentures ☐ Tooth-tissue-supported Prosthesis ☐ Tooth-supported partial denture ☐ Occlusal Rest Seat Preparation and Denture Movement ☐ Impact of Implants on Movements of Partial Dentures	Power Point	Weekly quiz
24+25	2	Principles of RPD design	☐ Difference in Prosthesis Support and Influence on Design ☐ Differentiation Between Two Main Types of Removable Partial Dentures	Power Point	Weekly quiz

			☐ Components of Partial Denture Design ☐ Implant Considerations in Design		
26	1	Clinical phases of RPD construction	☐ 1st Phase: Education of patient ☐ 2nd Phase: Diagnosis, Treatment Planning, Design, Treatment Sequencing, and Mouth Preparation ☐ 3rd Phase: Support for Distal Extension Denture Bases ☐ 4th Phase: Establishment and Verification of Occlusal Relations and Tooth Arrangements ☐ 5th Phase: Initial Placement Procedures ☐ 6th phase: Periodic Recall	Power Point	Weekly quiz
27	1	Acrylic RPD	☐ Acrylic removable partial dentures ☐ Appearance ☐ Maintenance of space ☐ Reestablishment of occlusal relationships ☐ Conditioning of teeth and residual ridges ☐ Interim restoration during treatment	Power Point	Weekly quiz

			☐ Conditioning the patient for wearing a prosthesis ☐ Clinical procedure for placement		
28	1	Flexible RPD	☐ Flexible removable partial dentures ☐ Type of material used for the flexible denture ☐ Support ☐ Retention	Power Point	Weekly quiz
29	1	Repair & addition to RPD	☐ Broken clasp arms ☐ Several reasons for breakage of clasp arms ☐ Fractured occlusal rests ☐ Distortion or breakage of other components – major and minor connectors ☐ Addition of a new artificial tooth to a RPD ☐ Repair by soldering	Power Point	Weekly quiz
30	1	Digitally designed & fabrication process of RPD framework using CAD/CAM system	☐ Components of CAD/CAM system ☐ Types of Digital Scanner ☐ Digital RPD Framework Design (step by step) ☐ Digital Fabrication Process	Power Point	Weekly quiz

10.Course structure (Practical)

Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
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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:	
Conservative Dentistry (Crown and Bridge)	
2. Course Code: ZUDE0302	
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: was an abd - alrudha hasan Email: was an.abd@alzahu.edu.iq Name: sundus mohammad ali Email: sundus.mohammad@alzahu.edu.iq	
8. Course Objectives	
Course Objectives	Knowledge 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.
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10.Course structure					
Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1+2	2theory+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 work	Theoretical and practical exams (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	Theoretical and practical exams

				work	(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:	
Oral Surgery	
2. Course Code: ZUDE0303	
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: Asmaa mohammad mhana Email: asmaa.muhanah@alzahu.edu.iq	
8. Course Objectives	
Course Objectives	- Knowledge of principles of oral surgery and how to deal with patients 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	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)					
Wee k	Hours	Subject Title	Required learning outputs	Teachin g Method	Assess ment 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:
Pharmacology
2. Course Code: ZUDE0304
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: Istabraq 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-acid	Power Point	Quiz
2	Oral 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
Course evaluation			Mid Exam	Final exam
Text book & references 1- Pharmacology (Lippincott Illustrated Reviews Series) 7th Edition (2019) 2- Katzung's Basic & Clinical Pharmacology, 16th Edition 3- Contemporary Dental Pharmacology : Evidence-Based Considerations 1st ed (2019)				

Course Description Form

1. Course Name:

General Pathology					
2. Course Code: ZUDE0305					
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 clinical cases	Theoretical exams, seminars and 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

1. Course Evaluation

- 1) Distribution of the score of 100 according to the tasks assigned to the student such as daily preparation and daily, oral and monthly examinations
- 2) Editorial and Reports etc.

Sources

1. Robbins basic pathology. Kumar, Abbas and Aster. 10th edition. 2018, Elsevier.
2. Stevens, Alan, James S. Lowe, and Ian Scott. Core pathology. 2008, Elsevier Health Sciences.

Course Description Form

1. Course Name:
Community Dentistry
2. Course Code: ZUDE0306
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	Teaching the 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.
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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.
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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 its 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	Power point	Quiz

			-Etiology of periodontal disease		
8	1	Epidemiology of Oral Cancer	Learn about the types of cancers and its 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 6 th 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:					
Dental Radiology					
2. Course Code: ZUDE0307					
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	Physics of radioation	(introduction and definitions of nature of radiation, type of radiation)	Power Point	Quiz
2.	1	2-Production of radiation	x-ray machine, interaction of x-ray with matter) composition of matter	Power Point	Quiz
3.	1	Film imaging	(types of x-ray films, processing cycle,dark room, intensifying screen	Power Point	Quiz
4.	1	Factors controlling x-ray beam , dosimetry	Factors controlling x-ray beam , dosimetry and invers square low	Power Point	Quiz

		and invers square low			
5.	1	Projection jeometry	(sharpness, distortion, image characterstic and artifacts)	Power Point	Quiz
6.	1	Biological effects of radiatin	(direct & indirect effects, determistic and stochastic effect)	Power Point	Quiz
7.	1	Safety and Protection	(source of exposure , dose limits , exposure and risk and reducing dental exposure)	Power Point	Quiz
8.	1	Intraoral projection	(periapical, bitwing, and occlusal radiography)	Power Point	Quiz
9.	1	Digital radiography	(strength , limitations , comparing with conventional radiography and indications	Power Point	Quiz
10.	1	Patient's management	(mangement of pt.child, contrast media & localization technique	Power Point	Quiz
11.	1	Cephalometric imaging	g (technique, indications, evaluation of the image	Power Point	Quiz
12.	1	Panoramic radiography	(principels, technique ,positin and interpretation)	Power Point	Quiz
13.	1	Craniofacial imaging	(types , indication and interpretation)	Power Point	Quiz
14.	1	CBCT	(principles, components, strength and limitations).	Power Point	Quiz
15.	1	CBCT	(principles, components, strength and limitations).	Power Point	Quiz
16.	1	Radiographic anatomy part1	teeth, supporting dental structures, maxilla and mid facial bones)	Power Point	Quiz
17.	1	Radiographic anatomy part 2	mandible, Tmj, base of skull, air way, restorative materials)	Power Point	Quiz
18.	1	Advanced imaging modalities	CT, MRI AND ULTRASOUND	Power Point	Quiz
19.	1	Radiography & Implantology	modalities, indications	Power Point	Quiz
20.	1	Infection control	infection control in radiography clinic, protection of pt., protection of workers	Power Point	Quiz
21.	1	Prescribing diagnostic imaging	radiologic examination and guide lines for ordering imaging)	Power Point	Quiz

22.	1	Radiographically interpretations of common diseases	interpretation of dental caries, and periodontal disease	Power Point	Quiz
23.	1	Cysts of the jaw	odontogenic and non-odontogenic cysts	Power Point	Quiz
24.	1	Dental anomalies	acquired and developmental	Power Point	Quiz
25.	1	Inflammatory conditions of the jaws	periapical infectious disease, osteomyelitis, pericoronitis)	Power Point	Quiz
26.	1	Trauma	Dento-alveolar trauma , dental fractures and bone fractures	Power Point	Quiz
27.	1	TMJ abnormalities	anatomy of TMJ, application)	Power Point	Quiz
28.	1	Salivary gland disease	imaging modalities, interpretation	Power Point	Quiz
29.	1	Craniofacial anomalies	Cleft lip and palate	Power Point	Quiz
30.	1	Computed tomography	indications ,strength, limitations	Power Point	Quiz

	Course Evaluaton				
	Learning and Teaching Resources	White and Pharoah's Oral radiology principles and interpretation. Sanjay Mallya and Ernest Lam. 8th edition. 2019, Elsevier. 2. Ghom, Anil Govindrao . Textbook of oral radiology- E-Book. 2016, Elsevier Health Science			

Course Description Form

1. Course Name/ theoretical	
Microbiology	
2. Course Code: ZUDE0308	
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 Sajid Abd Al-Khuder 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 turn them into pathogenicity.
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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
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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	Essential Biosafety Protocols and Laboratory Rules	Orientation to the Microbiology laboratory	Power Point	quizzes + Quarterly exam.
2	2 hrs. Theory 2 hrs Practical	Light microscope electronmicroscope	The microscope	Power Point	quizzes + Quarterly exam,
3	2 hrs. Theory 2 hrs Practical	Sterilization by moist heat FILTRATION chemical sterilization. DISINFECTION AND THE DENTAL LABORATORY	Sterilization and disinfection	Power Point	quizzes + Quarterly exam.
4	2 hrs. Theory 2 hrs Practical	Introduction to Bacterial Reproduction The Bacterial Growth Curve	Bacterial growth	Power Point	quizzes + Quarterly exam.

		Environmental and Nutritional Requirements (Factors Affecting Growth)			
5	2 hrs. Theory 2 hrs Practical	Introduction and Core Components Classification Based on Physical State Classification Based on Chemical Composition Quality Control and Media Preparation	Types of culture media	Power Point	quizzes + Quarterly exam.
6	2 hrs. Theory 2 hrs Practical	Introduction to the Pre-Analytical Phase Preservation and Transport Media Specimen Transportation and Storage Conditions	Sampling and transport of test material	Power Point	quizzes + Quarterly exam.
7	2 hrs. Theory 2 hrs Practical	Fundamentals of Microbial Cultivation Methods for Isolating Pure Cultures	Laboratory cultivation of microorganisms	Power Point	quizzes + Quarterly exam.
8	2 hrs. Theory 2 hrs Practical	Cultural Characteristics on Differential and Enriched Media Optical and Chromogenic Characteristics Fundamentals of Macroscopic Identification	Bacterial identification: 1-Macroscopical characteristics (colonial morphology and cultural characteristics).	Power Point	quizzes + Quarterly exam.
9	2 hrs. Theory 2 hrs Practical	Preparation of Bacterial Smears Principles of Staining (Differential & Structural Staining) Advanced Microscopy in Clinical Microbiology	2. Microscopical examination (morphology of bacterial cells).	Power Point	quizzes + Quarterly exam.

10	2 hrs. Theory 2 hrs Practical	. Physics and Chemistry of Dye Differential Staining Mechanisms	Staining	Power Point	quizzes + Quarterly exam.
11	2 hrs. Theory 2 hrs Practical	Catalase Test Coagulase Test (Slide and Tube methods) Oxidase Test Urease Test Bacitracin sensitivity test	Biochemical tests (part 1).	Power Point	quizzes + Quarterly exam.
12	2 hrs. Theory 2 hrs Practical	Carbohydrate Fermentation Methyl Red Test Voges – Proskauer Test Citrate Utilization Test IMViC Tests	Biochemical tests (part 2).	Power Point	quizzes + Quarterly exam.
13	2 hrs. Theory 2 hrs Practical	Bile esculin test Indole test	Biochemical tests (part 3).	Power Point	quizzes + Quarterly exam.
14	2 hrs. Theory 2 hrs Practical	Terms Defined Methods of Antibiotic Susceptibility Testing Diffusion and Dilution	Antibiotic sensitivity test (part 1).	Power Point	quizzes + Quarterly exam.
15	2 hrs. Theory 2 hrs Practical	The Kirby-Bauer Mueller – Hinton Agar Procedure of The Kirby-Bauer Methods	Antibiotic sensitivity test (part 2).	Power Point	quizzes + Quarterly exam.
Second semester					
16	2 hrs. Theory 2 hrs Practical	Classification of antigen-antibody interactions ELISA Enzyme-Linked Immunosorbent Assay (ELISA) Types of ELISA	Serological tests (antigen and antibody detection tests) (part 1).	Power Point	quizzes + report, Quarterly exam.
17	2 hrs. Theory 2 hrs Practical	Agglutination Precipitation Types of precipitation test	Serological tests (antigen and antibody detection tests) (part 2).	Power Point	quizzes + report, Quarterly exam

18	2 hrs. Theory 2 hrs Practical	Gel diffusion Immunoelectrophoresis single Radial Immunodiffusion	Nucleic acid assays, Animal pathogenicity test	Power Point	quizzes +report Quarterly exam.
19	2 hrs. Theory 2 hrs Practical	STAPHYLOCOCCI Scientific Classification Characters of Staphylococci Grouping of Staphylococci	Staphylococci	Power Point	quizzes +report Quarterly exam.
20	2 hrs. Theory 2 hrs Practical	Pathogenesis of S. aureus infections Virulence factors Streptococci Diseases Laboratory diagnosis Antibiotic Therapy	Streptococci	Power Point	quizzes + report ,Quarterly exam.
21	2 hrs. Theory 2 hrs Practical	General Characteristics & Taxonomy Pathogenesis & Virulence Factors of Corynebacterium diphtheria Prevention and Treatment	Corynebacterium	Power Point	quizzes +report , Quarterly exam.
22	2 hrs. Theory 2 hrs Practical	Morphology and identification growth Characteristics Bacillus anthracis	Spore-forming Grampositive bacilli:	Power Point	quizzes +report , Quarterly exam.
23	2 hrs. Theory 2 hrs Practical	Bacillus species Clinical infection in humans Cutaneous anthrax Gastrointestinal anthrax Virulence factors	Bacillus spp.	Power Point	quizzes +report, Quarterly exam
24	2 hrs. Theory 2 hrs Practical	Clostridium spp.	Clostridium spp.	Power Point	quizzes + report, Quarterly exam.

		Habitat Characteristics Culture and identification Pathogenicity Treatment and prevention			
25	2 hrs. Theory 2 hrs Practical	Pathogenesis and Immune Response of Mycobacteriu m tuberculosis Laboratory Diagnostic Framework	Mycobacterium spp.	Power Point	quizzes + report, Quarterly exam.
26	2 hrs. Theory 2 hrs Practical	Enterobacteria ceae Four major features Genus : Pseudomanas is separated from a family Enterobacteria ceae Representative genera of Enterobacteria ceae that are Medically Important	Enterobacteriaceae (part1)	Power Point	quizzes +report Quarterly exam.
27	2 hrs. Theory 2 hrs Practical	Culture methods Enterics classified Virulence and Antigenic Factors of Enterics	Enterobacteriaceae (part2)	Power Point	quizzes +report Quarterly exam.
28	2 hrs. Theory 2 hrs Practical	Escherichia coli Infections Klebsiella species Proteus	Enterobacteriaceae (part3)	Power Point	quizzes + report , Quarterly exam.
29	2 hrs. Theory 2 hrs Practical	Morphology and Identification Growth Characteristics NEISSERIA gonorrhoeae Pathogenesis, Pathology, and Clinical Findings	Neisseriae spp.	Power Point	quizzes + report, Quarterly exam.
30	2 hrs. Theory	Introduction	Virology	Power Point	quizzes + report, Quarterly

	2 hrs Practical	and discovering of viruses General Properties of Viruses Classification of viruse Interferon Viral persistence Viruses are able to persist to cause chronic infection			exam.
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)		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:	Dental ethics
2. Course Code: ZUDE 0309	
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) + 75 hours (Practical). (Two 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	Understand the fundamental principles of ethical practice in dentistry Apply ethical decision –making in clinical dental situation Recognize the importance of patient autonomy ,confidentiality and informed consent Promote patient welfare and social responsibility in oral healthcare
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9. Teaching and Learning Strategies

Strategy	Using various modern devices and equipment to deliver the material to the student as needed - Data show projector - LCD Electronic screens Smart boards Live broadcast via digital cameras
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11. Course Structure					
Weeks	Hours	Required Learning Outcomes	Unit Name / Course or Topic	Learning Methods	Evaluation Method
1	1		What is meant by “ethics? Why are ethics important? Evolution and philosophy of ethics The terms moral and ethical, obligation and principle	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
2	1		Dental ethics, professionalism, Human Rights and Law What is a “profession?” What is a “professional?” What is “professionalism?” Dentistry as a Profession Dentistry: The Commercial Picture Dentistry: The Normative Picture The Content of Professional Obligations	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
3	1		What is meant by the “best interests” of our patients? What is “paternalism?” Is good risk management good ethics?	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams

			What about compromising quality?		
4	1		What are codes of ethics? Should I care more about being legal or being ethical? Do we really have obligations to patients? Can dentistry be both a business and a profession? Advances in characterizing host response o Assessment of the susceptible host using markers in peripheral blood o Identification of host constituent in GCF o Salivary biomarkers o Subgingival temperature - Advanced Imaging Modalities o Conventional radiograph o Digital radiograph o Subtraction radiography o Computer-assisted-densitometric-image-analysis (CADIA) o Cone Beam Computed Tomography (CBCT)	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
5	1		What's special about Dentistry? What's special about dental ethics? Who decides what is ethical?	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams

			Does dental ethics change? Does dental ethics differ from one country to another?		
6	1		The role of the FDI How does the FDI decide what is ethical? How do individuals decide what is ethical? How do individuals decide what is ethical?	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
7	1		History and basic ethical theory History of medical ethics Hammurabi's code of law Ippocratic oath Basic grounding of Ethics Humanities (universal standards) Religious & nonreligious: Political & dogmatic strategies of the state Other groundings of Ethics (theories of ethics): Action theory: Consequentiality theory: Value theory (why theory): Ethics and the law Sources of Ethical Views and Convictions	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
8	1		History and basic ethical theory History of medical ethics	Theoretical lectures using PDF and	Midterm Exams Midterm Exams

			Hammurabi' s code of law ippocratic oath Basic grounding of Ethics Humanities (universal standards) Religious& nonreligious: Political& dogmatic strategies of the state Other groundings of Ethics (theories of ethics): Action theory: Consequentiality theory: Value theory (why theory): Ethics and the law Sources of Ethical Views and Convictions	PowerPoint	Final Exams
9	1		Patient autonomy Non-maleficence Beneficence Justice Veracity	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
10	1		Patient autonomy Non-maleficence Beneficence Justice Veracity prognosis	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
11	1		Duties and obligation of dentists In general	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams

12	1		Duties and obligation of dentists In general	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
13	1		The Ideal Relationship between Dentist and Patient Duties and obligation of dentists Toward their patients THE DENTIST-PATIENT RELATIONSHIP FOUR MODELS OF THE DENTIST-PATIENT RELATIONSHIP The Guild Model The Agent Model The Commercial Model The Interactive Model	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
14	1		The Ideal Relationship between Dentist and Patient Duties and obligation of dentists Toward their patients THE DENTIST-PATIENT RELATIONSHIP FOUR MODELS OF THE DENTIST-PATIENT RELATIONSHIP The Guild Model The Agent Model The Commercial Model The Interactive Model	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams

15	1		Duties and obligation of dentists Toward the public and the paramedical profession The Relationship between Dentistry and the Larger Community	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
16	1		Duties of dental surgeons and specialists in consultations	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
17	1		Responsibilities of dental surgeons to one another Ideal Relationships between Co-professionals	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
18	1		Ethical Issues in Dental Practice Ethical Questions and Legal Questions Choosing to Re-Ethical Published Codes of Conduct and Ethics Committees Examples of ethical issues and Challenges Access to dental care Abuse of prescriptions by patients Advertising and abuse of advertising Emergency care Financial arrangements	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams

			Disclosure and misrepresentation Child		
19	1		Ethical Issues in Dental Practice Ethical Questions and Legal Questions Choosing to Re Ethical Published Codes of Conduct and Ethics Committees Examples of ethical issues and Challenges Access to dental care Abuse of prescriptions by patients Advertising Emergency care Financial arrangements Disclosure and misrepresentation Child abuse	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
20	1		Competence and judgment Confidentiality Dating patients Delegation of duties Digital communication and social media Harassment Consent	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
21	1		Patients with Compromised Capacity Treatment Decisions for Patients with Compromised	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams

			Capacity The Role of Parents and Legal Guardians The Capacity for Autonomous Decision Making Dealing with Patients with Partially		
22	1		Conflict of interest Personal interest versus patient interest Public versus patient interest Third-party interests Professional versus business ethics	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
23	1		Importance of Dental Research Research in Dental Practice Ethical Requirements Ethics Review Committee Approval	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
24	1		Importance of Dental Research Research in Dental Practice Ethical Requirements Ethics Review Committee Approval	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
25	1		Scientific Merit Social Value Risks and Benefits Informed Consent Confidentiality Conflict of Roles Honest Reporting of Results	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams

26	1		Scientific Merit Social Value Risks and Benefits Informed Consent Confidentiality Conflict of Roles Honest Reporting of Results:	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
27	1		Who determines how a dentist should behave? -A local or a global standard of care? - Transparency of care, guidelines, and protocols. -Shared decision-making, evidence informed decision-making, and evidence-guided decision-making. - Individualization and the standard of care based on a long-term goal for dental treatment.	Theoretical lectures using PDF and PowerPoint Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
28	1		Difficult Professional-Ethical Judgments A Model of Professional-Ethical Decision Making Conflicting Professional Obligations Conflicts Between Professional and Other Obligations Conscientious Disobedience of	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams

			Professional Obligations		
29	1		The Central Values of Dental Practice The Patient's Life and General Health The Patient's Oral Health The Patient's Autonomy phonetic complications: o Aesthetic complications o Phonetic problems	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams
30	1		Practice Aesthetic Values Efficiency in the Use of Resources Ranking Dentistry's Central Values Thinking about the Case	Theoretical lectures using PDF and PowerPoint	Midterm Exams Midterm Exams Final Exams

Course Description Form

1. Course Name:	
Periodontics	
2. Course Code: ZUDE0401	
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. Learning the students 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					
Wee k	Hou rs	Subject name	Require d learning outputs	Learning method	Assessment method
1	4	Terms & definitions frequently used in periodontology Anatomy of the periodontium Oral		Lecture/ Using PowerPoint lectures / Discussion and discussion method /	Written, quarterly, or monthly written tests /

		mucosa		Using smart screens and blackboards in presenting scientific material / clinic.	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 blackboards in	Written, quarterly, or monthly written tests / grades granted for daily entries / oral

				presenting scientific material / clinic.	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 Instrucion		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	Periodontal 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

1. Course Name:	
Prosthodontics	
2. Course Code:	
ZUDE0402	
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: ZUDE0502	
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

We ek	Hour s	Subject name	Required learning outputs	Learning method	Assessme nt 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
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:	
Orthodontic	
2. Course Code: ZUDE0403	
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. 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 laboratory	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	<i>continue</i> 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	<i>continue</i> 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. 5 TH . Edition Simon Littlewoods and Laura Mitchell.2019
Main references (sources)	Orthodontics: principles and practice /2 nd . 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:					
Conservative Dentistry					
2. Course Code: ZUDE0404					
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	Learning the students 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	2theory +4 practical	Patient evaluation, diagnosis, and treatment planning	Learning the right way for diagnosis	Power Point lec.+ clinical	Theoretical and practical

				work	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,diagnosis	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:	
Oral and Maxillofacial Pathology	
2. Course Code: ZUDE0405	
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
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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,patho-physiology, 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 osseous lesions (types,differential diagnosis, histopathological features)	Fibro osseous 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	Bone neoplasm	Power Point	Quiz

		and histopathology of each)			
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 and Maxillofacial surgery	
2. Course Code: ZUDE0406	
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	-Teaching the students 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 Myeloma	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. Theory	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 technique To 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:
Pediatric dentistry
2. Course Code: ZUDE0407
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	Eruption of teeth , normal eruption process		Power point	Quiz
2	1	Teething and difficult eruption		Power point	Quiz

3	1	Eruption haematoma , sequestrum ,ectopic eruption		Power point	Quiz
4	1	Epstein pearls, Bohn nodules, Dental lamina cysts		Power point	Quiz
5	1	Systemic (disease) Factors which cause late eruption		Power point	Quiz
6	1	Morphology of the primary teeth		Power point	Quiz
7	1	Normal morphology of all primary teeth		Power point	Quiz
8	1	Morphological differences between primary and permanent teeth		Power point	Quiz
9	1	Functions of primary teeth		Power point	Quiz
10	1	Dental caries; Definition and Classification		Power point	Quiz
11	1	Rampant dental caries, Early childhood caries,		Power point	Quiz
12	1	Restorative dentistry for children		Power point	Quiz
13	1	Morphological consideration ,cavity preparation		Power point	Quiz
14	1	Restorative materials used on pediatric dentistry		Power point	Quiz
15	1	Matrices & retainers		Power point	Quiz
16	1	Chrome steel crowns, ART		Power point	Quiz
17	1	Treatment of deep caries		Power point	Quiz
18	1	Indirect pulp treatment		Power point	Quiz
19	1	Vital pulp therapy pulpotomy		Power point	Quiz
20	1	Non vital pulp therapy technique		Power point	Quiz
21	1	Reaction of pulp to various capping material		Power point	Quiz

22	1	Local anesthesia and pain control for children		Power point	Quiz
23	1	Anesthetizing mandibular and maxillary teeth and soft tissue		Power point	Quiz
24	1	Complications after a local anesthetic		Power point	Quiz
25	1	Supplemental injection techniques		Power point	Quiz
26	1	Oral surgery for children		Power point	Quiz
27	1	Technique for extraction of primary teeth		Power point	Quiz
28	1	Extraction complications		Power point	Quiz
29	1	Postoperative extraction complications		Power point	Quiz
30	1	Infections manifestation and management		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:	
General medicine	
2. Course Code: ZUDE0408	
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:	
General surgery	
2. Course Code: ZUDE0409	
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	Teaching the students 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	Metabolic response to injury	BASIC CONCEPTS IN HOMEOSTASIS MEDIATORS OF THE METABOLIC RESPONSE TO INJURY Physiological response to injury ((THE 'EBB AND FLOW' MODEL)) Insulin resistance AVOIDABLE FACTORS THAT COMPOUND THE RESPONSE TO INJURY Systemic inflammation and tissue response	Power Point	Quiz
2	1	Wound healing Introduction	Introduction Classification of wound Healing Normal sequence of wound Healing Factors affecting healing (local & systemic) Complications of wound healing	Power Point	Quiz

3 & 4	2	Surgical wound infections	Surgical sepsis Types of wounds Infecting organisms (Exogenous organisms, Endogenous organisms) Prevention of wound Infections Clinical features of wound Sepsis Diagnosis of wound sepsis Treatment	Power Point	Quiz
5 & 6	2	Hemorrhage Introduction	Introduction Pathophysiology Definitions(<i>Revealed and concealed hemorrhage, Primary, reactionary and secondary hemorrhage Surgical and non surgical hemorrhage</i>) Degree and classification Management (<i>Identify hemorrhage, Immediate resuscitative maneuvers, Identify the site of hemorrhage, Hemorrhage control</i>) Damage control surgery	Power Point	Quiz
7& 8	2	Shock Introduction	Introduction Pathophysiology <i>Ischemia–reperfusion syndrome</i> Classification of shock Consequences <i>Unresuscitatable shock Multiple organ failure</i> RESUSCITATION Fluid therapy	Power Point	Quiz

			Monitoring end point of resuscitation		
9 & 10	2	Blood transfusion Introduction	Introduction Blood and blood products Indications for blood transfusion Blood groups and cross-matching Transfusion reactions Cross-matching Complications of blood transfusion Management of coagulopathy	Power Point	Quiz
11	1	Parenteral feeding Introduction	Introduction Route of delivery Peripheral central venous access Complications of parenteral nutrition Refeeding syndrome	Power Point	Quiz
12 & 13	2	Fluid balance	Abnormalities of body water Fluid overload and oedema Abnormalities of electrolytes Fluid replacement Acid-base balance Abnormalities of acid-base balance	Power Point	Quiz
14& 15	2	Electrolytes balance Introduction	Introduction Principles of electrolyte balance Normal homeostasis Barriers between compartments, osmolality and electrolyte	Power Point	Quiz

			concentrations Homeostatic mechanisms		
16& 17	2	Head injury	Introduction Cerebral blood flow Initial evaluation and management Mechanism Neurological progression Examination: primary survey Glasgow Coma Score secondary survey CLASSIFICATION OF SEVERITY TYPE OF HEAD INJURY	Power Point	Quiz
18 & 19	2	Preoperative preparation	Introduction to the Patient History of the presenting Complaint Relevant medical history Family history Drug therapy Social history Allergies Common surgical symptoms Terms used in General Surgery and History Taking	Power Point	Quiz
20 & 21	2	Anesthesia & Pain HISTORY	HISTORY GENERAL ANAESTHESIA Management of airway during	Power Point	Quiz

			Anesthesia Complications of intubation Ventilation during anesthesia Monitoring and care during anesthesia Chronic pain management Chronic pain control in benign disease Pain control in malignant disease		
22 & 23	2	Perioperative care Introduction	Introduction Factors that predispose patients to a high risk of morbidity and mortality Patient factors Surgical factors Optimize medical management of coexisting diseases and intraoperative considerations Ischemic heart disease Respiratory failure SPECIFIC Strategies	Power Point	Quiz
24 & 25	2	Postoperative care	Postoperative care SYSTEM-SPECIFIC POSTOPERATIVE COMPLICATIONS Respiratory complications Cardiovascular complications Renal and urinary complications COMPLICATIONS	Power Point	Quiz

			RELATED TO SPECIFIC SURGICAL SPECIALTIES <i>Paralytic ileus</i> <i>Compartment syndrome</i> Neck surgery Neurosurgery		
26 & 27	2	GENERAL POSTOPERATIVE	Nausea and vomiting Bleeding Deep vein thrombosis Hypothermia and shivering Fever Pressure sores Drains Wound care Wound dehiscence DISCHARGE OF PATIENTS	Power Point	Quiz
28 & 29	2	Day case surgery Definition	Definition SELECTION CRITERIA PREOPERATIVE ASSESSMENT SURGERY DISCHARGE	Power point	Quiz
30	1	Surgical ethics and law	Introduction Informed consent matters of life and death Confidentiality research	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: ZUDE0501
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.
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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.
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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 Risk	Power Point	Quiz
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

11. Course Evaluation

15 marks: mid-year exam
25 marks: Annual quest
60 marks: final year exam

12. Learning and Teaching Resources

Stage	Subject	References
5 th	Periodontics	1- Clinical Periodontology and Implant Dentistry, Seventh Edition, Niklaus P. Lang and Jan Lindhe, 2022 2- Newman and Carranza's Clinical Periodontology, Thirteen Edition, 2019

Course Description Form

1. Course Name:

Prosthodontic

2. Course Code: ZUDE0502	
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 applicati on and quiz
15	1	Single CD	Learn student about combination syndrome	Power point	Clinical applicati on and quiz
16	1	Single CD	Learn student about combination syndrome	Power point	Clinical applicati on and quiz
17	1	Geriatric dentistry	Learn how to diagnose and management patient	Power point	Clinical applicati on and quiz
18	1	Maxillofacial prosthesis	Learn student about obturator	Power point	Clinical applicati on and quiz
19	1	Maxillofacial prosthesis	Learn student about obturator	Power point	Clinical applicati on and quiz
20	1	Residual ridge resorption	Learn how to treat ridge resorption	Power point	Clinical applicati on and quiz
21	1	Residual ridge resorption	Learn how to treat ridge resorption	Power point	Clinical applicati on and quiz
22	1	Dental implant	Learn student about dental implantation	Power point	Clinical applicati on and quiz
23	1	Dental implant	Learn student about dental implantation	Power point	Clinical applicati on and quiz
24	1	Esthetic In CD	Learn how to deal with patient from esthetic view	Power point	Clinical applicati on 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

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:	
Orthodontic	
2. Course Code: ZUDE0503	
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 <u>Name: Tiba Sajad Mohsen</u> 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	H o u r s	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 cephalogram
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	<i>Continue..</i> 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	Power point	Quiz

			treatment		
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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:
Conservative Dentistry
2. Course Code: ZUDE0504
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		Teaching 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.+ clinical	Quiz & practical evaluation
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:	
Oral Medicine	
2. Course Code: ZUDE0505	
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 Jaber Aboob 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	Theoretic al exams, seminars and clinical cases
17	2	Oral manifestations in haematological diseases		Power point presentation and small group teaching in clinic with clinical cases	Theoretic al exams, seminars and clinical cases
18	2	Oral cancer		Power point presentation and small group teaching in clinic with clinical cases	Theoretic al 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	Theoretic al exams, seminars and clinical cases
20	1	Occupational hazards in dentistry		Power point presentation and small group teaching in clinic with clinical cases	Theoretic al exams, seminars and clinical cases

1.Course Evaluation

- 1. Distribution of the score of 100 according to the tasks assigned to the student such as daily preparation and daily, oral and monthly examinations**
- 2. Editorial and Reports etc.**

sources

1. Burket's oral medicine. Michael Glick, Martin Greenberg, Peter Lockhart and Dtephen Challacombe. 13th edition.2021, Wiley Black well.

2. Bumann, A., & Lotzmann, U. TMJ disorders and orofacial pain. The role of dentistry in a multidisciplinary approach. 2011, Thieme.

Course Description Form

1. Course Name:	
Oral and maxillofacial surgery	
2. Course Code: ZUDE0506	
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.
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10.Course structure					
Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
30	1	Oral surgery		Theory clinical	
1		Orofacial pain		Power Point	Quiz
2		Preliminary management of patients with facial fractures		Power Point	Quiz
3		Fracture of the mandible		Power Point	Quiz
4		Fracture of middle third of facial skeleton			
5		Dentoalveolar and soft tissue injuries			
6		Preprosthetic surgery			
7		Potentially malignant disorder of			

		The oral mucosa			
8		Odontogenic diseases of maxillary sinus			
9		Benign cystic lesion of the oral cavity			
10		Odontogenic tumor			
11		Non- odontogenic tumor and fibroosseous lesion of the jaws			
12		Oral cancer			
13		Implant treatment ;advanced concepts			
14		Salivary gland diseases			
15		Temporomandib ular joint disorder			
16		Orthognathic surgery			
17		Cleft lip and palate			

18		Laser and cryosurgery in oral and maxillofacial surgery			
19		Vascular anomalies			
20		Principles of reconstructive surgery of the defects of the jaws			

1. Course Evaluation

quizzes , short term , midterm , final exam and practical exam

2. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1. Contemporary oral and maxillofacial surgery 7th edition 2019 (Elsevier) 2. .An outline of oral surgery 200 3. ..Fractures of the Facial Skeleton 2nd edition 2015(Wiley Blackwell .4. Maxillofacial Surgery 3rd edition 2017 (Elsevier) 5 .Misch's Contemporary implant dentistry 4th edition 2021 (Elesvier)
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:	
Pediatric dentistry	
2. Course Code: ZUDE0507	
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 how to choose 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 to choose 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 its effect on permanent teeth	Learn how to classify the injuries to teeth.	Power point	Quiz
9	1	Traumatic injuries of the primary teeth and its 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 injuries 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 procedures, miscellaneous	Learn about advances in restorative procedure	Power point	Quiz
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 stain 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	Power point	Quiz

			disability, learning 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: ZUDE0508	
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