



جَامِعَةُ الْبَيَانِ



Academic Program Description

Al-Bayan University College of Dentistry

2025 - 2026

College of Dentistry
25/9/2025

University	Al-Bayan University
Faculty/Institute	College of Dentistry
Scientific Department	Collage of Dentistry
Academic/Professional Program Name	Academic Program Description of College of Dentistry
Final Certificate Name	Bachelor in Dentistry
Academic System	Annual
Description Preparation Date	2025
File Completion Date	25/9/2025

Head of Department

Signe

Name

Date

Scientific Associate

Signe

Name

Date



Lec. Dr. Alaa Mohammed
Shaheed

25/9/2025

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

Head of Quality Assurance Section

Signe

Name Lec. Dr Omar Bakr Hazm

Date 25/9/2025



Assis Prof Dr. Mudher Mohammed Baqir

Approval of the Dean

1. Program Vision

Leadership in education and scientific research at the national and global levels, keeping up with modern technologies, artificial intelligence, and ensuring quality oral and dental health care.

2. Program Mission

The College of Dentistry believes that oral health is an integral part of general health and strives to improve the quality of life in the community through its advanced educational programs and by harnessing artificial intelligence skills. It aims to graduate a new generation of inspiring dentists who uphold high professional ethics.

3. Program Objectives

1. Provide distinguished educational programs that ensure the development of students with high skills and professional ethics.
2. Support scientific research and innovation to develop treatments and techniques used in the field of dentistry and provide specialized, high-quality health care to patients.
3. Enhance the effectiveness of the educational process by using modern technology, represented by artificial intelligence and software for diagnosis and treatment, while achieving sustainable development concepts.
4. Promote communication and understanding between students and community members from diverse cultures and backgrounds, and commit to the values of justice and social equality.

4. The Program Accreditation

N/A

5. Other External Influences

N/A

6. Program Structure

Course Structure	Number of Courses	Credit Units	(%)	Reviews
Institutional Requirements	5	12	5.6%	primary
College Requirements	43	201	94.4%	Primary
Department Requirements				
Summer Training	14	78.5	36.8%	primary
Other				

7. Program Description

Year / Level	Course Code	Course Name	Credit Hours	
			Theoretical	Practical
1 st	050101	Dental Anatomy	2	2
	050102	Biology	2	2
	050103	Medical physics	2	2
	050104	Medical chemistry	2	2
	050105	General human anatomy	1	2
	050106	Computer	1	2
	050107	Arabic language	1	0
	050108	English language	1	0
	050109	Human rights	1	0
2 nd	050201	Prosthetic dentistry	1	4
	050202	Dental materials	1	2
	050203	Oral histology and embryology	2	2
	050204	General histology	2	2
	050205	General physiology	2	2
	050206	General human anatomy	1	2
	050207	Biochemistry	2	2
	050208	Baath party crimes	1	
3 ^{ed}	050301	Prosthetic dentistry	1	2
	050303	Pre-clinical conservative dentistry	1	2
	050304	Pre-clinical fixed prosthodontics	1	2
	050305	Oral surgery	1	2
	050306	Community dentistry	1	2
	050307	Pharmacology	2	2
	050308	General pathology	2	2
050309	Microbiology	2	2	

	050310	Radiology	1	2
	050311	Dental ethics	1	0
4 th	050401	Prosthetic dentistry	1	3
	050402	Operative and esthetic dentistry & endodontics	1	6
	050403	Oral surgery	1	4
	050404	Periodontics	1	3
	050405	Orthodontics	1	5
	050406	Oral pathology	2	3
	050407	General medicine	1	0
	050408	General surgery	1	0
	050409	Pediatric dentistry	1	0
	5 th	050501	Prosthodontics	1
050502		Oral medicine	1	2.5
050503		Oral surgery	1	6
050504		Orthodontics	1	4
050505		Pediatric dentistry	1	1.25
050506		Preventive dentistry	1	1.25
050507		Periodontics	1	2.5
050508		Clinical endodontics & clinical fixed prosthesis	1	6
050509		Research project	2	0

8. Expected learning outcomes of the program

Knowledge

Learning Outcome 1: A1- Formulating information in a way that enables students to understand and comprehend.

Learning Outcome 2: A2- Increasing students' knowledge of oral and dental examination and treatment methods.

Learning Outcome 3: A3- Enabling students to identify and diagnose cases associated with complete removable and fixed dentures, and to clinically treat them.

Learning Outcome 4: A4- Enabling students to treat patients of all age groups, including children and the elderly.

Skills

Learning Outcome 1: B1- Gaining the knowledge and experience that helps in diagnosing diseases and identifying their causes.

Learning Outcome 2: B2- Enabling students to acquire the skills to make appropriate decisions for medical cases.

Learning Outcome 3: B3- Methods for examining and treating dental caries and endodontic treatments for children and adults.

Learning Outcome 4: B4- Enabling students to create fixed and removable dental prostheses.

Values

Learning Outcome 1: C1- Educating students on humanitarian and professional work.

Learning Outcome 2: C2- Enhancing and instilling professional and ethical values in students for practicing dentistry.

Learning Outcome 3: C3- Developing a sense of responsibility in students during their studies and in the workplace.

Learning Outcome 4: C4- Supporting and promoting medical awareness among students and community members.

9. Teaching and Learning Strategies

A- Knowledge and Understanding:

1. Empowering students to acquire and comprehend the fundamental principles of anatomy, oral surgery, and gum diseases.
2. Equipping students with the ability to document patients' general medical history.
3. Enabling students to possess self-learning skills to acquire new information and expertise within the field.
4. Empowering students to act in response to any patient-related incidents during work.

B- Subject-specific Skills:

1. Presenting brainstorming questions that enable students to link study materials together and relate them to medical and health reality.
2. Developing skills in conducting motivational interviews to encourage patients to adopt preventive measures, adhere to treatment, and follow post-operative instructions.

C- Thinking Skills:

1. Encouraging students through expressive communication, thinking speed, and responsiveness.
2. Prompting students to problem-solving and fostering distinctive thinking.
3. Engaging lectures through student interaction and brainstorming.
4. Discussing medical cases and how to handle them.

D- General and Transferable Skills (Other skills related to employability and personal development):

1. Professional preparation and urging students toward positive behavior in their personal lives.
2. Scientific preparation and encouraging students to communicate in other scientific fields.
3. Cultural preparation and refining students' personalities.
4. Employing acquired skills to enable students to become dentists capable of performing various minor surgeries.

E- Teaching and Learning Methods:

1. Lectures using data show and PowerPoint presentations.
2. Educational films.
3. Display screens.
4. E-learning.
5. Whiteboards.
6. Student group discussions.
7. Patient reception and treatment in clinics.

10. Evaluation Methods

1. Daily quizzes for theoretical subjects.
2. Oral questions.
3. Midterm examination.
4. Final examination.

11. Faculty Members		Specialization	Special Requirements/Skills	Numbers	
Titles	General	Special	Staff	lecturer	
<i>Prof.</i>	Bachelor in oral surgery and medicine	Preventive dentistry	1		
	Bachelor in veterinary medicine	Cell physiology	1		
<i>Ass. Prof.</i>	Bachelor in oral surgery and medicine	Oral and maxillofacial surgery	1		
<i>Lecturer doctor</i>	Bachelor in oral surgery and medicine	Oral and maxillofacial surgery	3		
	Bachelor in oral surgery and medicine	Oral medicine	1		
	Bachelor in oral surgery and medicine	Prosthodontics	3		
	Bachelor in oral surgery and medicine	Conservative dentistry	1		
	Bachelor in oral surgery and medicine	Preventive dentistry	1		
	Bachelor in oral surgery and medicine	Oral pathology	1		
	Bachelor of Medicine & General Surgery	General surgery	1		

	Bachelor of Medicine & General Surgery	Family medicine	1	
	Bachelor of Biotechnology	Molecular biology	1	
	Bachelor of Science in Biology	Microbiology	1	
	Bachelor of Arabic Language	Arabic language		
<i>lecturer</i>	Bachelor in oral surgery and medicine	Periodontics	1	
<i>Ass. lecturer</i>	Bachelor in oral surgery and medicine	Prosthodontics	2	
	Bachelor in oral surgery and medicine	Orthodontics	2	
	Bachelor in oral surgery and medicine	Radiology	1	
	Bachelor in oral surgery and medicine	Aesthetic and restorative dentistry	4	
	Bachelor in oral surgery and medicine	Periodontics	1	
	Bachelor in oral surgery and medicine	Preventive dentistry	1	
	Bachelor in oral surgery and medicine	Oral surgery	3	
	Bachelor in oral surgery and medicine	Pediatric dentistry	1	
	Biology	Microbiology/histology	3	
	Chemistry	Biochemistry	2	
	Medical physics	Medical physics/x-ray	1	
	Bachelor in pharmacy	pharmacology	1	
	English language	English language		1
	Bachelor of Applied Sciences	Material science	1	
	Computer science	Computer		1
	Law	Law		1

Professional Development

Mentoring New Faculty Members

- Providing technical and technological support for new members to help them adapt to the tools and technologies used in teaching and research.
- Offering academic guidance by more experienced faculty members to assist in setting research and teaching goals and directing efforts toward achieving them.
- Regularly monitoring the progress of new members and evaluating their experiences at the college to ensure they meet their goals and improve their performance.

Professional Development for Faculty Members

- Organizing training courses and workshops for faculty members to update their knowledge in their specialties and learn new and effective teaching methods. These programs should include training on the effective use of technology in education and research.

- Providing mechanisms for regularly evaluating the performance of faculty members and offering constructive feedback to help them improve their performance and achieve their personal and professional goals.
- Faculty members should be encouraged to participate in local and international scientific conferences, present their research, and share their experiences with colleagues in the field.

12. Acceptance Criteria

Admission is based on the student's grade average after completing the sixth preparatory ministerial exam, with selection being made by the Ministry of Higher Education and other channels approved by the ministry.

13. The most important Sources of Information about the Program

Adopting programs from reputable international universities in the same field, as well as approved sources from textbooks published by reputable publishers and high-ranking academic journals.

14. Program Development Plan

- Providing academic mentoring programs for faculty members to help them set their research and teaching goals and develop their career plans.
- Organizing academic exchange programs with other universities or prestigious medical institutions to enhance collaboration and knowledge sharing.
- Offering training courses to develop leadership and management skills for faculty members, enabling them to apply these skills in managing academic and research programs and developing university policies.
- Providing financial and technical support for faculty members to conduct advanced scientific research and publish their findings in peer-reviewed scientific journals. Additionally, workshops on scientific writing and data analysis can be organized.



Program Skills

Learning Outcomes Required from the Program

Year/Level	Course Code	Course Title	Primary or Optional	Knowledge					Skills					Values	
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4

1st	050101	Dental anatomy	primary	X					X							X
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2nd	050201	prosthodontics	primary			X					X				X	
	050202	Dental material	primary	X								X				
	050203	Oral histology and embryology	primary	X									X			

3rd	050301	prosthodontics	primary			X	X	X				X	X			
	050303	Preclinical conservative dentistry	primary				X	X				X	X			
	050304	Preclinical fixed prosthesis	primary		X	X				X			X	X		
	050306	Community	primary				X	X				X	X			
	050310	Radiology	primary				X	X						X		

4th	050401	Prosthodontics		X	X	X	X		X	X						
	050402	Operative and esthetic dentistry & endodontics		X	X	X	X						X	X		

	050405	Orthodontics	X	X		X	X
	050409	Pediatric dentistry		X	X	X	X
5th	050501	Prosthodontics	X			X	X
	050502	Oral medicine	X			X	X
	050504	Orthodontics				X	X
	050505	Pediatric dentistry	X	X	X	X	X
	050506	Preventive dentistry		XX	X	X	X
	050508	Clinical endodontics & clinical fixed prosthesis					

Program Skills

Learning Outcomes Required from the Program

Year/Level	Course Code	Course Title	Primary or Optional	Knowledge				Skills				Values			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
1 st	050105	General human anatomy	primary	X					X					X	
2 nd	050206	General human anatomy	primary		X			X						X	
3 rd	050303	Oral surgery	primary			X			X					X	
4 th	050403	Oral surgery	primary				X				X	X		X	
	050408	General surgery	primary				X							X	
	050404	Periodontics	primary							X		X		X	
	050406	Oral pathology	primary	X						X				X	
5 th	050503	Oral surgery	primary		X						X	X		X	
	050507	Periodontics	primary		X					X		X		X	

Program Skills

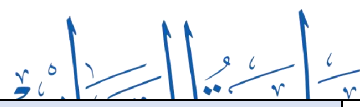
				Learning Outcomes Required from the Program												
Year/Level	Course Code	Course Title	Primary or Optional	Knowledge				Skills				Values				
				A 1	A 2	A 3	A 4	B 1	B 2	B 3	B4	C 1	C2	C 3	C4	
1st	050102	Biology	primary	X					X						X	
	050103	Medical physics	primary	X							X	X			X	
	050104	Medical chemistry	primary	X							X	X			X	
	050106	computer	primary		X						X	X			X	
	050107	Arabic language	primary								X	X			X	
	050108	English language	primary								X	X			X	
	050109	Human rights	primary												X	
	050110	Baath party crimes	primary												X	
2nd	050204	General histology	primary			X				X					X	
	050205	General physiology	primary			X				X					X	
	050207	Biochemistry	primary			X				X					X	

3rd	050307	pharmacology	primary	X	X	X
	050308	General pathology	primary	X	X	X
	050309	Microbiology	primary	X	X	X
4th	050407	General medicine	primary	X	X	X
5th	050509	Research project	primary	X	X	X

جامعة البتة

Department of dental specialties

Course description



1. Course Title	Clinical Endodontics & Clinical Fixed Prosthodontics	
2. Course Code	050508	
3. Semester/Year	annual	
4. Description Preparation Date	21-9-2025	
5. Available Attendance Form	Lectures + clinics	
6. No. of Hours (Total)	30 theoretical hours180 work hour	
7. No. of Credits (Total)	8	
8. Course Administrator Name	Assistant prof Mohammed Munther Abdulrazaq	
9. E-mail	mohammad_monther@aliraqia.edu.iq	
10. Course Objectives		
Knowledge	A1	Training the student on how to examine and diagnose medical conditions
	A2	Giving important information and treatment steps
	A3	Giving instructions and following up on root filling operations
	A4	Giving instructions and following up on bridge and crown operations
Skills	B1	Description of the tools used to prepare canals for root fillings
	B2	Description of the tools used for steps to prepare teeth for crowns and bridges
	B3	Teaching the student how to use it and following up on it while working
	B4	

Handwritten Arabic notes at the top of the page, including the word 'محل' (Mahl) and some mathematical symbols like '3/2' and '2/3'.

Values	C1	Solve problems
	C2	Able to drive
	C3	
	C4	

11. Teaching and Learning Strategies

1.	Data show	4.	educational movies
2.	lecture	5.	occasional cameras
3.	LCD	6.	

12. The Structure of the Course					
Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	1	Introduction to Endodontic Diagnosis II. Patient History III. Clinical Examination IV. Diagnostic Tests V. Differential Diagnosis VI. Final Diagnosis VII. Treatment Planning VIII. Follow-Up and Re-evaluation	Endodontic diagnosis	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
2	1	Introduction to Pain Control in Endodontics II. Types of Pain in Endodontic Procedures III. Preoperative Pain Management IV. Local Anesthesia	Pain control in endodontics	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
3	1	introduction to Endodontic Radiography II. Importance of Radiography in Endodontics III. Types of Radiographic Techniques	Endodontic radiography	Theoretical lecture using the program power point	Short, semester, mid-year and final exams

جامعة البيان

4	1		Working Length Determination	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
5	1	Introduction to Microbiology in Endodontics II. Role of Microorganisms in Dental Diseases A. Pulpal infections B. Periapical infections III. Types of Microorganisms A. Bacteria 1. Anaerobic bacteria 2. Aerobic bacteria B. Fungi C. Viruses	Microbiology	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
6	1	Introduction to Microbiology in Endodontics IV. Pathogenic Mechanisms A. Biofilm formation B. Virulence factors C. Host response to infection V. Diagnostic Techniques A. Culture methods B. Molecular techniques (e.g., PCR) C. Microscopy VI. Treatment Implications A. Antibiotic use B. Endodontic disinfection protocols C. Role of irrigation solutions	Microbiology	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
7	1	I. Introduction to Intracanal Instruments II. Types of Intracanal Instruments	Intracanal instruments (1)	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
8	1	I. Introduction to Rotary Endodontics II. Advantages of Rotary Endodontics III. Types of Rotary Instruments	Intracanal instruments (2)	Theoretical lecture using the program power point	Short, semester, mid-year and final exams

جامعة البتة

		IV. Rotary Instrumentation Techniques			
9	1	I. Introduction to Obturation A. Definition and purpose of obturation B. Importance in endodontic treatment success II. Objectives of Obturation A. Sealing the canal system B. Preventing reinfection C. Maintaining the integrity of the tooth structure III. Materials Used for Obturation	Obturation of Root Canal System (1)	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
10	1	IV. Obturation Techniques	Obturation of Root Canal System (2)	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
11	1	I. Introduction to Endodontic Emergencies A. Definition and significance B. Common types of endodontic emergencies II. Types of Endodontic Emergencies III. Pain Management	Endodontic Emergency treatment	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
12	1	I. Introduction to Restoration of Endodontically Treated Teeth II. Importance of Restoration III. Types of Restorative Options IV. Factors Influencing Restoration Choice V. Preparation for Restoration	Restoration of Endodontically Treated Teeth	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
13	1	I. Introduction to Endo-Periodontal Relations II. Anatomy and Physiology III. Pathological Interactions IV. Diagnosis of Endo-Periodontal Issues V. Treatment Considerations	Endodontic-Periodontal Relations	Theoretical lecture using the program power point	Short, semester, mid-year and final exams

جامعة البتاني

14	1	I. Introduction to Tooth Discoloration II. Causes of Tooth Discoloration	Tooth discoloration and bleaching	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
15	1	III. Types of Tooth Discoloration IV. Assessment of Tooth Discoloration V. Tooth Bleaching Methods	Tooth discoloration and bleaching.	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
16	1	definition of fixed partial denture, Effect of Tooth Loss, Comparison with R.P.D	Terminology	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
17	1		Types of Fixed Bridge including Basic Bridge Design	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
18	1	Retainers.	Components of Fixed Bridge	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
19	1	Pontics Connectors.	Components of Fixed Bridge	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
20	1	Abutment Tooth(evaluation and selection) _Crown/Root Ratio. _Splinting of teeth. _Patient Occlusal Status. _General Factors.	Clinical Consideration for Bridge Construction.	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
21	1	(Post. Tilted Abutments, Span Length, Pier Abut., Arch curvature)	Clinical Situations affecting Bridge Design		
22	1		Resin bonded bridge		
23	1	a. Intra-oral Examination. b. X-Rays Examination. c. Diagnostic Cast Examination	Diagnosis And Treatment Plan.		

جامعة البيان

24	1		Gingival retraction and impression(techniques)and impression disinfection		
25	1		provisional Restoration , Occlusion and Aesthetics (Principles of occlusion occlusal plane, Anterior guidance) Bite Registration, and Articulation	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
26	1		provisional Restoration, Occlusion and Aesthetics (Principles of occlusion occlusal plane, Anterior guidance) Bite Registration, and Articulation	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
27	1		Try-in and Shade Selection (Colour dimensions Hue, Chroma, and Value).	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
28	1		Final Cementation of F.P.Ds. (Techniques)	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
29	1		Failure in Fixed Prosthodontics.	Theoretical lecture using the program power point	Short, semester, mid-year and final exams
30	1		Porcelain in Fixed Prosthodontics (Current Ceramic).	Theoretical lecture using the program power point	Short, semester, mid-year and final exams

13. Course Evaluation

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

14. Learning & Teaching Resources

Required textbooks (curricular if any)	<ul style="list-style-type: none"> • Cohens pathways of the pulp • Contemporary Fixed Prosthodontics • Rosentetiel.Land.Fugimoto
Main References (sources)	
Recommended Books & References (Scientific Journals, Reports ...)	Make periodic reports and read recent research in reputable journals
Websites or Electronic References	Electronic references, Internet sites

Clinical Requirements

Minimum Requirement	Hours
The students are required to complete the following restorations:- Amalgam Restorations .a Class I, Class II, Compound and complex restorations. Composite (tooth colored) Restorations .b Class I, Class II, Class III, Class IV, and Class V. Fixed prosthesis including crown and bridge work. .c Endodontic treatment for anterior teeth and premolars. .d Seminars .e	6h/wk
Total	180 h/year

Course Description (1)

15. Course Title	Operative and esthetic dentistry & endodontics	
16. Course Code	050402	
17. Semester/Year	annual	
18. Description Preparation Date	2024-2025	
19. Available Attendance Form	Lectures and Laboratory	
20. No. of Hours (Total)	Theory: 30 hours	Practical: 150 hours
21. No. of Credits (Total)	8	
22. Course Administrator Name	Lecturer Hashim Mueen Hussein	
23. E-mail		
24. Course Objectives		
Knowledge	Preparing dental students scientifically and practically and qualifying them to deal with preparing the tooth and making fillings Simple and moderate under local anesthesia and training them on medical diagnosis and taking the patient's medical history and being accurate in doing so to protect themselves and their patients and teaching them to deal with emergency cases within their specialty. Fillings and root canal fillings	
Skills	<p>C- Thinking skills</p> <ol style="list-style-type: none"> 1. Motivating the student through the method of expression, thinking, speed of communication and response 2. Urging the student to solve problems and possess distinctive thinking 3. The lecture depends on student interaction and brainstorming 4. Qualifying students to examine, diagnose and treat patients <p>D- Other skills related to employability and personal development (general and transferable skills)</p>	
Values	<ol style="list-style-type: none"> 1. Professional preparation and urging the student to have positive behavior in his public life 2. Teamwork 	

3. Planning and organization
4. Skill in identifying dental prosthetic devices

Course description

the week	hours	Name of the unit or topic	Required educational outcomes	Evaluation method	Learning method
1	1	Biologic Considerations	Biologic Considerations of Enamel structure and its Clinical Significance in Practice of Operative Dentistry.	Daily examinations and evaluations on treatment of patients	Data show White board
2	1	Biologic Considerations	Biologic Considerations of Enamel structure and its Clinical Significance in Practice of Operative Dentistry.	Daily examinations and evaluations on treatment of patients	Data show White board
3	1	Biologic Considerations	Biologic Considerations of Dentin structure & its Clinical Significance in Operative Dentistry	Daily examinations and evaluations on treatment of patients	Data show White board
4	1	Biologic Considerations	Biologic Considerations of Dentin structure & its Clinical Significance in Operative Dentistry	Daily examinations and evaluations on treatment of patients	Data show White board
5	1	Patient Evaluation	Patient Evaluation, Diagnosis & Treatment Planning	Daily examinations and evaluations on treatment of patients	Data show White board

جامعة البتة

6	1	Caries Management	Caries Management (Diagnosis & treatment strategies)	Daily examinations and evaluations on treatment of patients	Data show White board
7	1	Cervical Lesions	Cervical Lesions(carious and non-carious lesions)	Daily examinations and evaluations on treatment of patients	Data show White board
8	1	Restorative Dentistry and Pulpal Health	Restorative Dentistry and Pulpal Health	Daily examinations and evaluations on treatment of patients	Data show White board
9	1	Management of Deep Seated Caries	Management of Deep Seated Caries	Daily examinations and evaluations on treatment of patients	Data show White board
10	1	Inflammatory Conditions of the Pulp	Inflammatory Conditions of the Pulp	Daily examinations and evaluations on treatment of patients	Data show White board
11	1	Treatment of Deep Seated Caries	Treatment of Deep Seated Caries Simplified anatomical modeling.	Daily examinations and evaluations on treatment of patients	Data show White board
12	1	Fluoride – Releasing Materials	Fluoride – Releasing Materials	Daily examinations and evaluations on treatment of patients	Data show White board
13	1	Indirect aesthetic adhesive restorations	Indirect aesthetic adhesive restorations Inlays and Onlays (materials, techniques) CAD/CAM Technology.	Daily examinations and evaluations on treatment of patients	Data show White board
14	1	Direct tooth-colored restorations	Direct tooth-colored restorations (Composite)	Daily examinations and evaluations on treatment of patients	Data show White board
15	1	Dental Laser	Dental Laser	Daily examinations and evaluations on treatment of patients	Data show White board

16	1	Application of Laser in Conservative Dentistry.	Application of Laser in Conservative Dentistry.	Daily examinations and evaluations on treatment of patients	Data show White board
17	1	Application of Laser in Conservative Dentistry.	Application of Laser in Conservative Dentistry.	Daily examinations and evaluations on treatment of patients	Data show White board
18	1	Indirect tooth-colored restorations	Indirect tooth-colored restorations	Daily examinations and evaluations on treatment of patients	Data show White board
19	1	Techniques of posterior composite	Techniques of posterior composite Inlay/Onlay restoration system Laboratory-processed composite inlays and onlays.	Daily examinations and evaluations on treatment of patients	Data show White board
20	1	Ceramic veneers	Ceramic veneers, inlays and onlays, clinical procedures.	Daily examinations and evaluations on treatment of patients	Data show White board
21	1	Ceramic veneers	Ceramic veneers, inlays and onlays, clinical procedures.	Daily examinations and evaluations on treatment of patients	Data show White board
22	1	CAD/CAM techniques	CAD/CAM techniques	Daily examinations and evaluations on treatment of patients	Data show White board
		Endodontics			
23	1	Topics Covered	Topics Covered	Daily examinations and evaluations on treatment of patients	Data show White board
24	1	1-Objective of endodontic treatment	1-Objective of endodontic treatment	Daily examinations and evaluations on treatment of patients	Data show White board
25	1	2- Basic Phases of Treatment	2- Basic Phases of Treatment	Daily examinations and evaluations on treatment of patients	Data show

جامعة البتة

					White board
26	1	3- Pulp pathologies	3- Pulp pathologies	Daily examinations and evaluations on treatment of patients	Data show White board
27	1	Classification of periapical diseases	Classification of periapical diseases	Daily examinations and evaluations on treatment of patients	Data show White board
28	1	Access Opening Preparation	Access Opening Preparation	Daily examinations and evaluations on treatment of patients	Data show White board
29	1	Endodontic Instruments	Endodontic Instruments	Daily examinations and evaluations on treatment of patients	Data show White board
30	1	Roentgenography in Endodontics	Roentgenography in Endodontics and Root canal preparation	Daily examinations and evaluations on treatment of patients	Data show White board

		Required textbooks (methodology, if any)
		Main references (sources)
		Recommended supporting books and references (scientific journals, reports....)
		Electronic references, Internet sites

course Description (1)

25. Course Title	Preclinical Operative dentistry	
26. Course Code	050303	
27. Semester/Year	Annual	
28. Description Preparation Date	21-9-2025	
29. Available Attendance Form	Lectures + laboratories	
30. No. of Hours (Total)	30 hours (theoretical) + 60 hours (practical)	
31. No. of Credits (Total)	4	
32. Course Administrator Name	zainab tariq abdukkadhim	
33. E-mail	zainab.tariq@albayan.edu.iq	
34.	<p>Course Objectives: Developing the manual skills of primary studies students in the third stage for the period before they enter clinical work in clinics on solid scientific foundations, acquiring more skills, knowledge and learning, and making them capable of dealing with complex clinical cases of dental fillings and treating them with the latest scientific methods</p>	
Knowledge	A1	Gaining experience and information that will help him identify the disease and know its causes
	A2	Developing motivational interviewing skills to encourage patients to take preventive measures.
	A3	Increasing students' knowledge of methods for examining teeth and detecting caries and gingivitis

	A4	Learn how to assess patients' risks of dental disease based on factors such as oral hygiene, dietary habits, tobacco use, and chronic diseases.
Skills	B1	Acquire skills in conducting clinical dental examinations for early detection of tooth decay.
	B2	Developing motivational interviewing skills to encourage patients to take preventive measures .
	B3	Identify the indications and techniques for applying fluoride treatments to strengthen tooth enamel and prevent caries
	B4	
Values	C1	Professional preparation and encouraging the student to have positive behavior in his public life
	C2	Scientific preparation and urging the student to communicate in other fields of science
	C3	Cultural preparation and refining the student's personality
	C4	Utilizing the acquired skills so that the student becomes a dentist capable of treating patients

35. Teaching and Learning Strategies

1.	Lectures using data show and power point	4.	E-learning
2.	Educational films	5.	Smart boards
3.	Display screens	6.	

36. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	1	<ul style="list-style-type: none"> - Indication of operative procedure. - Definition of tooth preparation. - Objectives of tooth preparation. - Caries terminology. - Abbreviated descriptions of tooth preparations. - Tooth preparation walls and angles. 	Introduction to operative dentistry	A theoretical lecture using Power Point	Short, semester, mid-year and final exams
2	1	<ul style="list-style-type: none"> - Caries terminology. - Classification of tooth preparations. - Cavity preparation according to G.V. Black principles. 	Dental caries, types and classification	A theoretical lecture using Power Point	Short, semester, mid-year and final exams

جامعة البتة

3	1	<ul style="list-style-type: none"> - Hand instruments. - Cutting instruments. - Instrument formula given by G.V. Black. - Examples of the cutting instruments. 	Instruments and general instrumentation of cavity preparation	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
4	1	-	Principle of cavity preparati + classification of cavities.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
5	1	-	Factors that affect cavity preparation.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
6	1	<ul style="list-style-type: none"> - Outline form. - Retention. - Resistance. - Class I cavity of buccal pit of lower 1st molars. - Class I cavity of palatal pit of upper incisors. - Class I cavity of upper molars. - Class I cavity of lower 1st premolar. 	Cavity preparations for class	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
7	1	<ul style="list-style-type: none"> - Outline form and initial depth. - Resistance form. - Factors prevent fracture of the tooth. 	Cavity preparations for class II.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams

جامعة البيان

		<ul style="list-style-type: none"> - Preventing fracture of restoration. - Retention form. - Convenience form. - Cavity preparations for class II (MOD). 			
8	1	<ul style="list-style-type: none"> - Indication and contra indication for cl III preparation. - Advantages and disadvantages for cl III preparation. - Tooth preparation for cl III cavity preparations. - Indication and contra indication for cl IV preparation. - Advantages and disadvantages for cl IV preparation. - Tooth preparation for cl IV cavity preparations. 	Cavity preparations for class III and class IV.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
9	1	<ul style="list-style-type: none"> - Indication for cl V preparations. - Isolation. - Retention and resistance. - Position of retentive means. 	Cavity preparations for class V.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams

جامعة البتة

10	1	<ul style="list-style-type: none"> - Classification. - Types. - Indications and contraindications. - Advantages and disadvantages. - Composition 	Tooth colored restorations	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
11	1	<ul style="list-style-type: none"> - Classification of composite. - Conventional. - Micro-filled. - Hybrid. - Nano-fill. - Reinforced. - Classification of composite according to the method of activation. 	Dental composite resins.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
12	1	<ul style="list-style-type: none"> - Polymerization of resin composite. - Factors affecting polymerization shrinkage stress. - Acid etch. - Enamel etching. - Dentin etching. - Adhesion to dentin. - Current strategies for Adhesion of Resin to Dentin. - Adhesive strategies – principles and generations. 	Adhesives systems.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams

جامعة البتة

13	1	<ul style="list-style-type: none"> - Types of rubber dam. - Application procedures of rubber dam. 	Rubber Dam.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
14	1		Direct composite resin restoration of CL I, III, IV and V cavities.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
15	1		Direct composite resin restoration of CL II cavity.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
16	1	<ul style="list-style-type: none"> - Principles of preparation. 	Complex composite restoration.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
17	1	<ul style="list-style-type: none"> - Restorative procedures. 	Complex composite restoration.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
18	1	<ul style="list-style-type: none"> - Indication of direct composite veneers. - Principles of direct composite veneers. 	Direct composite veneers.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
19	1	Restorative procedures of direct composite veneers.	Direct composite veneers	A theoretical lecture using Power Point	Short, semester, mid-y and final exams

جامعة البتة

20	1	<ul style="list-style-type: none"> - Procedures and principles. - Shade guides. 	Color matching and composite shade selection.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
21	1	-	Light curing of restorative materials	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
22	1	<ul style="list-style-type: none"> - Indications. - Procedures. <p>-Classifications</p>	Glass Ionomer restorations.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
23	1	<ul style="list-style-type: none"> - How to repair. - How to replace 	Failures in composite restorations	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
24	1		Remineralization and resin infiltration techniques.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
25	1	<ul style="list-style-type: none"> - Clinical relevance. - Longevity. - Failure patterns 	Amalgam restoration.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
26	1	-	Removal of amalgam restorations and mercury hazards.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
27	1	- The materials used for pulp protection.	Pulp protection.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams

		<ul style="list-style-type: none"> - The techniques used for pulp protection. 			
28	1	<ul style="list-style-type: none"> - Liners and bases definitions. - Reasons for use of base and lining materials. - The ideal lining material properties. - Function of liners. - Function of bases. - Types of cement materials. - Zinc phosphate cement. - Zinc oxide-eugenol cement. - Zinc polycarboxylate cement. - Glass ionomer cement. - Classification of GIC cements. - Resin cements. - Cavity liners \ types. - General clinical consideration. - Classification of the cavities according to their proximity from the pulp. 	liners and base materials.	A theoretical lecture using Power Point	Short, semester, mid-year and final exams
29	1	<ul style="list-style-type: none"> - Disinfection and antisepsis. - Accepted Methods of sterilizations. - New methods of sterilizations 	Sterilization of operative instruments part I	A theoretical lecture using Power Point	Short, semester, mid-year and final exams
30	1	<ul style="list-style-type: none"> - Liquid sterilants. 	Sterilization of operative instruments part II.	A theoretical lecture using Power Point	Short, semester, mid-year and final exams

جامعة البتاني

		<ul style="list-style-type: none">- Vaccines for dental health care workers.- Use and care of sharp instruments and needles.- Cleaning and disinfection of dental unit and environmental surfaces.- Disposal of waste materials.			
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Laboratory sessions

Week 1: Introduction to the phantom lab and working position.

Week 2: Introduction to the phantom lab and working position.

Week 3: Demonstration of hand and drilling instruments.

Week 4: Demonstration of CL I cavity preparation of buccal pit on lower 6 and palatal pit on upper 2.

Week 5: Exercise and evaluation of CL I cavity preparation of the buccal pit on lower 6 and palatal pit on upper 2.

Week 6: Demonstration of CL I cavity preparation for the lower 5 and 2 CL I on the lower 4.

Week 7: Exercise of CL I cavity preparation for the lower 5 and 2 CL I on the lower 4.

Week 8: Evaluation.

Week 9: Demonstration of 2 CL I cavity preparation + P extension on the upper 6.

Week 10: Exercise and evaluation of 2 CL I cavity preparation + P extension on the upper 6.

Week 11: Demonstration of CL II M and D only cavity preparation on the lower 6.

جامعة البتراء

- Week 12:** Exercise and evaluation of CL II M and D only cavity preparation on the lower 6.
- Week 13:** Demonstration of CL II MO cavity preparation + palatal extension on the upper 6.
- Week 14:** Exercise and evaluation of CL II MO cavity preparation + palatal extension on the upper 6.
- Week 15:** Demonstration and exercise of CL II DO cavity preparation on the lower 5.
- Week 16:** Demonstration and exercise of CL I composite filling of the lower 4.
- Week 17:** Demonstration and exercise of CL I composite restoration of the lower 5 (DO cavity).
- Week 18:** Demonstration and exercise of composite restoration on the lower 6.
- Week 19:** Demonstration and exercise of composite restoration on the upper 6.
- Week 20:** Demonstration and exercise of CL III cavity preparation + composite restoration on upper 1.
- Week 21:** Demonstration and exercise of CL IV cavity preparation + composite restoration on upper 1.
- Week 22:** Demonstration of CL II MO cavity preparation + composite restoration on upper 4.
- Week 23:** Exercise of CL II MO cavity preparation + composite restoration on upper 4.
- Week 24:** Demonstration and exercise of CL V cavity preparation + composite restoration on upper 3.
- Week 25:** CL V cavity preparation of lower 3+ Glass ionomer restoration.
- Week 26:** Demonstration of cavity liners and base materials.
- Week 27:** Demonstration and exercise on Rubber Dam application.
- Week 28:** Demonstration of caries detection and excavation on natural teeth, exercise on natural molars with occlusal caries.

جامعة البتراء

Week 29: Final practical examination of CL II MO cavity preparation + composite restoration on lower 6.

Week 30: Final practical examination of CL II MO cavity preparation + composite restoration on lower 6.

37. Course Evaluation

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

Grade distribution	Evaluation methods
theoretical 3% Clinical 22%	First semester + second semester 25%
Theoretical 15%	half year 15%
Theoretical 40% Clinical 20%	Final exam 60%
Theoretical %50 Clinical 50%	100%

38. Learning & Teaching Resources

Required textbooks (curricular if any)	Walmsleyetal , fundamental in operative dentistry
Main References (sources)	1. Summitt's fundamentals of operative dentistry: A contemporary approach. 4th edition . 2.Art and science of operative dentistry 7th edition
Recommended Books & References (Scientific Journals, Reports ...)	Working on ghost laboratory heads
Websites or Electronic References	Google scholar

Course Description (1)

1. Course Title		Preclinical fixed prosthodontics
2. Course Code		050304
3. Semester/Year		Annual
4. Description Preparation Date		21-9-2025
5. Available Attendance Form		Lectures + laboratories
6. No. of Hours (Total)		30 hours (theoretical) + 60 hours (practical)
7. No. of Credits (Total)		4
8. Course Administrator Name		Shatha saadallah alani
9. E-mail		Shatha.s@albayan.edu.iq
<p>10. Course Objectives: Developing the manual skills of primary studies students in the third stage for the period before they enter clinical work in clinics on solid scientific foundations, acquiring more skills, knowledge and learning, and making them capable of dealing with complex clinical cases of crown and bridge and treating them with the latest scientific methods</p>		
Knowledge	A1	Gaining experience and information that will help him identify the disease and know its causes
	A2	Developing motivational interviewing skills to encourage patients to take preventive measures.
	A3	Increasing students' knowledge of methods for examining teeth and detecting caries and gingivitis
	A4	Learn how to assess patients' risks of dental disease based on factors such as oral hygiene, dietary habits, tobacco use, and chronic diseases.

Skills	B1	Acquire skills in conducting clinical dental examinations for crown and bridge.
	B2	Developing motivational interviewing skills to encourage patients to take preventive measures .
	B3	
	B4	
Values	C1	Professional preparation and encouraging the student to have positive behavior in his public life
	C2	Scientific preparation and urging the student to communicate in other fields of science
	C3	Cultural preparation and refining the student's personality
	C4	Utilizing the acquired skills so that the student becomes a dentist capable of treating patients

11. Teaching and Learning Strategies

1.	Lectures using data show and power point	4.	E-learning
2.	Educational films	5.	Smart boards
3.	Display screens	6.	

12. The Structure of the Course					
Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	1	-Introduction to Fixed Prosthodontics.	Crown and Bridge Definitions:	A theoretical lecture using Power Point	Short, semester, mid-year and final exams
2	1	Types of crowns Purposes of crown construction.	Crown and Bridge Definitions: (continued)	A theoretical lecture using Power Point	Short, semester, mid-year and final exams
3	1	-Steps in crown construction. -Components of bridge.	Crown and Bridge Definitions: (continued)	A theoretical lecture using Power Point	Short, semester, mid-year and final exams
4	1	*Preservation of sound tooth *Retention and *resistance form	Biomechanical principles of tooth preparation:	A theoretical lecture using Power Point	Short, semester, mid-year and final exams
5	1	. *Marginal integrity.	Biomechanical principles of tooth preparation:	A theoretical lecture using Power Point	Short, semester, mid-year and final exams

جامعة البتة

6	1	*Structural durability	Biomechanical principles of tooth preparation:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
7	1	Indications, contra - indications, advantages, disadvantages,	Full metal crown:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
8	1	steps of preparation	Full metal crown:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
9	1	Indications, contra - indications, advantages, disadvantages,	Porcelain fused to metal crown:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
10	1	steps of preparation	Porcelain fused to metal crown:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams

جامعة البتة

11	1	Indications, contra - indications, advantages, disadvantages,	Complete ceramic crown (Porcelain Jacket Crown):	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
12	1	steps of preparation	Complete ceramic crown (Porcelain Jacket Crown):	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
13	1	Indications, contra - indications, advantages, disadvantages,	Partial veneer crown (thr -quarter crown):	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
14	1	steps of preparation	Partial veneer crown (thr -quarter crown):	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
15	1	Indications, contra - indications	Post crown:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
16	1	factors to be considered in the assessment of tooth for post	Post crown:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams

جامعة البتة

17	1	<p>Definition</p> <p>Requirements of an acceptable impression</p> <p>-Requirements of an impression material</p> <p>Classification of impression material</p> <p>Non-elastic impression materials</p> <p>Elastic impression materials</p>	Impression for crown and bridge work:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
18	1	<p>Final impression</p> <p>Advantages of the study cast</p> <p>Advantages of the special tray</p>	Impression for crown and bridge work:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
19	1	<p>Gingival retraction</p>	Impression for crown and bridge work:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
20	1	<p>Definition, objectives, types(prefabricated, custom -made, and laboratory -made</p>	Provisional restoration:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
21	1	<p>Definition</p> <p>Requirements of good working cast</p> <p>Inter-occlusal Record (Bite Registration)</p>	Working cast and dies:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
22	1	<p>- Die Definition</p> <p>Requirements of the die</p>	Working cast and dies:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams

جامعة البيان

23	1	<p>Waxing and Spruing</p> <p>Requirements of good inlay casting wax</p> <p>Steps in waxing procedure</p> <p>Sprue</p> <p>-Dimensions and location of the sprue</p> <p>Crucible Former</p>	Waxing.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
24	1	<p>Investment Definition</p> <p>Investment materials</p>	Investing.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
25	1	Burnout & Casting	Casting.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
26	1	<p>Cleaning of the cast restoration</p> <p>Sandblast</p> <p>Sandblast Advantage</p> <p>Clinical Try in</p> <p>Types of Marginal Defects</p> <p>- polishing</p>	Finishing of the casting Clinical try -in.	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
27	1	Types of cements used for cementation of crown restoration	Cementation:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
28	1	Techniques of cementation	Cementation:	A theoretical lecture using Power Point	Short, semester, mid-y and final exams

جامعة البيان

29	1	- Introduction	CAD /CAM Technology for crown construction	A theoretical lecture using Power Point	Short, semester, mid-y and final exams
30	1	- Technique	CAD /CAM Technology for crown construction	A theoretical lecture using Power Point	Short, semester, mid-y and final exams

13. Course Evaluation

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

Grade distribution	Evaluation methods
theoretical 3% Clinical 22%	First semester + second semester 25%
Theoretical 15%	half year 15%
Theoretical 40% Clinical 20%	Final exam 60%
Theoretical %50 Clinical 50%	100%

14. Learning & Teaching Resources

Required textbooks (curricular if any)	Fundamentals of fixed prosthodontic, 2012.
Main References (sources)	Contemporary fixed prosthodontic, 2016.
Recommended Books & References (Scientific Journals, Reports ...)	Working on ghost laboratory heads
Websites or Electronic References	Google scholar

Course Description (1)

1. Course Title	Preventive Dentistry	
2. Course Code	050506	
3. Semester/Year	year	
4. Description Preparation Date	21/9/2025	
5. Available Attendance Form	Lectures and Clinic	
6. No. of Hours (Total)	30 hours lectures,37.5 clinical	
7. No. of Credits (Total)	3.25	
8. Course Administrator Name	Prof. Dr. Athraa Mustafa Salih	
9. E-mail	Athraa.mu@albayan.edu.iq	
10. Course Objectives		
Knowledge	A1	Gaining experience and information that will help him identify the disease and know causes
	A2	Develop motivational interviewing skills to encourage patients to take prevent measures.
	A3	Increasing students' knowledge of methods for examining teeth and detecting caries and gingivitis
	A4	Learn how to assess patients' risks of dental disease based on factors such as oral hygiene, dietary habits, tobacco use, and chronic diseases.
Skills	B1	Acquire skills in conducting clinical dental examinations for early detection of tooth decay.

جامعة البتة

	B2	Develop motivational interviewing skills to encourage patients to take preventive measures.
	B3	Identify the indications and techniques for applying fluoride treatments to strengthen tooth enamel and prevent tooth decay thinking skills
	B4	Qualifying students to examine, diagnose and treat patients, including children and the elderly
Values	C1	Motivating the student through the style of expression and thinking and the speed of communication and response
	C2	Urging the student to solve problems and possess distinctive thinking
	C3	The lecture depends on student interaction and brainstorming
	C4	The student will be able to create a preventive program for patients

11. Teaching and Learning Strategies

1.	Lectures using Data show and power point.	4.	Electronic education
2.	Educational films	5.	Smart probes
3.	Monitors	6.	Practical application in the clinic

12. The Structure of the Course					
Week	Hours	Topic/Subject Name	RLOs	Learning Method	Evaluation Method
1	1	Preventive dentistry (introduction)	Introduction to preventive Dentis and its level of prevention	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
2	1	Dental Caries development	Caries initiation ,appearance dental tissues	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
3	1	Fluoride in Dentistry	Fluoride in environment,fluor metabolism	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
4	1	Systemic fluoridation (history)	Types of systemic fluoride , ,milk a salt fluoridation	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
5	1	Communal water fluoridation	Natural fluoridation and fluor index	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
6	1	Fluoride supplements	Fluoride tablets	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
7	1	Topical fluoridation	mechanisms of topical fluoridatio ,application	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
8	1	Self applied fluoride	Self care ,fluorida toothpaste,mouth wash	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
9	1	Professionally applied fluoride	Types of topical fluoridation, ,in oral appliances	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam

جامعة البتاني

10	1	Toxicity of fluoride	Chronic toxicity, Acute toxicity and managements of acute toxicity	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
11	1	Microbiology of caries	Oral bacteriology plaque formation	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
12	1	Cariogenic potential of bacteria	Streptococcus mutans , lactobacilli	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
13	1	Fissure sealants	History of fissure sealants, types and application ,and follow up	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
14	1	New approach in restorative dentistry	Minimal invasive Dentistry, Icon	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
15	1	Diet and dental caries	Definition of diet and nutrition, carbohydrates types and effect on dental caries, Stephan curve	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
16	1	Non- sugar sweeteners	Bulk sweeteners and types sweeteners	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
17	1	Dietary counseling in dental practice	Types and objectives	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
18	1	Nutrition and oral health	Effect of vitamins ,proteins and nutrition on teeth development and eruption	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
19	1	Nutrition, diet & periodontal disease	Vit C and vit D effect on gingivitis and periodontitis	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
20	1	Saliva and dental caries	Salivary function ,Buffering Capacity ,flow rate and pH	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam

جامعة البتة

21	1	Oral immune system	Passive immunity ,cellular immunity and vaccination	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
22	1	Oral hygiene measures(Mechanical)	Brushing techniques ,Dental floss and other dental care auxiliary	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
23	1	Oral hygiene measures (Chemical)	Therapeutic toothpaste, Mouth wash indication ,Chlorhexidine ,Triclosan	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
24	1	Diagnosis of caries	Methods of diagnosis, visual tactile ,radiography	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
25	1	Identification of high risk group	Objectives, age group ,socioeconomic risk factors	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
26	1	Dental health of disabled and medically compromised patients	Types of physical disability, systemic diseases, preventive programs	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
27	1	Geriatric dentistry	Definition ,effect of aging on dental hard and soft tissues ,preventive programs	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
28	1	Health education and motivation	Objectives Dental health education programs	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
29	1	Uses of LASER in dentistry	Mechanism of Laser ,Types of laser effect on dental hard and soft tissues	Theoretical lectures using power point	Quizzes ,Monthly exam , and final exam
30	1	Prevention of peri-implantitis	Types of implants , preventive methods	Theoretical lectures using power point	

13. Course Evaluation

Distribution of the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily exams, oral, monthly, written and records.

Theoretical 10 clinical 15%	First Semester + Second Semester 25%
Theoretical 15%	Half Year 15%
Theoretical 40% Clinical 20%	Final Exam 60%
Theoretical 65% Clinical 35%	100%

14. Learning & Teaching Resources

Required textbooks (curricular if any)	-Primary Preventive Dentistry by Harris NO Garcia-GodoyF-NatheCN 8th Ed 2014 .
Main References (sources)	-Comprehensive preventive dentistry (2012) Edited by Hardy Limeback -Caries Management—Science and Clinical Practice Hendrik Meyer-Lueckel, Sebastian Paris, Kim R. Ekstrand, 2013 Georg Thieme Verlag KG Stuttgart, Germany
Recommended Books & References (Scientific Journals, Reports ...)	-Textbook of geriatric dentistry, Third edition Edited by Poul Holm-Pedersen, Angus W. G. Walls, Jonathan A. Ship, 2015 by John Wiley & Sons Ltd. -Make periodic reports and read recent research in reputable journals
Websites or Electronic References	PubMed, Scopus, Elsevier, Google Scholar, Research Gates

Course Description (1)

39. Course Title	Pediatric Dentistry	
40. Course Code	050505	
41. Semester/Year	Annual	
42. Description Preparation Date	21/9/2025	
43. Available Attendance Form	Lectures & Clinics	
44. No. of Hours (Total)	30 hours theoretical + 37.5 hours practical	
45. No. of Credits (Total)	3.25	
46. Course Administrator Name	Mafaz Mahdi Mohsin	
47. E-mail	mafaz.mahdi@albayan.edu.iq	
48. Course Objectives		
Knowledge	A1	Preparing dental students to keep children's oral and dental health.
	A2	Focus on the treatment and prevention of milk and permanent teeth decay in children.
	A3	Maintain the distance and arrangement of teeth in the jaw.
	A4	Preparing dental students to keep children's oral and dental health.
Skills	B1	Gain experience and information that help him identify the disease and find out its causes
	B2	Develop motivational interviewing skills to encourage patients to take preventive measures.
	B3	Increasing students' knowledge of dental examination methods and detecting caries and gingivitis
	B4	Learn how to assess patients' risk of dental disease based on factors such as oral hygiene, dietary habits and chronic diseases.
Value	C1	Acquire skills in conducting clinical and periodic dental examinations for the early detection of dental problems.

جامعة البتة

C2	Develop motivational interviewing skills to encourage patients and their families to take the necessary measures to treat their children's teeth and prevent the exacerbation of existing problems.
C3	Acquire skills in conducting clinical and periodic dental examinations for the early detection of dental problems.
C4	Develop motivational interviewing skills to encourage patients and their families to take the necessary measures to treat their children's teeth and prevent the exacerbation of existing problems.

49. Teaching and Learning Strategies

1.	Preparing a professional and urging the student to positive behavior in his public life	4.	Employing the acquired skills in order for the student to become a dentist capable of treating patients
2.	Preparing scientific and urging the student to communicate in other fields of science	5.	Employing the acquired skills in order for the student to become a dentist capable of treating patients
3.	Cultural preparation and refinement of the student's personality	6.	Develop motivational interviewing skills to encourage patients and their families to take the necessary measures to treat their children's teeth and prevent the exacerbation of existing problems.

50. The Structure of the Course					
Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	1	<ul style="list-style-type: none"> • Diagnosis and treatment planning 	Diagnosis and examination	Data Show and Blackboard Show	Daily exam Oral questions and discussions
2	1	<ul style="list-style-type: none"> • Preliminary medical and dental History. • Clinical examination • Art and science of behavior management 	Diagnose and examination	Data Show and Blackboard Show	Daily exam Oral questions and discussions
3	1	<ul style="list-style-type: none"> • Child development. • Major area of development. • Variables influencing children's dental behaviors • classification of children's behavior 	Non pharmacological behavior management	Data Show showblack board and demonstration films	Daily exam Oral questions and discussions
4	1	<ul style="list-style-type: none"> • Non pharmacologic management of patient behavior • Purpose 	Non pharmacological behavior management	,Data Show show blackboard and demonstration films	Daily exam Oral questions and discussions

جامعة البتة

		<ul style="list-style-type: none"> • Classifying children • communication methods 			
5	1	<ul style="list-style-type: none"> • management of traumatic injuries to the teeth and supporting tissues of children. • Trauma to the face. 	traumatic injuries	,Data Show show blackboard and demonstration films	Daily exam Oral questions and discussions
6	1	<ul style="list-style-type: none"> • classification of injuries to the anterior teeth of children methods of clinical examination 	traumatic injuries	Data Show and Blackboard Show	Daily exam Oral questions and discussions
7	1	<ul style="list-style-type: none"> • Traumatic injuries of the primary teeth and its effect on permanent teeth 	Traumatic injuries	Data Show and Blackboard Explanatory Films	Daily exam Oral questions and discussions
8	1	<ul style="list-style-type: none"> • Treatment of injury of permanent teeth, emergency treatment, temporary restoration of fractured teeth 	Traumatic injuries	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions

جامعة البتراء

9	1	<ul style="list-style-type: none"> • Management of space problems. • planning for space maintenance. • loss of primary incisors 	Space maintainer	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
10	1	<ul style="list-style-type: none"> • Space Maintenance for the First and Second Primary Molar and the Primary Canine Area. • premature loss of second primary molar 	Space maintainer	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
11	1	<ul style="list-style-type: none"> • Loss of the Second Primary Molar Before Eruption of the First Permanent Molar. • Areas of Multiple Primary Molar Loss 	Space maintainer	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
12	1	<ul style="list-style-type: none"> • Development of dental arch and occlusion; deciduous phase, mixed dentition phase. 	Space maintainer	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
13	1	<ul style="list-style-type: none"> • Arch length analysis; Nance analysis. 	Empowering students how permanent teeth emerge in the right places	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions

جامعة البتاني

		<ul style="list-style-type: none"> • Moyers mixed dentition analysis. • Tanaka and Johnston analysis • Bolton analysis. 			
14	1	<ul style="list-style-type: none"> • Enable students to know how to control pain and use anesthesia during treatment • Local anesthesia and pain control for children 	local anesthesia	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
15	1	<ul style="list-style-type: none"> • Anesthetizing mandibular and maxillary teeth and soft tissue 	local anesthesia	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
16	1	<ul style="list-style-type: none"> • Complications after a local anesthetic 	local anesthesia	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
17	1	<ul style="list-style-type: none"> • Oral surgery for children, Extraction of primary teeth 	Extracting milk teeth early	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions

18	1	<ul style="list-style-type: none"> • Infection manifestation and management 	Infection control	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
19	1	<ul style="list-style-type: none"> • Introduction simple gingivitis • eruption gingivitis • acute gingival disease • herpes simplex viral infection. 	Gingivitis and periodontal disease in children	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
20	1	<ul style="list-style-type: none"> • Acute candidacies (thrush) • Acute bacterial infection • chronic nonspecific gingivitis • gingival diseases modified by systemic factors. 	Gingivitis and periodontal disease in children	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
21	1	<ul style="list-style-type: none"> • Gingival lesions of genetic origin • ascorbic acid deficiency gingivitis. 	Gingivitis and periodontal disease in children	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions

22	1	<ul style="list-style-type: none"> • Papillon – Lefevere syndrome • gingival recession • extrinsic stains and deposits on teeth 	<p>Gingivitis and periodontal disease in children</p>	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
23	1	<ul style="list-style-type: none"> • Dental problems of the disabled child • first dental visit • Radiographic examination • Preventive dentistry • Management of a child with special care needs during dental treatment 	<p>Dental Problems of Children with Special Health Care Needs</p>	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
24	1	<ul style="list-style-type: none"> • Treatment immobilization • Intellectual disability • Down syndrome • Learning disability 	<p>Dental Problems of Children with Special Health Care Needs.</p>	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
25	1	<ul style="list-style-type: none"> • Fragile X syndrome • Cerebral palsy • autism, 	<p>Dental Problems of Children with Special Health Care Needs</p>	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions

26	1	<ul style="list-style-type: none"> • Respiratory diseases • hearing loss • visual impairment • epilepsy 	Dental Problems of Children with Special Health Care Needs	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
27	1	<ul style="list-style-type: none"> • Heart disease • Hemophilia • sickle cell anemia • viral hepatitis • AIDS • systemic diseases 	Dental Problems of Children with Special Health Care Needs	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
28	1	<ul style="list-style-type: none"> • Dental problems of the disabled child • first dental visit • Radiographic examination • Preventive dentistry • Management of a child with special care needs during dental treatment. 	Dental Problems of Children with Special Health Care Needs	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions
29	1	<ul style="list-style-type: none"> • Definition of Pharmacologic management of patient behavior 	Pharmacologic management of patient behavior	Data Show and + Blackboard Explanatory Films	Daily exam Oral questions and discussions

جامعة البتة

		<ul style="list-style-type: none"> • Degree of sedation • Indications for pharmacological behavior management technique • Pretreatment documentation and assessment • Sedation in pediatric dentistry 			
30	1	<ul style="list-style-type: none"> • Conscious sedation • Routes of drug administration: Enteral sedation, Rectal route, Intra muscular route, Intravenous route, Inhalation. • Drugs and agents used for sedation • nitrous oxide general anesthesia. 	<p>Pharmacologic management of patient behavior</p>	,Data Show show blackboard and demonstration films	Daily exam Oral questions and discussions

51. Course Evaluation

Distribution of the score out of 100 according to:

- Daily and quarterly exams for theoretical subject
- Treatment of pediatric patients
- Mid-Year Exam
- Final exam

52. Learning & Teaching Resources

Required textbooks (curricular if any)	McDONALD AND AVERY'S DENTISTRY for CHILD and ADOLESCENT 2022 by ElsevierText book of pediatric dentistry Nikhil Marwa 2nd ed. 2019 New Delh
Main References (sources)	McDONALD AND AVERY'S DENTISTRY for CHILD and ADOLESCENT 2022 by ElsevierText book of pediatric dentistry Nikhil Marwa 2nd ed. 2019 New Delh
Recommended Books & References (Scientific Journals, Reports ...)	Read recent research in global journals
Websites or Electronic References	Google scholar, Research gates, ORCID

Course Description (1)

53. Course Title	Pediatric Dentistry	
54. Course Code	050409	
55. Semester/Year	annual	
56. Description Preparation Date	21/9/2025	
57. Available Attendance Form	Lectures	
58. No. of Hours (Total)	Theory: 30 hours + Seminars	
59. No. of Credits (Total)	4	
60. Course Administrator Name	Assistant lecturer Serar nassir mahmood	
61. E-mail	Serar.n@albayan.edu.iq	
62. Course Objectives		
Knowledge	Understand and assimilate theoretical and practical methods for treating all cases of infection of children's teeth and learn about scientific methods and methods supported using explanations to know how to determine brown and permanent teeth and the problems related to them.	
Skills	<p>Learning Outcomes:</p> <p>A- Knowledge and understanding</p> <ol style="list-style-type: none"> 1- Enabling students to acquire and understand the subject of pharmacology. 2- Enabling students to dispense medications in the correct scientific manner for various diseases and conditions after they are diagnosed. 3- Enabling students to possess self-learning skills to acquire information, skills, and practices related to medicines. 4- Enabling students to know drug interactions and side effects of drugs. <p>B - Subject-specific skills</p>	

1 - Asking brainstorming questions through which the student can link the study materials together and link them to the medical and health reality.

2- Developing motivational interviewing skills to encourage patients to take preventive measures and adhere to treatment and its instructions.

C- Thinking skills

1- Motivating the student through the style of expression and thinking and the speed of communication and response

2- Urging the student to solve problems and possess distinctive thinking

3- The lecture depends on student interaction and brainstorming

3- Discussing various medical conditions and finding appropriate treatments for them.

D - General and transferable skills (other skills related to employability and personal development)

1- Professional preparation and encouraging the student to have positive behavior in his public life

2- Scientific preparation and urging the student to communicate in other fields of science

3- Cultural preparation and refining the student's personality

4- Utilizing the acquired skills so that the student becomes a dentist capable of treating patients

Teaching and learning methods

1. Lectures using data showing and PowerPoint

2. Educational films

3. Display screens

4. E-learning

5. Blackboards

6. Student discussion groups.

1. Lectures using data showing and PowerPoint

2. Educational films

3. Display screens

4. E-learning

5. Blackboards

- **6. Student discussion groups.**

63. Course structure

Week	Hours	Subject name	The outcomes of learning	Learning method (hours)	Week
Daily exam	Data show White board	Eruption of teeth, normal eruption process	Recognizing tooth eruption, a natural eruption process	1	1
Daily exam	Data show White board	Teething & difficult eruption	Identifying teething and its difficulties in children	1	2
Oral exam + discussion sessions	Data show White board	Eruption haematoma, sequestrum, ectopic eruption	Hematoma eruption, entrapment, external eruption	1	3
Daily oral exam	Data show White board	Epstein pearls, Bohn nodules, Dental lamina cysts, Shedding of the primary teeth, Mechanism of resorption, and shedding Factors cause differences in time of eruption	Epstein pearls, Bohn's nodules, lamina cysts, loss of primary teeth, resorption mechanism, and shedding factors cause differences in eruption time.	1	4
oral test	Data show White board	Systemic (disease) factors that cause late eruption deciduous dentition period, ugly duckling stage	Systemic factors (disease) that cause the appearance of late baby teeth, the ugly duckling stage	1	5
oral test	Data show White board	Morphology of the primary teeth	Morphology of primary teeth	1	6
oral test	Data show White board	Normal morphology of all primary teeth and their clinical consideration	Recognize the normal morphology of all primary teeth and their clinical considerations	1	7

جامعة البتراء

Discussion panels	Data show White board	Morphological differences between primary and permanent teeth	Recognize the morphological differences between primary and permanent teeth	1	8
Daily exam	Data show White board	Functions of primary teeth	Identify the functions of baby teeth	1	9
Daily exam	Data show White board	Dental caries; Definition and Classification	Definition of tooth decay; Definition and classification	1	10
Daily exam	Data show White board	Rampant dental caries, Early childhood caries	Identifying rampant tooth decay and early tooth decay in children	1	11
Daily exam	Data show White board	Restorative dentistry for children Isolation & maintenance of dry field and application of the rubber Dam	Learn about pediatric restorative dentistry Dry field isolation and maintenance and rubber dam application	1	12
Daily exam	Data show White board	Morphological consideration, cavity preparation, and instrumentation	Learn about morphological consideration, cavity preparation, and the tools used	1	13
Daily exam	Data show White board	Restorative materials used on pediatric dentistry	Restorative materials used in pediatric dentistry	1	14
Daily exam	Data show White board	Matrices & retainers	Arrays and folders	1	15
a report	Data show White board	Chrome steel crowns, ART	Chrome steel crowns, ART	1	16
Homework	Data show White board	Treatment of deep caries	Learn how to treat deep caries	1	17

جامعة البتة

Daily exam	Data show White board	Indirect pulp treatment	Learn how to treat indirect pulp	1	18
Daily exam	Data show Whiteboard	Vital pulp therapy pulpotomy	Vital pulp therapy	1	19
oral test	Data show White board	Non-vital pulp therapy technique	Learn how to treat non-vital pulp	1	20
Discussion groups	Data show White board	Reaction of pulp to various capping materials	Interaction of the pulp with various sealing materials	1	21
Daily exam	Data show White board	Local anesthesia and pain control for children	Local anesthesia and pain control in children	1	22
oral test	Data show White board	Anesthetizing mandibular and maxillary teeth and soft tissue	Anesthesia of the mandibular and maxillary teeth and soft tissues		
oral test	Data show White board	complications after a local anesthetic	Complications after local anesthesia	1	23
Discussion panels	Data show White board	supplemental injection techniques	Supplemental injection techniques	1	24
Homework	Data show White board	Oral surgery for children, indication and contraindications for extraction of primary teeth	Oral surgery for children, indications and contraindications for primary tooth extraction	1	25
Homework	Data show White board	technique for extraction of primary teeth	Extraction technique for complications of primary tooth extraction	1	26
a report	Data show White board	extraction complications	Primary tooth extraction technique	1	27
oral test	Data show White board	postoperative extraction complications, radiographic survey	Postoperative extraction complications, radiographic	1	28

		of teeth extracted	scanning of extracted teeth		
Oral exam + discussion groups	Data show White board	Infections manifestation and management	Manifestations of infection and their management	1	29

Assessment: Clinical requirement

A collection of titles for seminars that are distributed to students and presented by them, discussing the details of the topics and their future outlook.

No Title

- 1 Hypodontia among children
- 2 Anodontia among children
- 3 Rampant caries among children
- 4 Staining among children
- 5 Types of Caries removal techniques
- 6 Restoration of primary and young permanent teeth with variety types of restorative materials
- 7 Rubber dam
- 8 Minor oral surgery
- 9 Thumb sucking habits
- 10 Pulp therapy for permanent dentition
- 11 Pulp therapy for primary dentition
- 12 Materials used for pulp therapy
- 13 Crowns in pediatric dentistry
- 14 Nail biting among children
- 15 Maintenance of pulp vitality by use of regenerative materials
- 16 Root canal treatment for anterior non vital teeth
- 17 Root canal treatment
- 18 Management of molar incisor hypomineralization MIH
- 19 Behavior management for young patients
- 20 Infection control re-assurance and guidance of students
- 21 Tooth colored restoration technique
- 22 Radiographic prescription and interpretation of results
- 23 Space maintainers
- 24 Fluoride application as a preventive measure
- 25 Cleft lip and palate
- 26 Supernumerary teeth and their impact on teeth eruption
- 27 Management of medically compromised children
- 28 Diagnosis and treatment plan
- 29 ART technique
- 30 Periodontal diseases in children

Assessment and Evaluation

- Class Attendance: 2%

جامعة البتة

- **Quizzes: 5%**
- **Semester Exams: 18%**
- **Midterm Examination: 15%**
- **Final Examination: 60% (40% written + 20% practical)**

First semester + second semester	15%
Mid-year examination Theoretical	15%
Final exam Theoretical	60%
Total	100%
1. Learning and teaching resources	
Required textbooks, methodology if present	McDonald AND AVERY'S DENTISTRY for CHILD and ADOLESCENT 2022 by Elsevier
Main references (Resources)	Handbook of pediatric dentistry (Cameron) Mosby
Supporting books and references recommended by scientific journals and reports	View recent research
Electronic References, Internet Sites	Google Scholar, research gate

Course Description (1)

1. Course Title	Orthodontics	
2. Course Code	050504	
3. Semester/Year	Annual	
4. Description Preparation Date	21/9/2025	
5. Available Attendance Form	Lectures and clinics	
6. No. of Hours (Total)	30 hours theory and 120 hours clinical	
7. No. of Credits (Total)	6	
8. Course Administrator Name	Assisst.Lect. Sally Saad Ali	
9. E-mail	G-mail: sally.saad@albayan.edu.iq	
10. Course Objectives		
Knowledge	A1	Acquire knowledge of methods of diagnosis and treatment of cases of malocclusion.
	A2	How to use the different types of removable and functional orthodontic devices
Skills	B1	Acquire skills in conducting special diagnostic methods
	B2	Knowing the types of orthodontic devices related to each case.
	B3	Motivating the student through the style of expression, thinking, speed of communication and response
	B4	Qualifying students to examine, diagnose and treat patients
Values	C1	Preparing a professional and urging the student to positive behavior in his public life

جامعة البتة

C2	Preparing scientific and urging the student to communicate in other fields of science
C3	Cultural preparation and refinement of the student's personality
C4	Employing the acquired skills in order for the student to become a dentist capable treating patients

11. Teaching and Learning Strategies

1.	Lectures using Data show and power point.	4.	Electronic education
2.	Educational films	5.	Smart probes
3.	Monitors	6.	Practical training in the clinic

12. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	1	a- Personal data b- Consent form c- Clinical examination i. General body stature	Orthodontic diagnosis and treatment planning	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
2	1	ii. Face examination in 3 dimensions iii. Skeletal examination iv. Soft tissue examination	Orthodontic diagnosis and treatment planning	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
3	1	v. Occlusion	Orthodontic diagnosis and treatment planning	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

جامعة البتة

4	1	vi. Dentition vii. Temporomandibular joint	Orthodontic diagnosis and treatment planning	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
5	1	d- Diagnostic aids i. Cephalometrics	Orthodontic diagnosis and treatment planning	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
6	1	ii. Orthopantomograph iii. Other views	Diagnostic aids	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
7	1	iv. Study models	Diagnostic aids	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
8	1	v. Photography vi. 3D imaging	Diagnostic aids	Theoretical lecture using	Quizzes, monthly, mid-year and final examinations

جامعة البتة

				Power Point	
9	1	e- Treatment planning	Orthodontic diagnosis and treatment planning	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
10	1	f- Treatment of Medically compromised patients	Orthodontic diagnosis and treatment planning	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
11	1	g- Orthodontic indices	Orthodontic diagnosis and treatment planning	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
12	1	a-Mixed Dentition Analysis b- Permanent Dentition Analysis	Space analysis, Bolton's ratio	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
13	1	a. Selection Of Teeth To Be Extracted B. Types Of Extraction Procedures	Teeth extraction in orthodontics	Theoretical lecture	Quizzes, monthly, mid-year and final examinations

جامعة البيان

				using Power Point	
14	1	Procedures of serial extraction	Serial extraction	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
15	1	a. Deep bite	Vertical and transverse problems	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
16	1	b. Open bite	Vertical and transverse problems	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
17	1	c. Crossbite and scissors bite	Vertical and transverse problems	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

جامعة البتاني

18	1	<p>a. supernumerary and hypodontia</p> <p>b. Early loss of deciduous</p> <p>c. Retained teeth, delayed eruption, impaction, ankylosis</p> <p>d. Abnormal eruptive behavior</p> <p>e. Large frenum iduous teeth</p>	Treatment of common local factors	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
19	1	f. Bad oral habits	Treatment of common local factors	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
20	1	<p>a. Management Of Buccal Displacement. B. Management Of Palatal Displacement</p>	Treatment of aberrant position of canines	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
21	1	a. Class I treatment (crowding, spacing, biprotrusion)	Treatment of general factors	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

جامعة البيان

22	1	Continue class I treatment (method of space creation)	Treatment of general factors	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
23	1	b. Class II div. 1 treatment	Treatment of general factors	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
24	1	c. Class II div. 2 treatment	Treatment of general factors	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
25	1	d. Class III treatment problems	Treatment of general factors	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
26	1	a- Periodontal problems	Treatment of adults	Theoretical lecture using	Quizzes, monthly, mid-year and final examinations

جامعة البتة

				Power Point	
27	1	b- Orthognathic surgery	Treatment of adults	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
28	11	Presurgical orthopaedics	Cleft lip and palate	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
29	1	Surgical repair of cleft lip and palate	Continue cleft lip and palate	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
30	1	digital approach in orthodontic (diagnosis and treatment)	Digital orthodontics	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

Course Structure (Practical)

The minimum requirements that allow the students to enter the final examination include:

Treatment of at least one patient:

- 1- Diagnosis :(Mandatory)
 - a- Case sheet filling & presentation
 - b- Upper and lower impression.
 - c- Study models preparation
 - d- Extra & intra oral photographs
 - e- Cephalometric tracing
- 2- Treatment plan:(Mandatory)
- 3- Insertion(Optional)
- 4- Adjustment or Activation(Optional)

The student should receive at least one orthodontic case to enter the final exam

13. Course Evaluation

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

14. Learning & Teaching Resources

Required textbooks (curricular if any)	<p>1. An Introduction to Orthodontics 5th Edition Simon J. Littlewood and Laura Mitchell 2019.</p> <p>2. Orthodontics: Principles and Practice: Principles and Practice 2nd Edition 2017</p>
Main References (sources)	<p>1. An Introduction to Orthodontics 5th Edition Simon J. Littlewood and Laura Mitchell 2019.</p> <p>2. Orthodontics: Principles and Practice: Principles and Practice 2nd Edition 2017</p>
Recommended Books & References (Scientific Journals, Reports ...)	Make periodic reports and read recent research in reputable journals
Websites or Electronic References	PubMed, Scopus, Elsevier, Google Scholar, Research Gates

Course Description (1)

64. Course Title	Oral Medicine	
65. Course Code	050502	
66. Semester/Year	Annual	
67. Description Preparation Date	21/9/2025	
68. Available Attendance Form	Weekly	
69. No. of Hours (Total)	30 hours theory and 75 hours practical	
70. No. of Credits (Total)	4.5	
71. Course Administrator Name	Alaa Mohammed Shaheed	
72. E-mail	alaa.mohammed@albayan.edu.iq	
73. Course Objectives		
Knowledge	A1	Develop student information on patient interviews and take the patients history illness and medical history.
	A2	To acquire experience and information that will help him to identify the disease and find out its causes.
	A3	Increase students knowledge of different oral tissue screening methods and identification of injury areas.
	A4	Learn how to assess the risks of oral illness for patients based on factors such as oral hygiene, dietary habits, tobacco use and chronic diseases.
Skills	B1	Acquiring skills in oral clinical examinations for diagnosis and treatment of various oral diseases
	B2	Identification of signs and symptoms of TMJ disorders, saliva glands and lymph node diseases for diagnosis and treatment.
	B3	Development of early detection skills for certain diseases with oral symptoms.

جامعة البتة

	B4	Development of early detection of oral cancer.
Values	C1	Professional preparation and promotion of positive behavior in public life
	C2	Scientific preparation and encouragement of students to communicate in other fields of science.
	C3	Cultural preparation and refining of the student's personality.
	C4	Employing acquired skills for the student to become a dentist capable of treating patients.

74. Teaching and Learning Strategies

1.	Lectures using Data show and power point.	4.	Electronic education
2.	Educational films	5.	Smart probes
3.	Monitors	6.	Practical application in the clinic

75. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	1	<ul style="list-style-type: none"> Overview of the field Role of oral medicine in dentistry Importance of patient history and examination 	The principles of oral diagnosis Clinical examinations	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
2	1	<ul style="list-style-type: none"> Extra oral examination Intra oral examination 	The principles of oral diagnosis Clinical examinations	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
3	1	<ul style="list-style-type: none"> Tests for the diabetes mellitus Tests for the thyroid gland Tests for hepatitis 	Laboratory investigations in dentistry	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
4	1	<ul style="list-style-type: none"> The Hematological investigation Evaluation of red and white blood cells Evaluation of platelets 	Laboratory investigations in dentistry	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
5	1	<ul style="list-style-type: none"> Types of facial pain Types of headaches 	Orofacial pain	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
6	1	<ul style="list-style-type: none"> Differential diagnosis of facial pain and 	Orofacial pain	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

جامعة البتة

		<ul style="list-style-type: none"> • Management strategies 			
7	1	<ul style="list-style-type: none"> • Anatomy review • Etiological factors of the TMJ disorder 	T.M.J	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
8	1	<ul style="list-style-type: none"> • Signs and symptoms • Types of TMJ disorders • Diagnosis, management, and treatment 	T.M.J	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
9	1	<ul style="list-style-type: none"> • Terms description • Principal Causes of oral mucosal ulceration • Classification of ulcerative, vesicular and bullouse lesions 	Oral ulceration and Vesiculobullosities lesions	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
10	1	<ul style="list-style-type: none"> • Etiology and Pathogenesis • Oral Manifestations (Oral Findings) 	Oral ulceration and Vesiculobullosities lesions	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
11	1	<ul style="list-style-type: none"> • Laboratory Findings (Diagnosis) • Differential diagnosis • Management and Treatment 	Oral ulceration and Vesiculobullosities lesions	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
12	1	<ul style="list-style-type: none"> • Classification • Characteristics and clinical significance 	White & red lesions	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

جامعة البتة

13	1	<ul style="list-style-type: none"> Differential diagnosis Management and Treatment 	White & red lesions	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
14	1	<ul style="list-style-type: none"> Importance of early diagnosis Screening techniques 	Early detection of oral cancer	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
15	1	<ul style="list-style-type: none"> Continued focus on patient education and management 	Early detection of oral cancer	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
16	1	<ul style="list-style-type: none"> Types and clinical presentations Diagnosis and treatment 	Pigmented oral lesions	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
17	1	<ul style="list-style-type: none"> Case studies and management strategies 	Pigmented oral lesions	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
18	1	<ul style="list-style-type: none"> Classification and clinical features Etiology and Risk Factors 	Benign, Premalignant and malignant lesions of the oral cavity	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
19	1	<ul style="list-style-type: none"> Pathogenesis Adjunctive diagnostic aids and screening tools 	Benign, Premalignant and malignant lesions of the oral cavity	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
20	1	<ul style="list-style-type: none"> Integration of knowledge through clinical cases Staging and grading 	Benign, Premalignant and malignant lesions of the oral cavity	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
21	1	<ul style="list-style-type: none"> Management strategies and treatment options 	Benign, Premalignant and malignant lesions of the oral cavity	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
22	1	<ul style="list-style-type: none"> classification 	Neuromuscular disorder	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

جامعة البتة

		<ul style="list-style-type: none"> • Case studies and interdisciplinary approaches 			
23	1	<ul style="list-style-type: none"> • Understanding oral manifestations • Diagnosis and management 	Neuromuscular disorder	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
24	1	<ul style="list-style-type: none"> • Anatomy and histology review • Diseases affecting salivary glands 	Salivary gland diseases	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
25	1	<ul style="list-style-type: none"> • Tumors affecting salivary glands • Differential diagnosis and management 	Salivary gland diseases	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
26	1	<ul style="list-style-type: none"> • The immune system of the mouth • Classification of autoimmune diseases 	Autoimmune diseases	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
27	1	<ul style="list-style-type: none"> • Oral manifestations of autoimmune disorders 	Autoimmune diseases	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
28	11	<ul style="list-style-type: none"> • Diagnosis and management 	Autoimmune diseases	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
29	1	<ul style="list-style-type: none"> • Types of allergic reactions and their oral implications 	Oral manifestation of allergic react	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

جامعة البيان

30	1	<ul style="list-style-type: none">Management strategies and patient education	Oral manifestation of allergic react	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
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76. Course Evaluation

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

77. Learning & Teaching Resources

Required textbooks

(curricular if any)

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.
3. Little, James W., Craig Miller, and Nelson L. Rhodus. Dental management of the medically compromised patient. 2017, Elsevier Health Sciences.

Main References

(sources)

Recommended Books & References

(Scientific Journals, Reports ...)

Make periodic reports and read recent research in reputable journals

Websites or Electronic References

PubMed, Scopus, Elsevier, Google Scholar, Research Gates

Course Description (1)

1. Course Title	Community Dentistry	
2. Course Code	050306	
3. Semester/Year	Annual	
4. Description Preparation Date	21/9/2025	
5. Available Attendance Form	Weekly	
6. No. of Hours (Total)	30 hours theory and 60 hours practical	
7. No. of Credits (Total)	4	
8. Course Administrator Name	Hussam Fawzi	
9. E-mail		
10. Course Objectives		
Knowledge	A1	Preparing dental students to be maintainers of community oral and dental health.
	A2	Students know how to protect society from tooth decay and gum disease and maintain oral health
	A3	Knowing the methods for conducting statistics on tooth decay, common oral and gum diseases, and the conditions and areas of their spread.
	A4	
Val Skills	B1	Acquire skills in conducting clinical dental examinations for early detection of tooth decay.
	B2	Identify the indicators and application techniques for preventing tooth decay and common oral and gum diseases
	B3	Students are assigned to groups to undertake a comprehensive educational program for community dentistry
	B4	
Val	C1	Urging the student to have positive behavior in his public life

C2	Urging the student to communicate in other fields of science	
C3	Cultural preparation and refining the student's personality	
C4	Urging the student to employ the acquired skills in order to become a dentist capable of treating patients	

11. Teaching and Learning Strategies

1.	Gaining experience and information that will help him identify tooth decay and gum disease and find out their causes	4.	
2.	Increase students' awareness and sense of responsibility towards community oral health and dental public health principles and activities.	5.	
3.	Applications of epidemiology and biostatistics in dental public health	6.	

12. Curriculum structure

Week	Hours	Subject name	The outcomes of learning	Learning method (hours)	Assessment Method
1	1	Dental public health	<ul style="list-style-type: none"> - Dental public health - Public health definition. - Dental Public health definition. - Community Dentistry. - Dental public health practitioners. - Public health impact of dental disease. – Tools of dental public health. 1-Epidemiology. 2-Biostatistics. 3-Social sciences. 4-Principles of administration. 5-Preventive dentistry 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
2	1	Dental public care	<ul style="list-style-type: none"> -Dental public care - Steps in planning dental care for the patient 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams

جامعة البتة

			<ul style="list-style-type: none"> - Steps in planning dental care for the community - Similarities between personal and community health care: - Differences between private dental practice and public health dentistry 		
3	1	epidemiology	<ul style="list-style-type: none"> - Objectives of epidemiology. - Components of epidemiological study. - Essential steps in an epidemiological study. - Hypothesis. - Population at risk - Morbidity - Measurements of disease frequency. - Epidemiological approach. - Measurement tools in epidemiology. 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
4	1	Epidemiological studies	<p>Types of Epidemiological studies: 1-Observational studies</p> <p>Types of observational studies -</p> <ul style="list-style-type: none"> - Descriptive studies. - Analytical studies. Case control studies Cohort studies - Ecological studies 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
5	1	Experimental studies	-Intervention Types of experimental studies	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
6	1	Epidemiology of dental caries	<ul style="list-style-type: none"> - Definition of dental caries - Epidemiology -Etiological factors of dental caries -Types of dental caries according to their anatomical 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
7	1	Epidemiology of Periodontal Disease	<ul style="list-style-type: none"> -Periodontal Diseases definition -Structure of the periodontal tissues -Epidemiology 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams

جامعة البتة

			-Etiology of periodontal disease		
8	1	Epidemiology of Oral Cancer	<ul style="list-style-type: none"> - Types of cancers - Etiology of oral cancer - Constituents of tobacco smoke - Potentially malignant lesions - Levels of prevention for oral cancer - Rehabilitation after Oral Cancer 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
9	1	Dental indices	<ul style="list-style-type: none"> - Index - Uses of dental index - Classification of indices 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
10	1	Indices used for assessment of dental caries	<ul style="list-style-type: none"> -DMF index -Principles in recording DMF index - Calculation of DMFT/DMFS - Dental caries severity index - dmf index 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
11	1	Indices used for assessment of periodontal disease	<ul style="list-style-type: none"> - Oral Hygiene Indices: - Gingival inflammation indices - Periodontal indices 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
12	1	Dental fluorosis	Indices for assessment of dental fluorosis	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
13	1	Biostatistics	<ul style="list-style-type: none"> - Data - Types of data - Methods of Data Collection -Sampling Technique -Types of sample design 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
14	1	Data presentation	<ul style="list-style-type: none"> - Methods of data presentation -The tabulation of data -The graphical representation of data 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
15	1	Measures of central tendency & dispersion	<ul style="list-style-type: none"> -Measures of central tendency -Measures of dispersion. 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
16	1	Fluoridation as a public health measure	<ul style="list-style-type: none"> - History: - Sources of Fluoride - Water fluoridation -Types of fluoride 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
17	1	Fluoridation Mechanism and Effects	<ul style="list-style-type: none"> Mechanism of action -Anti-caries effects of fluoride. - Metabolism of fluoride. 	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams

جامعة البتة

			-Dental Fluorosis -Side effects of fluoride		
18	1	Occupational hazards in dentistry	- Major occupational hazards -Biological health hazards. -Physical hazards -Chemical hazards -Musculoskeletal disorders and diseases of the peripheral nervous system -Hearing loss -Radiation exposure -Stress -Legal hazards -Other risks	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
19	1	Environment and health	- Environment -Physical environment -Biological environment -Psychological environment - Environmental indicators	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
20	1	Effects of air pollution on health	-Prevention and control of air pollution - Effects of radiation -Noise pollution	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
21	1	School Dental Health Program	- Purpose of School Health Program - Guidelines for an ideal school dental program - School dental survey - phases in school oral health program	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
22	1	Treatment need and demand -	Need - categories of need - Demand - Factors affecting dental demands	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
23	1	Dental manpower	- Manpower definition - Dental health manpower planning -Steps in dental health manpower planning	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
24	1	Ethics in dentistry	-Definition of ethics - Dentistry as a profession - Ethical principles	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
25	1	Oral health care for special populations	- Elderly people: -The main oral effects of aging - Pregnant women	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams

جامعة البتة

			- Special Care Dentistry - Patients with special health care needs		
26	1	Forensic dentistry - Introduction	-Application of forensic dentistry. -Bit marks -Person identification. - Dental identification	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
27	1	Dental auxiliary personal	-Introduction. - Dental auxiliary classification. *Non operator auxiliary. * Operatory auxiliary -Four handed relationship.	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
28	1	Primary health care	- Introduction. -Elements (components) of Primary health care. -Principles of Primary health care. - Primary dental health care. -Community dental health services	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
29	1	Infection control	- Introduction. -Concept of disease transmission . -The acquisition means of pathogens. -Transmission of infectious diseases. -Control of infectious diseases. -Personal barrier techniques. -Instrument processing(sterilization)	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
30	1	Dental health education	- Introduction. -Aims of health education. -Objective of health education. - Objective of dental health education. -Principle of health education. -Planning a health education programs.	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams

جامعة البتة

<i>Clinical requirements</i> Lab number	Study unit title	Hours	Practical Course
1	Community dentistry	2	
2	Patient's setting and examination	2	
3	Clinical examination	2	
4	Basic tooth numbering	2	
5	Clinical examination	2	
6	Indices	2	
7	Dental caries	2	
8	Theories of caries formation	2	
9	Dental caries indices	2	
10	Clinical examination	2	
11	Clinical examination	2	
12	Deciduous teeth	2	
13	Clinical examination	2	
14	Clinical examination	2	
15	Prevention of dental caries	2	
16	Fluoride	2	
17	Periodontal diseases	2	
18	Indices for plaque assessment	2	
19	Clinical examination	2	
20	Clinical examination	2	
21	Indices for calculus assessment	2	
22	Clinical examination	2	
23	Clinical examination	2	
24	Gingival disease indices	2	
25	Clinical examination	2	
26	Clinical examination	2	
27	Periodontal diseases prevention	2	

28	Tooth brushing/mechanical plaque control	2	
29	Clinic.....assistant	2	
30	Clinic.....assistant	2	
Total		60	

12. Course Evaluation

1-Distribution of the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily exams, oral, monthly, written and records.

2-For first and second semesters 25 degrees (15 practical + 10 theoretical) and mid-year 15 degrees and final examination 60 degrees (40 theoretical + 20 practical)

13. Learning & Teaching Resources

Required textbooks (curricular if any)	1- Dentistry, Dental Practice, and the Community - E-Book (2005) by Brian A. Burt, Steven A. Eklund 2- Comprehensive preventive dentistry (2012) Edited by Hardy Limeback
Main References (sources)	
Recommended Books & References (Scientific Journals, Reports ...)	Make periodic reports and read recent research in reputable journals
Websites or Electronic References	PubMed, Scopus, Elsevier, Google Scholar, Research Gates

Course Description (1)

1. Course Title	DENTAL MATERIAL	
2. Course Code	050202	
3. Semester/Year	Annual	
4. Description Preparation Date	2024-2025	
5. Available Attendance Form	Lectures and Labs	
6. No. of Hours (Total)	30 h theory	and 60 h laboratory
7. No. of Credits (Total)	4	
8. Course Administrator Name	Areej Talal Ayash	
9. E-mail	Areej.t@albayan.edu.iq	
10. Course Objectives		
The objectives of the course are to enable students of the Grade 2 at the college of dentistry to have a proper academic approach to all dental materials that are used in dentistry field (which includes the sufficient knowledge about the properties of these materials and their manipulation and their advantages and disadvantages if present.		
Knowledge	A1	Develop student information on dental materials specifications and properties.
	A2	To acquire experience and information that will help him to identify the dental material.
	A3	Increase students knowledge of different types of every dental material.
	A4	Learn how to assess the risks of improper use of the dental materials.
Skills	B1	Acquiring skills in determining the dental materials and their proper selection and use.
	B2	Identification of correct implementation of the dental materials that lead to present proper service for the patient.
	B3	Professional preparation and promotion of positive behavior in public life
	B4	Scientific preparation and encouragement of students to communicate in other fields science.

جامعة البتة

Values	C1	Theoretical and laboratory daily and semester examinations
	C2	Mid-year examination
	C3	Laboratory and theoretical final examination
	C4	

11. Teaching and Learning Strategies

1.	Lectures using Data show and power point.	4.	Electronic education
2.	Educational films	5.	Smart probes
3.	Monitors	6.	Practical application in the lab

12. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	1	<input type="checkbox"/> Introduction to dental material <input type="checkbox"/> Physical, chemical and biological properties of dental materials	Introduction and physical properties of dental material	Theoretical lecture using Power Point	Quizzes, monthly, n year and f examinations
2	1	Mechanical properties	Mechanical properties	Theoretical lecture using Power Point	Quizzes, monthly, n year and f examinations
3	1	<input type="checkbox"/> Definition, requirement, types, <input type="checkbox"/> gypsum bonded investment <input type="checkbox"/> phosphate bonded investment <input type="checkbox"/> ethyl silicate bonded	Gypsum materials	Theoretical lecture using Power Point	Quizzes, monthly, n year and f examinations

جامعة البتة

4	1		Gypsum materials	Theoretical lecture using Power Point	Quizzes, monthly, yearly and examinations
5	1	<input type="checkbox"/> Definition <input type="checkbox"/> Ideal properties of impression materials <input type="checkbox"/> Classification of impression materials <input type="checkbox"/> Non elastic impression materials <input type="checkbox"/> Impression plaster <input type="checkbox"/> Impression compound <input type="checkbox"/> Zinc oxide-eugenol <input type="checkbox"/> Elastomeric impression material	Impression materials	Theoretical lecture using Power Point	Quizzes, monthly, yearly and examinations
6	1		Impression materials	Theoretical lecture using Power Point	Quizzes, monthly, yearly and examinations

جامعة البتة

7	1		Impression materials	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations
8	1		Impression materials	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations
9	1		Impression materials	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations
10	1	<input type="checkbox"/> Definition, <input type="checkbox"/> Requirements, <input type="checkbox"/> classification of wax according to origin & melting point, <input type="checkbox"/> classification of wax according to uses, properties of dental waxes.	Waxes	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations
11	1		Waxes	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations

12	1	<p><input type="checkbox"/> Polymers and polymerization</p> <p><input type="checkbox"/> Definition of polymer, co</p> <p>-polymer, cross</p> <p>-link</p> <p>polymer and Degree of polymerization</p> <p><input type="checkbox"/> Factors which control structure and properties of polymer</p> <p><input type="checkbox"/> Types of polymerization <input type="checkbox"/> Heat activated acrylic <input type="checkbox"/> Composition Properties <input type="checkbox"/> Chemically activated resin <input type="checkbox"/> Composition <input type="checkbox"/> Properties</p> <p><input type="checkbox"/> Light activated resin <input type="checkbox"/> Composition <input type="checkbox"/> Properties <input type="checkbox"/> Chemically activated resin compared to heat activated resins</p> <p><input type="checkbox"/> Polymers used in</p>	<p>Polymers</p>	<p>Theoretical lecture using Power Point</p>	<p>Quizzes, monthly, yearly and examinations</p>
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جامعة البتاني

		dentistry <input type="checkbox"/> Processing errors			
13	1		Polymers	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations
14	1	<input type="checkbox"/> factors affecting setting time, setting expansion, strength, storage and manipulation of gypsum products, and hygroscopic expansion	Investment materials	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations
15	1	<input type="checkbox"/> Classification of dental cements <input type="checkbox"/> Definition <input type="checkbox"/> Requirements	Cement materials	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations
16	1	<input type="checkbox"/> Definition <input type="checkbox"/> indication <input type="checkbox"/> Types <input type="checkbox"/> Requirements	Temporary filling	Theoretical lect using Power Poi	
17	1	<input type="checkbox"/> Metallic denture base materials <input type="checkbox"/> Types of metal and metal alloys	Metal and metal alloy	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations

		<input type="checkbox"/> Definition of alloy <input type="checkbox"/> Requirement of casting alloy <input type="checkbox"/> Application of dental alloy <input type="checkbox"/> classification of metal <input type="checkbox"/> classification of dental alloy <input type="checkbox"/> gold foil (advantage, disadvantages) <input type="checkbox"/> gold alloys <input type="checkbox"/> Composition Properties			
18	1		Metal and metal alloy	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations
19	1	<input type="checkbox"/> Alternative of gold alloys <input type="checkbox"/> Metal ceramic alloys <input type="checkbox"/> Requirement <input type="checkbox"/> Types <input type="checkbox"/> Remova denture base alloys <input type="checkbox"/> Requirements <input type="checkbox"/> Types <input type="checkbox"/> Co -Cr alloy	Metal and metal alloy	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations

جامعة البتاني

		<input type="checkbox"/> Application <input type="checkbox"/> Composition properties, <input type="checkbox"/> Advantages Disadvantages			
20	1	<input type="checkbox"/> Titanium and Titanium alloys <input type="checkbox"/> Applications <input type="checkbox"/> Properties <input type="checkbox"/> Ni/Cr alloys <input type="checkbox"/> Composition <input type="checkbox"/> Indications <input type="checkbox"/> Wrought stainless steel alloy	Metal and metal alloy	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations
21	1	<input type="checkbox"/> Direct filling material <input type="checkbox"/> Definition <input type="checkbox"/> Factors causing loss tooth substance <input type="checkbox"/> Requirement of an ideal filling material. <input type="checkbox"/> Classification of filling material <input type="checkbox"/> Anterior filling materials Disadvantages Composite filling materials composition and	Filling materials	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations

جامعة البيان

		structure Types of composite <input type="checkbox"/> Posterior filling materials Dental amalgam <input type="checkbox"/> Classification of amalgam alloys <input type="checkbox"/> Properties of set amalgam <input type="checkbox"/> Shaping and finishing <input type="checkbox"/> Mercury toxicity			
22	1		Filling materials	Theoretical lecture using Power Point	Quizzes, monthly, n year and f examinations
23	1		Filling materials	Theoretical lecture using Power Point	Quizzes, monthly, n year and f examinations
24	1		Filling materials	Theoretical lecture using Power Point	Quizzes, monthly, n year and f examinations

جامعة البتة

25	1	Preventive materials	Preventive materials	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations
26	1	Root canal filling materi (obturating materials)	Root canal filling mater (obturating materials)	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations
27	1	Finishing and polishing material	Finishing and polishing material	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations
28	1	<input type="checkbox"/> Definition <input type="checkbox"/> Types <input type="checkbox"/> Requirements <input type="checkbox"/> Indication <input type="checkbox"/> Soft liners <input type="checkbox"/> Types <input type="checkbox"/> Requirements <input type="checkbox"/> Indication <input type="checkbox"/> Properties	Relining material	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations
29	1	Implant materials	Implant materials	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations
30	1	Maxillofacial material	Maxillofacial materials	Theoretical lect using Power Poi	Quizzes, monthly, n year and f examinations

13. Course Evaluation

Distribution of the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily exams, oral, monthly, written and records.

For first and second semesters 25 degrees (15 practical + 10 theoretical) and mid-year 15 degrees and final examination 60 degrees (40 theoretical + 20 practical)

14. Learning & Teaching Resources

Required textbooks

(curricular if any)

Craig's Restorative Dental Materials.

Sakaguchi, R., & Powers, J. (2019). Elsevier Inc.
<https://doi.org/10.1016/C2010-0-65754-3>

Phillips' science of dental materials

Authors: Kenneth J. Anusavice, Ralph W. Phillips, Chiayi Shen, H. Ralph Rawls

Publisher

Print Book, English, ©2013

Edition: 12th ed formats and editions

Publisher: Elsevier/Saunders, St. Louis, Mo., ©2013

Main References

(sources)

Recommended Books & References

(Scientific Journals, Reports ...)

Make periodic reports and read recent research in reputable journals

Websites or Electronic References

PubMed, Scopus, Elsevier, Google Scholar, Research Gates

Course Description

1. Course Title	Dental anatomy	
2. Course Code	050101	
3. Semester/Year	annual	
4. Description Preparation Date	2024-2025	
5. Available Attendance Form	Lectures and Laboratories	
6. No. of Hours (Total)	60 of theory and 60 hours of practical	
7. No. of Credits (Total)	6	
8. Course Administrator Name	Ali Ahmed Abdel Mutlak	
9. E-mail	ali.abm@albayan.edu.iq	
10. Course Objectives		
Knowledge	A1	Enable students to know the external anatomy of teeth
	A2	Enabling students to number teeth according to different numbering system
	A3	Enable students to sculpt teeth on wax molds
	A4	
Skills	B1	Asking brainstorming questions through which the student can link the study materials together and link them to the medical and health reality.
	B2	developing skills Sculpture and drawing related to dental anatomy
	B3	Motivating the student through the style of expression and thinking at the speed of communication and response
	B4	Urging the student to solve problems and possess distinctive thinking
Values	C1	Professional preparation and encouraging the student to have positive behavior in his public life
	C2	Scientific preparation and urging the student to communicate in other fields of science

جامعة البتة

C3	Cultural preparation and refining the student's personality
C4	Utilizing the acquired skills so that the student becomes a dentist capable treating patients

11. Teaching and Learning Strategies

1.	Lectures using the program data show and power point	4.	E-learning
2.	Educational films	5.	Blackboards
3.	Display screens	6.	Student discussion groups.

12. The Structure of the Course					
Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
Theoretical					
1	2	Introduction About dental anatomy	introduction	Display data show and blackboard	Daily exam
2	2	Introduction About dental anatomy	introduction	Display data show and blackboard	Daily exam
3	2	Knowing the method of numbering baby and permanent teeth	Numbering systems	Display data show and blackboard	Daily exam
4	2	Knowing the method of numbering baby and permanent teeth	Numbering systems	Display data show and blackboard	Daily exam
5	2	Knowing the anatomical features teeth, their names and shapes	Anatomical landmarks	Display data show and blackboard	Daily exam
6	2	Knowing the anatomical features teeth, their names and shapes	Anatomical landmarks	Data show and blackboard display + explanatory films	Daily exam
7	2	Identify the external appearance of the tooth by studying each surface of the tooth	Permanent Maxillary Central Incisor	Data show and blackboard display + explanatory films	Daily exam

جامعة البتة

8	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Maxillary Central Incisor	Data show and blackboard display + explanatory films	Daily exam
9	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Maxillary Lateral Incisor	Data show and blackboard display + explanatory films	Daily exam
10	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Maxillary Lateral Incisor	Data show and blackboard display + explanatory films	Daily exam
11	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Mandibular Incisors	Data show and blackboard display + explanatory films	Daily exam
12	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Mandibular Incisors	Data show and blackboard display + explanatory films	Daily exam
13	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Mandibular Incisors	Data show and blackboard display + explanatory films	Daily exam
14	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Canines	Data show and blackboard display + explanatory films	Daily exam
15	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Canines	Data show and blackboard display + explanatory films	Daily exam

جامعة البتاني

16	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Maxillary Premolars	Data show and blackboard display + explanatory films	Daily exam
17	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Maxillary Premolars	Data show and blackboard display + explanatory films	Daily exam
18	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Mandibular Premolars	Data show and blackboard display + explanatory films	Daily exam
19	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Mandibular Premolars	Data show and blackboard display + explanatory films	Daily exam
20	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Mandibular Second Premolar	Data show and blackboard display + explanatory films	Daily exam
21	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Maxillary First Molar Permanent maximum second and third molars	Data show and blackboard display + explanatory films	Daily exam
22	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Maxillary First Molar Permanent maximum second and third molars	Data show and blackboard display + explanatory films	Daily exam
23	2	Identify the external appearance the tooth by studying each surface the tooth	Permanent Mandibular First Molar	Data show and blackboard display + explanatory films	Daily exam

جامعة البتة

24	2	Identify the external appearance of the tooth by studying each surface of the tooth	Permanent Mandibular Second third molars	Data show and blackboard display + explanatory films	Daily exam
25	2	Identify the stages of tooth growth and the time of their eruption	Tooth development	Data show and blackboard display + explanatory films	Daily exam
26	2	Identify the stages of tooth growth and the time of their eruption	Tooth development	Data show and blackboard display + explanatory films	Daily exam
27	2	Learn about the parts of the tooth nerve and their names	Pulp Cavities	Data show and blackboard display + explanatory films	Daily exam
28	2	Learn about the parts of the tooth nerve and their names	Pulp Cavities	Data show and blackboard display + explanatory films	Daily exam
29	2	Learn about the mechanism of dental occlusion and the function of teeth the anatomy of teeth and gums	Occlusion and physiologic form of teeth and periodontium	Data show and blackboard display + explanatory films	Daily exam
30	2	Learn about the mechanism of dental occlusion and the function of teeth the anatomy of teeth and gums	Occlusion and physiologic form of teeth and periodontium	Display data show and blackboard	Daily exam
Practical					
1	2	Introduction About dental anatomy	Introduction to dental anatomy and sculpting tools	Display data show and blackboard	Evaluation method
2	2	Knowing the method of numbering baby and permanent teeth	Numbering systems.	Display data show and blackboard	Daily exam
3	2	Know how to sculpt a cube	Practical demonstration of cube sculpting	Data display, blackboard and practical sculpture	Daily exam

جامعة البتاني

			(1cm*1cm*1cm)		
4	2	Knowledge of the anatomical parts of teeth	-Introduction to anatomical landmarks on dental models. -Cube sculpting.	Display data show and blackboard	Homework
5	2	Knowledge of anatomy and how to draw and dissect the tooth	Describe and sculpt the verbal aspect of P.Max. Right central incisor.	Data display, blackboard and practical sculpture	Daily exam
6	2	Knowledge of anatomy and how to draw and dissect the tooth	Describe and sculpt the medial aspect of P.Max. Right central incisor.	Data show and blackboard display + explanatory films and practical sculpture	Homework
7	2	Knowledge of anatomy and how to draw and dissect the tooth	Description, carving and finishing of the cutting side of Permanent Max. Right central incisor	Data show and blackboard display + explanatory films and practical sculpture	Homework
8	2	Developing students' ability to draw and sculpt teeth	Hands-on carving P.Max. Central right The incisor	practical training	Homework
9	2	Assessing students' ability to sculpt and draw teeth	Practical exam. From sculpture P.Max. Central right The incisor	practical training	Homework
10	2	Knowledge of anatomy and how to draw and dissect the tooth	Describe and model the oral and genital aspects of P. the above. Right dogs.	Data show and blackboard display + explanatory films and practical sculpture	An in-person practical exam

جامعة البتاني

11	2	Knowledge of anatomy and how to draw and dissect the tooth	Description, carving and finishing of the cutting side of P the above. Right dogs	Data show and blackboard display + explanatory films and practical sculpture	Homework
12	2	Developing students' ability to draw and sculpt teeth	Hands-on carving P. Max. Right dogs	practical training	Homework
13	2	Assessing students' ability to sculpt and draw teeth	Practical exam. Sculpture P. Max. Right dogs.	practical training	Homework
14	2	Assessing students' ability to sculpt and draw teeth	Mid-year practical exam for drawing carving.	practical training	An in-person practical exam
15	2	Knowledge of anatomy and how to draw and dissect the tooth	Describe and sculpt the buccal and mesial aspects B Max. Right first premolar.	Data show and blackboard display + explanatory films and practical sculpture	Practical exam
16	2	Knowledge of anatomy and how to draw and dissect the tooth	Description, carving and finishing of the occlusal side B Max. Right first premolar	Data show and blackboard display + explanatory films and practical sculpture	Homework
17	2	Developing students' ability to draw and sculpt teeth	Hands-on carving P. Max. Right first premolar	practical training	Homework
18	2	Assessing students' ability to sculpt and draw teeth	Practical exam. From sculpture P. Max. Right first premolar	practical training	Homework
19	2	Knowledge of anatomy and how to draw and dissect the tooth	Describe and sculpt the buccal and mesial aspects B. Mand. Right first premolar.	Data show and blackboard display + explanatory films and practical sculpture	An in-person practical exam

جامعة البتة

20	2	Knowledge of anatomy and how to draw and dissect the tooth	Description, carving and finishing of the occlusal side B. Mand. Right first premolar.	Data show, blackboard and practical sculpture + explanatory films	Homework
21	2	Developing students' ability to draw and sculpt teeth	Practical training for carving P.Mand. First right Premolars	practical training	Homework
22	2	Assessing students' ability to sculpt and draw teeth	Practical exam. Sculpture P. Mand. Right first premolar	practical training	Homework
23	2	Knowledge of anatomy and how to draw and dissect the tooth	Describe and sculpt the buccal and mesial aspects of the right first molar	Data show and blackboard display + explanatory films and practical sculpture	An in-person practical exam
24	2	Knowledge of anatomy and how to draw and dissect the tooth	Description, carving and finishing of the occlusal side From P. Max. Right first molar.	Data show and blackboard display + explanatory films and practical sculpture	Homework
25	2	Developing students' ability to draw and sculpt teeth	Hands-on carving P.Max. Right first molar.	practical training	Homework
26	2	Knowledge of anatomy and how to draw and dissect the tooth	Describe and sculpt the buccal and mesial aspects B. Mand. Right first molar	Data show and blackboard display + explanatory films and practical sculpture	Practical exam
27	2	Knowledge of anatomy and how to draw and dissect the tooth	Description, carving and finishing of the occlusal side	Data show and blackboard display + explanatory films and practical sculpture	Homework

جامعة البتة

			P. Mand first molar/hands sculpting p. Mand first molar.		
28	2	Knowledge of anatomy and how draw and dissect the tooth	Describe and sculpt the buccal and mesial aspects B. Mand. Right first molar	Data show and blackboard display + explanatory films and practical sculpture	Daily exam
29	2	Assessing students' ability to scu and draw teeth	Practical examination of carving P. Mand. First right Molly	practical training	Homework
30	2	Assessing students' ability to scu and draw teeth	Final oral and practical examination dental carving	practical training	Practical exam

13. Course Evaluation

	<ol style="list-style-type: none"> 1. Daily exams for theoretical subjects 2. Practical exam in the laboratory 3. Oral questions 4. Mid-year exam 5. Final exam
theoretical 10% practical 15%	First semester + second semester 25%
Theoretical 15%	Half year 25%
Theoretical 35% Practical 25%	Final exam 50%
Theoretical 60% practical 40%	100%

14. Learning & Teaching Resources

Required textbooks (curricular if any)	WHEELER'S DENTAL ANATOMY, PHYSIOLOGY, AND OCCLUSION,9th edition,2010
Main References (sources)	dental anatomy and morphology
Recommended Books & References (Scientific Journals, Reports ...)	Make a drawing of teeth and their external anatomy and view drawings of dental anatomy in the Dental Anatomy Atlas
Websites or Electronic References	Google scholar, research gates

Course Description (1)

78. Course Title	Dental radiology	
79. Course Code	050310	
80. Semester/Year	annual	
81. Description Preparation Date	21/9/2025	
82. Available Attendance Form	Lectures and Laboratory	
83. No. of Hours (Total)	Theory: 30 hours	Practical: 60 hours
84. No. of Credits (Total)	4	
85. Course Administrator Name	Assistant lecturer hamsa jamal mahdi	
86. E-mail	Hamsa.jamal@albayan.edu.iq	
87. Course Objectives		
Knowledge	<p>Gaining experience and information related to X-rays, radiographs, and all types of radiography equipment</p> <p>Developing the student's skills in the field of dealing with radiographic films, digital sensors, and means of displaying them</p> <p>Increasing students' knowledge of techniques for taking radiographs using films and digital sensors and Learn how to evaluate the type of photos taken, possible errors, and ways to avoid them</p>	
Skills	<ul style="list-style-type: none"> • Enabling the student to use x-ray machines correctly • Explain the importance of radiation protection and its risks • Enabling the student to read and diagnose radiographs of various types • Providing sufficient information about the latest types of devices and diagnostic methods in the field of oral and maxillofacial radiology 	

جامعة البتة

- Reading radiographs
- Use of devices
- Possibility of protection from radiation risks
- Acquiring skills in taking radiographs with their various techniques while taking preventive measures for the doctor, workers, and patients
- Developing the skills of reading and interpreting apparent cases to reach the correct diagnosis

88. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required educational outcomes	hours	the week
Daily examinations and evaluations on treatment of patients	Data show White board	Physics of radiation	introduction and definitions of nature of radiation, type of radiation	1	1
Daily examinations and evaluations on treatment of patients	Data show White board	Production of radiation	x-ray machine, interaction of x-ray with matter composition of matter	1	2
Daily examinations and evaluations on treatment of patients	Data show White board	Film imaging	types of x-ray films, processing cycle, dark room, intensifying screen	1	3
Daily examinations and evaluations on treatment of patients	Data show White board	Factors controlling x-ray beam	dosimetry and invers square law	1	4

جامعة البتة

Daily examinations and evaluations on treatment of patients	Data show White board	Projection geometry	(sharpness, distortion, image characteristic and artifacts)	1	5
Daily examinations and evaluations on treatment of patients	Data show White board	Biological effects of radiation	direct & indirect effects, deterministic and stochastic effect	1	6
Daily examinations and evaluations on treatment of patients	Data show White board	Safety and Protection	source of exposure , dose limits , exposure and risk and reducing dental exposure	1	7
Daily examinations and evaluations on treatment of patients	Data show White board	Intraoral projection	periapical, bitewing, and occlusal radiography	1	8
Daily examinations and evaluations on treatment of patients	Data show White board	Digital radiography	strength , limitations , comparing with conventional radiography and indications	1	9
Daily examinations	Data show	Patient's management	management of pt. Child, contrast	1	10

جامعة البتة

and evaluations on treatment of patients	White board		media & localization technique		
Daily examinations and evaluations on treatment of patients	Data show White board	Cephalometric imaging	technique, indications, evaluation of the image	1	11
Daily examinations and evaluations on treatment of patients	Data show White board	Panoramic radiography	principles, technique, positin and interpretation	1	12
Daily examinations and evaluations on treatment of patients	Data show White board	Craniofacial imaging	types, indication and interpretation	1	13
Daily examinations and evaluations on treatment of patients	Data show White board	CBCT	principles, components, strength and limitations	1	14
Daily examinations and evaluations	Data show White board	CBCT	clinical applications in maxillofacial region, anatomy	1	15

جامعة البتة

on treatment of patients			and interpretations		
Daily examinations and evaluations on treatment of patients	Data show White board	Radiographic anatomy part1	teeth, supporting dentoalveolar structures, maxilla and mid facial bones	1	16
Daily examinations and evaluations on treatment of patients	Data show White board	Radiographic anatomy part 2	teeth, supporting dentoalv structures, maxilla and mid facial bones	1	17
Daily examinations and evaluations on treatment of patients	Data show White board	Advanced imaging modalities	CT, MRI AND ULTRASOUND	1	18
Daily examinations and evaluations on treatment of patients	Data show White board	Radiography & Implantology	modalities, indications	1	19
Daily examinations and evaluations on treatment of patients	Data show White board	Infection control	infection control in radiography clinic, protection of pt., protection of workers	1	20

جامعة البتة

Daily examinations and evaluations on treatment of patients	Data show White board	Prescribing diagnostic imaging	radiologic examination and guide lines for ordering imaging	1	21
Daily examinations and evaluations on treatment of patients	Data show White board	Radiographical interpretations of common diseases	interpretation of dental caries, and periodontal disease	1	22
Daily examinations and evaluations on treatment of patients	Data show White board	Cysts of the jaw	odontogenic and non-odontogenic cysts	1	23
Daily examinations and evaluations on treatment of patients	Data show White board	Dental anomalies	acquired and developmental	1	24
Daily examinations and evaluations on treatment of patients	Data show White board	Inflammatory conditions of the jaws	periapical inf disease, osteomyelitis, pericoronitis	1	25
Daily examinations and	Data show White board	Trauma	dento alveolar trauma , dental	1	26

جامعة البتة

evaluations on treatment of patients			fractures and bone fractures		
Daily examinations and evaluations on treatment of patients	Data show White board	TMJ abnormalities	anatomy of TMJ, application	1	27
Daily examinations and evaluations on treatment of patients	Data show White board	Salivary gland disease	imaging modalities, interpretation	1	28
Daily examinations and evaluations on treatment of patients	Data show White board	Craniofacial anomalies	Cleft lip and palate	1	29
Daily examinations and evaluations on treatment of patients	Data show White board	Computed tomography	indications, strength, limitations	1	30
89. Course evaluation					
Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, reports, etc.					

Number	Assessment measurement	
1	1 st and 2 nd semester 25%	theory 10% clinical 15%
2	Mid-year examination 15%	Theory 15%
3	Final examination (60%)	40% theory 20% clinical
Total		100%

90. Learning and teaching resources

Required textbooks, methodology if present	White and Pharoah's Oral radiology principles and interpretation. Sanjay Mallya and Ernest Lam. 8 th edition. 2019, Elsevier
Special requirements (include for example workshops, periodicals, IT software, websites)	
Community-based facilities	(include for example, guest Lectures , internship , field studies)

جامعة البيان

Electronic References, Internet Sites

PubMed, Scopus, Elsevier,
Google Scholar, Research
Gates

91. Course Evaluation

1	First + second semester 25%	Theory 10% Practical 15%
2	Midyear examination 15%	Theory 15%
3	Final examination	Theory 40% Practical 20%
Total		100%

92. Learning & Teaching Resources

Required textbooks, methodology if present	White and Pharoah's Oral radiology principles and interpretation. Sanjay Mallya and Ernest Lam. 8 th edition. 2019, Elsevier
Special requirements (include for example workshops, periodicals, IT software, websites)	
Community-based facilities	(include for example, guest Lectures , internship , field studies)
Electronic References, Internet Sites	PubMed, Scopus, Elsevier, Google Scholar, Research Gates

Course Description (1)

93. Course Title	Oral histology and Embryology	
94. Course Code	050203	
95. Semester/Year	Annual for third grade	
96. Description Preparation Date	21/9/2025	
97. Available Attendance Form	Weekly	
98. No. of Hours (Total)	60 hours theory and 60 hours practical	
99. No. of Credits (Total)	6	
100. Course Administrator Name	Lecturer Nawar Bahjat Kamel	
101. E-mail	nawar.bahjat@codental.uobaghdad.edu.iq	
102. Course Objectives		
Knowledge	A1	Conveying a general idea about the process of fertilization and emb formation.
	A2	Students' understanding of the stages of tooth formation and methods of dental tissue development.
	A3	Increasing students' knowledge of the histological anatomy of the tooth.
	A4	For the student to understand the differences in composition between different tissues of the tooth.
Value Skills	B1	Identify the stages of embryonic formation.
	B2	Acquiring skills in classifying the different tissues of the tooth.
	B3	Identify the fetal causes of dental disease.
	B4	
Value	C1	Preparing the student and urging him to use various references to understand the curriculum decisions.

جامعة البتة

	C2	Scientific preparation and urging the student to use modern technologies to understand the curriculum decisions.
	C3	Scientific and practical preparation to understand the genetic causes of dental diseases.
	C4	Utilizing the acquired skills so that the student can work in groups and use scientific terminology within the limits of the course.

103. Teaching and Learning Strategies

1.	lectures using power point.	4.	discuss topics with students.
2.	Practical lessons.	5.	
3.	Preparing research papers.	6.	

104. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	2	<ul style="list-style-type: none"> • Ovulation: Hormonal control, ovarian cycle • Fertilization: Process, capacitation, acrosomal reaction • Implantation: Blastocyst formation, attachment to uterine wall 	Embryogenesis: first week ovulation, fertilization and implantation	Theoretical lecture	Quiz
2	2	<ul style="list-style-type: none"> • Formation of Bilaminar Disc: Epiblast and hypoblast • Amniotic Cavity and Yolk Sac • Extraembryonic Mesoderm 	2nd week, Bilaminar germ layer	Theoretical lecture	Quiz
3	2	<ul style="list-style-type: none"> • Gastrulation: Formation of three germ layers (ectoderm, mesoderm, endoderm) • Neurulation: Formation of the neural tube • Notochord and Neural Crest 	3rd week trilaminar germ layer: gastrulation and neurulation	Theoretical lecture	Quiz
4	2	<ul style="list-style-type: none"> • Pharyngeal Arches: Structure and function • Pharyngeal Pouches and Clefts: Derivatives • Developmental Anomalies 	Development of head and neck (pharyngeal arch, pouch & cleft)	Theoretical lecture	Quiz
5	2	<ul style="list-style-type: none"> • Facial Processes: Maxillary and mandibular prominence • Facial Anomalies: Cleft lip, cleft palate 	Development of face and anomalies	Theoretical lecture	Quiz
6	2	<ul style="list-style-type: none"> • Tongue Formation: Pharyngeal arches involvement • Innervation of Tongue • Tongue Anomalies: Ankyloglossia, bifid tongue 	Development of tongue and anomalies	Theoretical lecture	Quiz

جامعة البتة

7	2	<ul style="list-style-type: none"> • Primary and Secondary Palate • Fusion of Palatal Shelves • Palatal Anomalies 	Development of palate and anomalies	Theoretical lecture	Quiz
8	2	<ul style="list-style-type: none"> • Histological Techniques • Staining Methods • Tissue Sectioning 	Slide preparation	Theoretical lecture	Quiz
9	2	<ul style="list-style-type: none"> • Stages of Tooth Development: Bud, cap, bell stages • Developmental Disturbances: Hypodontia, supernumerary teeth 	Tooth development and developmental disturbances of teeth	Theoretical lecture	Quiz
10	2	<ul style="list-style-type: none"> • Formation of Dentin • Odontoblast Role • Dentin Types: Primary, secondary, tertiary dentin 	Dentinogenesis and dentin structure	Theoretical lecture	Quiz
11	2	<ul style="list-style-type: none"> • Formation of Enamel • Enamel Organ and Ameloblasts • Enamel Defects: Amelogenesis imperfecta 	Amelogenesis, Enamel structures	Theoretical lecture	Quiz
12	2	<ul style="list-style-type: none"> • Dentin Sensitivity • Enamel Erosion and Hypoplasia 	Clinical consideration for dentin and enamel	Theoretical lecture	Quiz
13	2	<ul style="list-style-type: none"> • Pulp Anatomy • Cellular Composition • Pulp histology 	Dental Pulp	Theoretical lecture	Quiz
14	2	<ul style="list-style-type: none"> • Types of Cementum • Cementogenesis • Cementum Anomalies 	Cementum and clinical consideration	Theoretical lecture	Quiz
15	2	<ul style="list-style-type: none"> • Hertwig's Epithelial Root Sheath • Root Morphology and Development 	Root formation & Cementogenesis	Theoretical lecture	Quiz
16	2	<ul style="list-style-type: none"> • PDL Structure and Function • PDL Fibers Types • PDL Remodeling 	Periodontal ligaments	Theoretical lecture	Quiz

جامعة البتة

17	2	<ul style="list-style-type: none"> • Sharpey's Fibers • Gingival Fiber Groups 	Principles fiber of pdl and gingival fibers	Theoretical lecture	Quiz
18	2	<ul style="list-style-type: none"> • Alveolar Process Development • Alveolar Bone histology • Alveolar Bone Remodeling 	Alveolar bone	Theoretical lecture	Quiz
19	2	<ul style="list-style-type: none"> • Osteoblast and Osteoclast Role • Bone Turnover 	Bone formation and resorbtion	Theoretical lecture	Quiz
20	2	<ul style="list-style-type: none"> • Bone Proteins: Collagen, osteocalcin • Dentin Proteins: Dentin phosphoprotein 	Proteins involve in mineralization of bone and dentin	Theoretical lecture	Quiz
21	2	<ul style="list-style-type: none"> • Keratinized and Non-Keratinized Mucosa • Histological Differences 	Oral mucosa and their type	Theoretical lecture	Quiz
22	2	<ul style="list-style-type: none"> • Gingival Structure • Dentogingival Attachment 	Gingiva and dentogingival junction	Theoretical lecture	Quiz
23	2	<ul style="list-style-type: none"> • Stages of Tooth Eruption • Factors Influencing Eruption 	Eruption of teeth	Theoretical lecture	Quiz
24	2	<ul style="list-style-type: none"> • Process of Deciduous Tooth Shedding • Timing of Exfoliation 	Shedding of teeth	Theoretical lecture	Quiz
25	2	<ul style="list-style-type: none"> • Major and Minor Glands • Saliva Secretion and Composition 	Salivary gland	Theoretical lecture	Quiz
26	2	<ul style="list-style-type: none"> • Types of Salivary Proteins: Amylase, mucins • Role in Oral Health 	Salivary proteins	Theoretical lecture	Quiz
27	2	<ul style="list-style-type: none"> • Anatomy of TMJ • TMJ Movements • TMJ histology 	TMJ	Theoretical lecture	Quiz
28	2	<ul style="list-style-type: none"> • Development of Maxillary Sinus • Sinus mucosa histology 	Maxillary sinus	Theoretical lecture	Quiz

جامعة البتة

29	2	<ul style="list-style-type: none">• Tissue Staining Methods• Enzyme Histochemistry	Histochemistry	Theoretical lecture	Quiz
30	2	<ul style="list-style-type: none">• Aging of Oral Tissues• Clinical Considerations in Older Adults	Age changes of soft and hard tissues	Theoretical lecture	Quiz

105. Course Evaluation

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

For first and second semester 25 degree (10 theoretical +15 practical)

For mid-year (15 degree theoretical)

For final exam (60 degree theoretical + 40 practical)

106. Learning & Teaching Resources

Required textbooks (curricular if any)	1. Ten cate's oral histology development, structures and function. Antonio Nanci. 9th edition. 2017, Elsevier. 2. Orban's oral histology and embryology. Kumar. 14th edition. 2015, Elsevier.
Main References (sources)	
Recommended Books & References (Scientific Journals, Reports ...)	1. Electronic references and websites 2. Scientific and practical journals and reports
Websites or Electronic References	PubMed, Scopus, Elsevier, Google Scholar

Course Description (1)

107. Course Title	Prosthodontics	
108. Course Code	050301	
109. Semester/Year	Yearly	
110. Description Preparation Date	21/9/2025	
111. Available Attendance Form	Lectures and laboratory	
112. No. of Hours (Total)	Theory : 30 Clinical: 60	
113. No. of Credits (Total)	4	
114. Course Administrator Name	Lec. Mustafa Samir Mahmood	
115. E-mail	mustafa.sa@albayan.edu.iq	
116. Course Objectives		
Knowledge	A1	Acquiring experience and information to help identify the patient needs and reasons
	A2	Development of motivational interviewing skills to encourage patients to take remedial measures
	A3	Increased knowledge of students to determine the patients need for a partial set of teeth
	A4	Increased knowledge of students about constructing a partial set of teeth
Skills	B1	Acquiring skills in clinical dental examinations and partially identifying der compensation
	B2	Development of motivational interviewing skills to encourage patients to maint their partial dental set
	B3	Identification of indicators and techniques for application of partial denture s treatments

جامعة البتة

	B4	Acquiring skills in treatment planning for partially edentulous patients	
Values	C1	Catalyze students through expression, reflection, speed of communication and response	
	C2	Inducing students to solve problems and to have special thinking	
	C3	Reliance of the lecture on student interaction and mental storm	
	C4	Preparing the student to be a dentist capable of treating patients	
117. Teaching and Learning Strategies			
1.	Lectures using Data show and power point.	4.	Electronic education
2.	Educational films	5.	Smart probes
3.	Monitors	6.	Practical application in the clinic

118. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	1	<ul style="list-style-type: none"> • Partial dentures • Removable partial denture (RPD) • Objectives for RPD construction • Causes of teeth loss • Indications of removable partial dentures • Fixed partial denture • Indications for fixed partial denture • Dental implant therapy • Contraindications for dental implant therapy • Terminology and re-finishing 	Introduction to Removable Partial Dentures	Prosthodontics	Theoretical lecture using Power Point
2	1	<ul style="list-style-type: none"> • 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 	Partially Edentulous Classification of Arches	Prosthodontics	Theoretical lecture using Power Point

جامعة البتة

		<p>classified according to the type of material</p> <ul style="list-style-type: none"> • 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 of the Kennedy classification method 			
3	1	<ul style="list-style-type: none"> • 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) 	Surveying	Prosthodontics	Theoretical lecture using Power Point
4	1	<ul style="list-style-type: none"> • Principles of surveying • Types of undercuts established by surveying • Factors that determine and affect the path of placement (insertion) and removal of the RPD 	Surveying (continue)	Prosthodontics	Theoretical lecture using Power Point

جامعة البتة

		<ul style="list-style-type: none"> • Rules of surveying 			
5	1	<ul style="list-style-type: none"> • Main components of RPD • Major connectors • Requirements of major connectors • Guidelines for design and location of major connectors • Characteristics of major Connectors 	Component Parts of a Removable Partial Denture	Prosthodontics	Theoretical lecture using Power Point
6	1	<ul style="list-style-type: none"> • 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 	Maxillary Major Connectors	Prosthodontics	Theoretical lecture using Power Point
7	1	<ul style="list-style-type: none"> • Special structural requirements • Types of mandibular major connectors <ul style="list-style-type: none"> ○ Lingual bar → Methods that may be used to 	Mandibular Major Connectors	Prosthodontics	Theoretical lecture using Power Point

جامعة البتة

		<p>determine the relative height of the floor of the mouth</p> <ul style="list-style-type: none"> ○ Lingual plate (linguoplate) → The indications for the use of linguoplate ○ Double lingual bar (lingual bar with cingulum bar) → Indications for use of double lingual bar ○ Labial bar → Indications for use of labial bar → Characteristics and location 			
8	1	<ul style="list-style-type: none"> • Definition • Functions • Form & location • Basic types of minor connectors • Tissue stops • Finishing lines • Reaction of Tissue to Metallic Coverage 	Minor Connectors	Prosthodontics	Theoretical lecture using Power Point
9	1	<ul style="list-style-type: none"> • The purposes of the rest in general • Occlusal Rest • Extended Occlusal Rest • Interproximal Occlusal Rest • Internal Occlusal Rests 	Rests and Rest Seats	Prosthodontics	Theoretical lecture using Power Point

جامعة البتة

		<ul style="list-style-type: none"> • 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 			
10	1	<ul style="list-style-type: none"> • Direct retainers • Indirect retainers • The extra coronal retainer (Clasp type) • Component parts, Function, and position of clasp assembly parts • Factors affecting the magnitude of retention • The basic principles of clasp design 	Retention and Removable Partial Denture Retainers	Prosthodontics	Theoretical lecture using Power Point
11	1	<ul style="list-style-type: none"> • Clasps designed without movement accommodation. • Circumferential (Circle or Akers) clasp • Ring-type clasp • Embrasure (double Akers) clasp • Back action clasp • Multiple clasps • Half-and-half Clasp 	Extra Coronal Direct Retainers (Types of clasp assemblies)	Prosthodontics	Theoretical lecture using Power Point

جامعة البتة

		<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Internal attachments • Precision Attachments <ul style="list-style-type: none"> ○ 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 	Intracoronar Direct Retainers (Internal Attachments, Precision Attachments)	Prosthodontics	Theoretical lecture using Power Point
13	1	<ul style="list-style-type: none"> • Stress-Breakers • Types of Stress-Breakers 	Stress-Breakers (Stress Equalizers)	Prosthodontics	Theoretical lecture using Power Point

جامعة البتاني

14	1	<ul style="list-style-type: none"> • The main factors influencing the effectiveness of an indirect retainer • The auxiliary functions of indirect retainers • Forms of Indirect Retainers 	Indirect Retainers	Prosthodontics	Theoretical lecture using Power Point
15	1	<ul style="list-style-type: none"> • Auxiliary occlusal rest • Lingual rest • Incisal rest • Canine extensions from occlusal rests • Cingulum bars (continuous bars) and linguo-plates • Modification areas • Rugae support 	Indirect Retainers (continue)	Prosthodontics	Theoretical lecture using Power Point
16	1	<ul style="list-style-type: none"> • Blockout and relief • Cast preparation • Types of blockout of master cast <ul style="list-style-type: none"> ○ Parallel blockout ○ Shaped blockout ○ Arbitrary blockout • Relieving the master cast • Purpose of relief • Sites • Tissue Stops 	Laboratory procedures in RPD construction: Blockout and Relief	Prosthodontics	Theoretical lecture using Power Point
17	1	<ul style="list-style-type: none"> • Duplicating a stone cast • Duplicating material and flask • Impression • Refractory cast 	Laboratory procedures in RPD construction: Duplication and Refractory Cast Construction	Prosthodontics	Theoretical lecture using Power Point

جامعة البتة

18	1	<ul style="list-style-type: none"> • Waxing the framework • Spruing • General rules for spruing • Investing the sprued pattern • Purpose of investment • Burnout 	Laboratory procedures in RPD construction: Wax Pattern	Prosthodontics	Theoretical lecture using Power Point
19	1	<ul style="list-style-type: none"> • Casting the RPD Framework • Casting Process • Finishing the Framework • Sprue removal 	Laboratory procedures in RPD construction: Casting and Finishing	Prosthodontics	Theoretical lecture using Power Point
20	1	<ul style="list-style-type: none"> • 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 	Denture Base in RPD	Prosthodontics	Theoretical lecture using Power Point
21	1	<ul style="list-style-type: none"> • Record bases • Types of record bases according to materials constructed from it • Occlusion rims 	Record Bases, Occlusion Rims, Mounting and Arrangement of Teeth	Prosthodontics	Theoretical lecture using Power Point

جامعة البتاني

		<ul style="list-style-type: none"> • Occlusion rims for static jaw relation records • Occlusion rims for 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	1	<ul style="list-style-type: none"> • Biomechanical considerations • Possible movements of partial dentures • Tooth-tissue-supported prosthesis 	Biomechanics of Removable Partial Dentures	Prosthodontics	Theoretical lecture using Power Point
23	1	<ul style="list-style-type: none"> • Tooth-supported partial denture • Occlusal Rest Seat Preparation and Denture Movement • Impact of Implants on Movements of Partial Dentures 	Biomechanics of Removable Partial Dentures (continue)	Prosthodontics	Theoretical lecture using Power Point
24	1	<ul style="list-style-type: none"> • Difference in Prosthesis Support and Influence on Design 	Principles of Removable Partial Denture Design	Prosthodontics	Theoretical lecture using Power Point

جامعة البتة

		<ul style="list-style-type: none"> • Differentiation Between Two Main Types of Removable Partial Dentures 			
25	1	<ul style="list-style-type: none"> • Components of Partial Denture Design • Implant Considerations in Design 	Principles of Removable Partial Denture Design (continue)	Prosthodontics	Theoretical lecture using Power Point
26	1	<ul style="list-style-type: none"> • 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 	Clinical Phases of Removable Partial Denture Construction.	Prosthodontics	Theoretical lecture using Power Point
27	1	<ul style="list-style-type: none"> • Acrylic removable partial dentures • Appearance • Maintenance of space • Reestablishment of occlusal relationships • Conditioning of teeth and residual ridges 	Acrylic Removable Partial Dentures	Prosthodontics	Theoretical lecture using Power Point

جامعة البتة

		<ul style="list-style-type: none"> • Interim restoration during treatment • Conditioning the patient for wearing a prosthesis • Clinical procedure for placement 			
28	1	<ul style="list-style-type: none"> • Flexible removable partial dentures • Type of material used for the flexible denture • Support • Retention 	Flexible Removable Partial Dentures	Prosthodontics	Theoretical lecture using Power Point
29	1	<ul style="list-style-type: none"> • 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 	Repairs and Additions to Removable Partial Dentures	Prosthodontics	Theoretical lecture using Power Point
30	1	<ul style="list-style-type: none"> • Components of CAD/CAM system • Types of Digital Scanner • Digital RPD Framework Design (step by step) • Digital Fabrication Process 	Digitally Designed & Fabrication Process of RPD Framework Using CAD/CAM System	Prosthodontics	Theoretical lecture using Power Point

119. Course Evaluation

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

120. Learning & Teaching Resources

Required textbooks (curricular if any)	McCracken's Removable Partial Prosthodontics 13th Edition - November 3, 2015 ▪ Robert, W. L. (2018) Removable Partial Denture Manual. Dalhousie University
Main References (sources)	
Recommended Books & References (Scientific Journals, Reports ...)	Make periodic reports and read recent research in reputable journals
Websites or Electronic References	PubMed, Scopus, Elsevier, Google Scholar, Research Gates

Course Description (1)

121. Course Title	Prosthodontics	
122. Course Code	050201	
123. Semester/Year	Yearly	
124. Description Preparation Date	21/9/2025	
125. Available Attendance Form	Lectures and Laboratory	
126. No. of Hours (Total)	Theory: 30 hours	Practical: 120 hours
127. No. of Credits (Total)	6	
128. Course Administrator Name	Lect. Dr. Zainab Sabah Abdulhasan	
129. E-mail	zainab.s@albayan.edu.iq	
130. Course Objectives		
Knowledge	A1	1. The student must have seen with his own eyes and become familiar with dental devices & tools
	A2	2. The student gets to know different types of laboratory materials and how to use them
	A3	3. The student must have learned to use laboratory equipment
	A4	4. Learn how to evaluate the mistakes that dental technicians may make
Skills	B1	1. Teaching the student methods of laboratory and environmental cleanliness
	B2	2. Teach the student to wear lab coat, masks, and gloves while working
	B3	3. Description of tools, devices, and materials related to the subject of manufacturing removable denture
	B4	

Values	C1	Professional preparation and encouraging the student to have positive behavior in his public life	
	C2	Teamwork	
	C3	Planning and organization	
	C4	Skill in identifying dental prosthetic devices	
131. Teaching and Learning Strategies			
1.	Lectures using data show and power point	4.	Educational films
2.	Display screens	5.	Smart boards
3.	E-learning	6.	Practical application in the laboratory

132. The Structure of the Course					
Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	1	<ul style="list-style-type: none"> • Complete denture • Objective of complete denture • General consideration in complete denture construction • Complete denture component parts 	Introduction	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
2	1	<ul style="list-style-type: none"> • Anatomical landmarks • Maxillary arch anatomical landmarks • Supporting structures • Limiting structures • Relief areas 	Anatomical landmarks	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
3	1	<ul style="list-style-type: none"> • Anatomical landmarks • Mandibular arch anatomical landmark • Supporting structures • Limiting structures • Relief areas 	Anatomical landmarks	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

4	1	<ul style="list-style-type: none"> • Impression tray - Definition • Parts of the impression tray • Types of trays • Stock tray - Definition • Types of stock trays • Factors effect in selection of stock tray 	Complete Denture Impression	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
5	1	<ul style="list-style-type: none"> • 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 <p>Criteria for special tray constructio</p>	Complete Denture Impression	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
6	1	<ul style="list-style-type: none"> • 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 	Complete Denture Impression	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

		<ul style="list-style-type: none"> • Master cast Definition • Materials used for final impression • Technique used for making final impression • Common fault in impression making 			
7	1	<ul style="list-style-type: none"> • Record base - Definition • Requirements of record base • Types of materials used in construction of record base 	Record Base	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
8	1	<ul style="list-style-type: none"> • 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 	Occlusion Rims	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
9	1	<ul style="list-style-type: none"> • Temporomandibular joint (TMJ) – Definition • Ligaments • Muscles 	Anatomy And Physiology of Temporomandibular Joint	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
10	1	<ul style="list-style-type: none"> • Mandibular axes and mandibular movements • Knowledge of mandibular movements 	Anatomy And Physiology of Temporomandibular Joint	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

جامعة البتة

		Mandibular movements			
11	1	<ul style="list-style-type: none"> • Types of jaw relation • Vertical jaw relation • Rest position • Inter – occlusal distance • Importance of vertical dimension • Increased vertical dimension • Decreased vertical dimension 	Maxillomandibular relation	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
12	1	<ul style="list-style-type: none"> • Method of recording rest vertical dimension • Method of recording occlusal vertical dimension • Pre – extraction records • Methods without pre – extraction record 	Methods of Recording Vertical Relation	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
13	1	<ul style="list-style-type: none"> • Centric jaw relation • Importance of centric jaw relation • Methods of recording jaw relation • Factors that complicate centric jaw relation • Methods of recording eccentric jaw relation 	Horizontal Jaw Relation	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
14	1	<ul style="list-style-type: none"> • Dental articulator • Definition • Functions of articulator • Requirements of articulator 	Dental Articulators	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

		<ul style="list-style-type: none"> • Types of articulators 			
15	1	<ul style="list-style-type: none"> • Face -bow • Definition • Parts of face -bow • Types of face -bow • Important of the face -bow 	Face – Bow	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
16	1	<ul style="list-style-type: none"> • Mounting • Definition • Preparation of articulator • Preparation of the casts and mounting the upper cast on CL II articulator • Mounting the lower cast • Errors occurred during mounting 	Mounting	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
17	1	<ul style="list-style-type: none"> • Selection of anterior teeth • The factors of shade selection • Size selection a. Length b. Width • Form selection • Materials of anterior teeth • Difference between acrylic and porcelain teeth 	Selection of Artificial Teeth	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
18	1	<ul style="list-style-type: none"> • Shade • Occluso -gingival height • Occlusal form • Advantages of cusp form teeth • Advantages of non - cusp form teeth 	Selection of Posterior Teeth	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

19	1	<ul style="list-style-type: none"> • Guideline of artificial teeth arrangement • Arrangement of anterior teeth • Arrangement of upper anterior teeth 	<p>Arrangement of Artificial Teeth</p>	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
20	1	<ul style="list-style-type: none"> • Curve of Spee • Compensatory curves • Arrangement of lower posterior teeth • Arrangement of upper posterior teeth • Common errors in arrangement of teeth 	<p>Arrangement of Posterior Teeth</p>	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
21	1	<ul style="list-style-type: none"> • Waxing • Definition • Requirements of waxing the polish surfaces • Establishing the posterior palatal seal area • Procedure for carving of posterior palatal seal area • Advantages of posterior palatal seal • Esthetic consideration in complete denture 	<p>Waxing And Carving</p>	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
22	1	<ul style="list-style-type: none"> • Occlusion • Occlusion of complete denture • Centric occlusion • Centric relation 	<p>Complete Denture Occlusion</p>	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

جامعة البتاني

23	1	<ul style="list-style-type: none"> • Eccentric occlusion • Concepts of complete denture occlusion • Try -in appointment 	Complete Denture Occlusion	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
24	1	<ul style="list-style-type: none"> • Flasking of the denture • Flasking techniques 	Processing of the Denture (Flasking)	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
25	1	<ul style="list-style-type: none"> • 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 	Finishing and Polishing of Complete Denture	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
26	1	<ul style="list-style-type: none"> • Procedure of finishing • Grinding and cutting instruments • Polishing of complete denture • Principles of polishing • Procedures of polishing 	Occlusal Correction	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
27	1	<ul style="list-style-type: none"> • Types of material used in repair • Causes of denture fracture • Types of repairs <p>Laboratory procedure for repairing fractured denture base</p>	Repair of Complete Denture	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

جامعة البتة

28	1	<ul style="list-style-type: none"> • Replacement of broken or missing tooth • Replacement of missing or lost part • Requirement of repair 	Repair of Complete Denture	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
29	1	<ul style="list-style-type: none"> • Indication for relining or rebasing • Relining • Contraindications of relining and rebasing • The impression techniques for relining and rebasing 	Relining and Rebasing	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations
30	1	<ul style="list-style-type: none"> • Laboratory procedures for relining • Rebasing • The chair – side relining technique 	Relining and Rebasing	Theoretical lecture using Power Point	Quizzes, monthly, mid-year and final examinations

133. Course Evaluation		
1	First + second semester 25%	Theory 10% Practical 15%
2	Midyear examination 15%	Theory 15%
3	Final examination	Theory 40% Practical 20%
Total		100%

134. Learning & Teaching Resources	
Required textbooks (curricular if any)	1. Dental laboratory technology for removable prosthodontics 2. Textbook of complete denture
Main References (sources)	
Recommended Books & References (Scientific Journals, Reports ...)	Make periodic reports and read recent research in reputable journals
Websites or Electronic References	PubMed, Scopus, Elsevier, Google Scholar, Research Gates

Course Description (1)

135. Course Title	Prosthodontics	
136. Course Code	050501	
137. Semester/Year	annual	
138. Description Preparation Date	21/9/2025	
139. Available Attendance Form	Lectures and Clinics	
140. No. of Hours (Total)	Theory: 30 hours	Practical: 180 hours
141. No. of Credits (Total)	8	
142. Course Administrator Name	Assistant lecturer Yaseen Hasan	
143. E-mail	Yassen.h@albayan.edu.iq	
144. Course Objectives		
Know	Preparing dental students scientifically and practically and qualifying them to make and deal with complete dentures and flexible dentures.	
Skills	<p>A- Special skills:</p> <p>1- Gain skills for patient diagnosis</p> <p>2- Gain skills to make motivational introduction to the patient.</p> <p>B- Thinking skills</p> <p style="text-align: right;">Motivate students to solve problems.</p> <p>C- General skills:</p> <p>1- Motivate students for positive thinking.</p> <p>2- Motivate students for other science.</p>	

145. Course structure

Week	Hours	Subject name	The outcomes of learning	Learning method (hours)	Evaluation
1	1	Occlusion in Complete Denture	<ul style="list-style-type: none"> ☐ Occlusion ☐ Articulation ☐ Centric relation ☐ Centric occlusion ☐ Occlusal balance ☐ Occlusal harmony ☐ Occlusal interference ☐ Maximum intercuspation <ul style="list-style-type: none"> • Requirements of ideal complete denture occlusion • Objectives of occlusion in complete denture ☐ Requirement of complete denture occlusion ☐ Types of occlusion 	Data show presentation	Daily examinations and evaluations on treatment of patients
2	1	Occlusion in Complete Denture (Continue)	<ul style="list-style-type: none"> ☐ Balance occlusion <ul style="list-style-type: none"> • Advantages of balance occlusion ☐ Factors affecting the balanced occlusion (laws of articulation) <ul style="list-style-type: none"> • Condylar guidance • Incisal guidance • Plane of occlusion • The compensating curve • Cuspal angulations 	Data show presentation	Daily examinations and evaluations on treatment of patients

جامعة البتاني

			<ul style="list-style-type: none"> ☐ Interaction of the five factor ☐ Lingualized occlusion ☐ Monoplane or occlusion (neurocentric) ☐ Types of occlusal scheme <ul style="list-style-type: none"> • retention, stability and support of complete denture 		
3	1	Retention, Stability And Support	<ul style="list-style-type: none"> ☐ Retention ☐ Factors affect in the retention of CD <ul style="list-style-type: none"> • Mechanical factors • Muscular factor ☐ Denture surface <ul style="list-style-type: none"> • Occlusalsurface • Polished surface • Impression surface ☐ Stability <ul style="list-style-type: none"> • Various factors that affecting the stability 	Data show presentation	Daily examinations and evaluations on treatment of patients
4	1	Retention, Stability And Support (Continue)	<ul style="list-style-type: none"> ☐ Support ☐ Nature of the Supporting tissue ☐ Mandibular anatomical consideration ☐ Mandibular residual ridge ☐ Maxillary anatomic consideration ☐ Factors that influence the form and size of the supporting bone 	Data show presentation	Daily examinations and evaluations on treatment of patients
5	1	Post Insertion Problems	<ul style="list-style-type: none"> ☐ Classification of Post-Insertion Denture problems <ul style="list-style-type: none"> • Complaints about comfort of the denture • Complaints about function of the denture • Complaints about esthetics • Complaints about phonetics ☐ Complaints about comfort of the denture <ul style="list-style-type: none"> • Sore spot • Burning sensation 	Data show presentation	Daily examinations and evaluations on treatment of patients

جامعة البتاني

			<ul style="list-style-type: none"> • Redness • Pain in TMJ • Tongue and cheek biting • Swallowing & sore throat • Nausea and gagging • Clicking of teeth • Fatigue of the muscles of mastication 		
6	1	Post Insertion Problems (Continue)	<ul style="list-style-type: none"> ☐ Complaints about function of the denture <ul style="list-style-type: none"> • Loose denture (poor retention) • Unstable denture ☐ Complaints about esthetics ☐ Complaints about phonetics ☐ Oral mucosal Lesions induced by removable dentures ☐ Causes of Mucosal Irritation ☐ Types of these lesions <ul style="list-style-type: none"> • Denture stomatitis • Angular Cheilitis • Flabby ridge • Denture irritation hyperplasia • Traumatic ulcer • Burning Mouth Syndrome • Hypersensitivity 	Data show presentation	Daily examinations and evaluations on treatment of patients
7	1	Complications Of Complete Denture	<ul style="list-style-type: none"> ☐ Changes occurred required Long term recall appointments ☐ Some Clinical Problems and Solutions associated with complete denture <ul style="list-style-type: none"> • Problems of reduced salivary flow • Aetiology of reduced salivary flow • Management of dry mouth 	Data show presentation	Daily examinations and evaluations on treatment of patients

جامعة البتاني

8	1	Complications Of Complete Denture (Continue)	<ul style="list-style-type: none"> ☐ Hard and soft materials for modifying the impression surface of dentures ☐ Other complications <ul style="list-style-type: none"> • Flabby ridge • Denture breakages • Debonding of teeth • Gagging reflex (retching) • Burning mouth syndrome • Disturbance of speech 	Data show presentation	Daily examinations and evaluations on treatment of patients
9	1	Immediate Denture	<ul style="list-style-type: none"> ☐ Introduction, Definition, Indications , Contraindications, Advantages ,Disadvantages ☐ Types of immediate dentures ☐ Explanation to the Patient Concerning Immediate Dentures 	Data show presentation	Daily examinations and evaluations on treatment of patients
10	1	Immediate Denture (Continue)	<ul style="list-style-type: none"> ☐ Diagnostic steps, Impression techniques, Jaw relations record ,Try-in, Cast trimming, Waxing and flasking, Surgical splints, Setting of teeth, Processing and finishing ,Insertion ☐ Post-operative care and instructions 	Data show presentation	Daily examinations and evaluations on treatment of patients
11	1	Classification system for completely edentulous patients	<ul style="list-style-type: none"> ☐ Development of the classification system ☐ Diagnostic Criteria ☐ Integration of Diagnostic Findings ☐ Diagnostic Classification of Complete Edentulism ☐ Reasonsfor a Classification System ☐ Features govern classes differentiation from each other ☐ Guidelinesfor Use of the Complete Edentulism Classification System ☐ Bone height-mandible only ☐ Residual ridge morphology-maxilla only 	Data show presentation	Daily examinations and evaluations on treatment of patients

جامعة البتاني

12	1	Classification system for completely edentulous patients (Continue)	<input checked="" type="checkbox"/> Muscle Attachments: Mandible only <input checked="" type="checkbox"/> Maxillomandibular Relationship <input checked="" type="checkbox"/> Integration of Diagnostic Findings <input checked="" type="checkbox"/> Arrangement of artificial teeth in abnormal jaw relations <input checked="" type="checkbox"/> Arrangement of anterior teeth in maxillary protrusion <input checked="" type="checkbox"/> Arrangement of artificial teeth in abnormal jaw relations <input checked="" type="checkbox"/> Arrangement of anterior teeth in mandibular protrusion	Data show presentation	Daily examinations and evaluations on treatment of patients
13	1	Posterior palatal seal area	<input checked="" type="checkbox"/> Posterior palatal seal area <input type="checkbox"/> Anatomical and Physiological Considerations for Posterior Palatal Seal <input type="checkbox"/> Methods of location of anterior vibrating line (AVL) <input type="checkbox"/> Classification of soft palate <input type="checkbox"/> Designs of the posterior palatal seal <input type="checkbox"/> Methods or techniques of recording posterior palatal Seal area <input type="checkbox"/> Error in recording of posterior palatal seal	Data show presentation	Daily examinations and evaluations on treatment of patients
14	1	Single CD	<input checked="" type="checkbox"/> Maxillary complete denture opposing by complete mandibular dentition <input checked="" type="checkbox"/> Techniques used to determine occlusal modifications prior to denture construction <input checked="" type="checkbox"/> Upper complete denture opposing by mandibular partial denture	Data show presentation	Daily examinations and evaluations on treatment of patients
15	1	Single CD (Continue)	<input checked="" type="checkbox"/> Complications of single CD <ul style="list-style-type: none"> • Combination Syndrome and Associated Changes (Kelly's Syndrome) • Setting of teeth and occlusal concept • fracture of Denture • Wear of Teeth 	Data show presentation	Daily examinations and evaluations on treatment of patients

جامعة البتة

			<ul style="list-style-type: none"> ☐ Mandibular single denture ☐ Stepsfor Single Denture construction 		
16	1	Geriatric dentistry	<ul style="list-style-type: none"> ☐ Definitions ☐ Factorsinfluencing Aging ☐ Goal of Geriatric dentistry ☐ Objectives of Geriatric dentistry ☐ Psychological disorders of elderly patients generally seen by prosthodontist ☐ Factorsthat influence the patient's response ☐ Seven basic personality traits will be considered in the light of their influence on success in dentistry ☐ Systemic Diseases and its dental relation ☐ Geriatric dentistry related to prosthetic part 2 	Data show presentation	Daily examinations and evaluations on treatment of patients
17	1	Maxillofacial Prosthesis	<ul style="list-style-type: none"> ☐ Objectives of maxillofacial prosthesis ☐ Maxillofacial Classification ☐ Extra Oral Appliances 	Data show presentation	Daily examinations and evaluations on treatment of patients
18	1	Maxillofacial Prosthesis (Continue)	<ul style="list-style-type: none"> ☐ Intra Oral Appliances ☐ Retentive Aids in Maxillofacial Prosthodontics ☐ Steps of maxillofacial prostheses construction 	Data show presentation	Daily examinations and evaluations on treatment of patients
19	1	Residual Ridge resorption	<ul style="list-style-type: none"> ☐ Structural characteristics of alveolar bone ☐ Pathology of RRR ☐ Pathogenesis of RRR ☐ Direction of bone resorption ☐ Patterns of bone resorption ☐ Consequences of RRR ☐ Etiology of RRR 	Data show presentation	Daily examinations and evaluations on treatment of patients
20	1	Residual Ridge resorption	<ul style="list-style-type: none"> ☐ RRR is a multi-factorial, biomechanical disease <ul style="list-style-type: none"> • Metabolic factors 	Data show presentation	Daily examinations and

جامعة البتاني

		(Continue)	<ul style="list-style-type: none"> • Dietary Factors ☒ Osteoporosis and residual ridge modeling ☒ Prosthetic factors ☒ Treatment and Prevention of RRR 		evaluations on treatment of patients
21	1	Dental implantology	<ul style="list-style-type: none"> ☒ implant classification ☒ Classification of endosseous implants according to their design ☒ Classification of endosseous implants according to their material ☒ Classification of endosseous implants according to surface characteristics ☒ Classification of endosseous implants according to the insertion technique ☒ Classification of endosseous implants according to surgical stages ☒ 6.classification of endosseous implants according to the time of installation ☒ 7.classification of endosseous implants according to time of prosthetic loading ☒ Factors affecting healing ☒ Surgical technique ☒ Premature loading ☒ Surgical fit ☒ Bone quality and quantity ☒ Physical condition of the patient 	Data show presentation	Daily examinations and evaluations on treatment of patients
22	1	Dental implantology (Continue)	<ul style="list-style-type: none"> ○ Components of branemark implant system ○ Prosthetic options in implant dentistry ○ Overdenture (implant supported overdenture) ○ Basic sequence of procedures in implants treatment 	Data show presentation	Daily examinations and evaluations on treatment of patients

جامعة البتة

			<ul style="list-style-type: none"> ○ Radiographic stent ○ Implant success and survival ○ Indications of implant denture ○ Contradictions of implant denture ○ Characteristics of the osseointegrated implant ○ Basic guiding factors of osseointegration ○ Occlusion in implant-supported prostheses ○ Occlusal form and scheme 		
23	1	Esthetics in CD	<ul style="list-style-type: none"> ○ Definition ○ Factors Influencing the Appearance of Dentures ○ Steps in achieving esthetic complete denture ○ Additional clinical and technical considerations in anterior tooth selection patient preferences ○ Gingival Contour ○ Denture base factors ○ Characterization ○ Final Decision for Esthetics 	Data show presentation	Daily examinations and evaluations on treatment of patients
24	1	Characteristics Of Ideal Materials For Dental Implant	<ul style="list-style-type: none"> ☒ osseointegration ☒ Biomaterials ☒ Selection of Biomedical Materials ☒ Classification of implant materials ☒ Types of surface modification: ☒ Surface design ☒ Ceramic coating ☒ Super structure ☒ Guided Bone Regeneration 	Data show presentation	Daily examinations and evaluations on treatment of patients
25	1	Copy denture	<ul style="list-style-type: none"> ☒ Definition ☒ Aims ☒ Indication 	Data show presentation	Daily examinations and evaluations on

جامعة البتاني

			<ul style="list-style-type: none"> ☐ Technique for denture duplication ☐ Laboratory procedure for denture duplication ☐ Denture duplication technique ☐ The silicon putty ☐ The agar- Agar ☐ Modification/ Further application ☐ Problem Areas in Fabrication and Solutions 		treatment of patients
26	1	Over Denture	<ul style="list-style-type: none"> ☐ The important goals of overdenture ☐ Indications of Overdenture. ☐ Contraindications of Overdenture ☐ Advantages of overdenture prosthesis ☐ Disadvantage of overdenture ☐ Overdenture Classification ☐ Sequence of Treatment of Patient Who Need an Overdenture ☐ Impressions of the Abutment Teeth ☐ Denture Base designing ☐ Implantsupported overdenture ☐ Type of implant overdenture 	Data show presentation	Daily examinations and evaluations on treatment of patients
27	1	Over Denture (Continue)	<ul style="list-style-type: none"> ☐ Indication of Implant supported overdenture ☐ Contraindication ☐ Advantages of implant supported over denture ☐ Disadvantages of implant supported over denture 	Data show presentation	Daily examinations and evaluations on treatment of patients
28	1	Neutral zone in CD	<ul style="list-style-type: none"> ☐ Definitions ☐ Neutral Zone Concept ☐ Objectives of Neutral zone Techniques ☐ Indications of Neutral zone Techniques ☐ Recording neutral zone in final impression stage ☐ Recording neutral zone in jaw relation visit ☐ Recording neutral zone in try in stage ☐ Recording neutral zone in finished denture 	Data show presentation	Daily examinations and evaluations on treatment of patients

جامعة البتة

			☐ Limitation for the success of neutral zone impression technique		
29	1	Attachments in over denture	☐ Function of attachment ☐ Factors affecting attachment selection ☐ Retentive Mechanism	Data show presentation	Daily examinations and evaluations on treatment of patients
30	1	Attachments in over denture (Continue)	☐ Classification of Attachments ☐ Types of attachments ☐ Overdenture care	Data show presentation	Daily examinations and evaluations on treatment of patients

146. Course Evaluation		
1	First + second semester 25%	Theory 10% Practical 15%
2	Midyear examination 15%	Theory 15%
3	Final examination	Theory 40% Practical 20%
Total		100%

147. Learning & Teaching Resources	
Required textbooks, methodology if present	Zarb, Hobkirk, Eckert, Jacob et al. Prosthodontic treatment for edentulous patients: Complete dentures and implant-supported prostheses. 13th edition 2013 by Mosby, Elsevier Inc.
Main references (Resources)	Golden and Driscoll. Treating the complete denture patient. 1st edition 2020 John Wiley & Sons, Inc.
Supporting books and references recommended by scientific journals and reports	Prosthodontics Articles
Electronic References, Internet Sites	Google scholar and research gate

Course Description (1)

148. Course Title	Prosthodontics	
149. Course Code	050401	
150. Semester/Year	Annual	
151. Description Preparation Date	21/9/2025	
152. Available Attendance Form	weekly	
153. No. of Hours (Total)	Theoretical 30 hours + clinical 90 h (120 hours)	
154. No. of Credits (Total)	5	
155. Course Administrator Name		
156. E-mail		
157. Course Objectives		
Knowledge	A1	Training the student on how to examine and diagnose medical conditions.
	A2	Giving important information and treatment steps
	A3	Giving instructions and following up on the process of making partial dentures
	A4	
Skills	B1	Describe the tools used to treat patients in need of partial dentures
	B2	Practical training on the steps followed to treat patients who need a partial denture

جامعة البتة

	B3	Follow up the student while working with oral questions for each step to encourage student to make connections between theoretical lectures and the practical aspect
	B4	
Values	C1	Solving problems
	C2	Creating a spirit of scientific competition among students by asking questions related various new cases
	C3	Encouraging the student to develop themselves through continuous reading and training
	C4	

158. Teaching and Learning Strategies

1.	Lectures using data show and power point	4.	E-learning
2.	Educational films	5.	Smart boards
3.	Display screens	6.	Practical application in the laboratory

159. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	1	<ul style="list-style-type: none"> • Osteology importance • Factors that influence the form and size of the supporting structures • Supporting structures in the maxillary edentulous foundation • The limiting structures of the upper denture • Osseous structures associated with the mandibular denture • Maxillary and mandibular stress- bearing areas • Areas requiring relief in impression • The pattern of bone resorption 	<p>Anatomy and physiology as related to dental prosthesis</p> <p>(Osteology)</p>	<p>Theoretical lecture using Power Point</p>	<p>Quizzes & semester exam</p>

جامعة البتة

2	1	<ul style="list-style-type: none"> • Muscles of facial expression • Functions of muscles of facial expression • Muscles of mastication • Muscles of the soft palate • Tongue • Muscle physiology • Oral mucous membrane • Salivary gland and saliva ☒ Physiologic factors affect salivation ☒ Function of saliva 	<p>Anatomy and physiology as related to dental prosthesis</p> <p>(Myology)</p>	<p>Theoretical lecture using Power Point</p>	<p>Quizzes & semester exam</p>
3	1	<ul style="list-style-type: none"> • Patient interview • The objectives of prosthodontic treatment • Oral examination • Sequences of oral examination 	<p>Diagnosis and treatment plan for RPD</p>	<p>Theoretical lecture using Power Point</p>	<p>Quizzes & semester exam</p>
4	1	<ul style="list-style-type: none"> • Interpretation of Examination Data 	<p>To be continued Diagnosis and treatment</p>	<p>Theoretical lecture using</p>	<p>Quizzes & semester exam</p>

جامعة البتة

		<ul style="list-style-type: none"> • Root morphology • Periodontal considerations • Needs for extraction • Indication of RPD • The Recommended Infection Control Practices for Dental Treatment 		Power Point	
5	1	<ul style="list-style-type: none"> • Interpretation of Examination Data • Root morphology • Periodontal considerations • Needs for extraction • Indication of RPD • The Recommended Infection Control Practices for Dental Treatment 	Preparation of the mouth to receive an RPD	Theoretical lecture using Power Point	Quizzes & semester exam
6	1	<ul style="list-style-type: none"> ☐ Maximum benefit from using tissue conditioning material 	Preparation of the mouth to receive an RPD (Continued).	Theoretical lecture using Power Point	Quizzes & semester exam

جامعة البتة

		<ul style="list-style-type: none"> ☐ Periodontal preparation ☐ Abutment teeth preparation ☐ The sequences of abutment tooth preparation on sound enamel or existing restoration are as follow ☐ The procedure of rest seat preparation on sounds enamel surface 			
7	1	<ul style="list-style-type: none"> • Impression material <ul style="list-style-type: none"> ☐ Differences between reversible and irreversible hydrocolloid ☐ Important Precautions to Be Observed in the Handling of Hydrocolloid Impressions. • Steps in impression making 	Classification of impression technique	Theoretical lecture using Power Point	Quizzes & semester exam

جامعة البتاني

		<p>☐ The step-by-step procedure and important points to observe in the making of a hydrocolloid impression</p>			
8	1	<p>☐ Step-by-Step Procedure for Making a Stone Cast from a Hydrocolloid Impression</p> <ul style="list-style-type: none"> • Possible Causes of an Inaccurate and/or a Weak Cast of a Dental Arch • Technique used for individual impression trays • McLean's physiologic impression • The Recommended Infection Control Practices for Dental Treatment 	Classification of impression technique (To be continue)	Theoretical lecture using Power Point	Quizzes & semester exam
9	1	<ul style="list-style-type: none"> • The main problems which might occur in tooth-tissue support 	Designing Support	Theoretical lecture using Power Point	Quizzes & semester exam

		<ul style="list-style-type: none"> • Factors influencing the support of a distal extension denture base • Anatomic form impression • Methods for obtaining functional support for the distal extension base 			
10	1	<ul style="list-style-type: none"> • Initial inspection • Methods and procedures for fitting the framework • Laboratory inspection • Clinical procedures • Occlusal evaluation • Clinical procedures after fitting the framework 	Fitting the removable partial denture framework	Theoretical lecture using Power Point	Quizzes & semester exam
11	1	<ul style="list-style-type: none"> • The establishment of satisfactory occlusion for RPD • Desirable occlusal contact relationships for various RPD • Occlusion in RPD's (Requirements) 	Occlusal Relationship for Removable Partial Denture	Theoretical lecture using Power Point	Quizzes & semester exam

12	1	<ul style="list-style-type: none"> •Methods for establishing occlusal relationship • Interocclusal records • Excellent occlusal recording materials 	Jaw relation in RPD	Theoretical lecture using Power Point	Quizzes & semester exam
13	1	<ul style="list-style-type: none"> • The trial dentures on the mounted casts • The trial dentures in patient s mouth • Esthetic try-in • Denture base consideration • The patient evaluation • Phonetics evaluation • Verification of Jaw Relation • Choice of tooth materials 	Trial RPD	Theoretical lecture using Power Point	Quizzes & semester exam
14	1	<ul style="list-style-type: none"> • Final inspection of the prosthesis before insertion • Verifying the removable partial denture (RPD) framework fit 	Initial placement and adjustment of RPD	Theoretical lecture using Power Point	Quizzes & semester exam

جامعة البتة

		<ul style="list-style-type: none"> • Assessment of acrylic resin denture base adaptation • Assessment of peripheral extension of the denture base • Evaluating occlusion • Adjusting retentive clasp assembly, if needed • Providing instructions for the patient in the use and care of the prosthesis 			
15	1	<ul style="list-style-type: none"> • Surgical Guides (Templates) • Commonly Used Pre-prosthetic Procedures • Ridge Alveoloplasty with Extraction • Intra-septal Alveoloplasty 	Pre- prosthetic surgery	Theoretical lecture using Power Point	Quizzes & semester exam

جامعة البتاني

		<ul style="list-style-type: none"> • Edentulous Ridge Alveoplasty Buccal Exostosis • Maxillary Tuberosity Reductions ☐ Mandibular Tori ☐ Maxillary Tori ☐ Mylohyoid Ridge Reduction ☐ Genial Tubercle Reduction 			
16	1	<ul style="list-style-type: none"> • Soft Tissue Procedures ☐ Maxillary Soft Tissue Tuberosity Reduction ☐ Maxillary Labial Frenectomy ☐ Excision of Redundant/Hyper mobile Tissue Overlying the Tuberosities ☐ Excision of inflammatory Fibrous Hyperplasia (Epulis Fissuratum) 	Pre-prosthetic Surgical Considerations (Continued).	Theoretical lecture using Power Point	Quizzes & semester exam

جامعة البتاني

		<ul style="list-style-type: none"> ☐ Inflammatory Papillary Hyperplasia of the Palate 			
17	1	<ul style="list-style-type: none"> • Mental Attitude (Psychological factor) ☐ House classification ☐ Social information. ☐ Systemic (medical) status <p>Week 18: To be continued diagnosis and treatment</p>	Diagnosis and treatment plan CD	Theoretical lecture using Power Point	Quizzes & semester exam
18	1	<ul style="list-style-type: none"> • Past dental history ☐ Local factors ☐ Intraoral examination (mucosa, ridge, hard palate, soft palate, tongue and post mylohyoid space) ☐ Radiographic examination ☐ Diagnostic cast-advantages • Treatment planning • Prognosis 	To be continued diagnosis and treatment plan for CD	Theoretical lecture using Power Point	Quizzes & semester exam

		<ul style="list-style-type: none"> • Patient education 			
19	1	<ul style="list-style-type: none"> • Definition • Objective of complete denture impression • Biologic considerations for mandibular impressions • Theories of impression techniques • Primary impression • Common errors in impression makings • Secondary (final) impression ☒ Materials used for final impression ☒ Steps for making final impression ☒ Correction of special tray ☒ Making the final impression 	Impression in CD	Theoretical lecture using Power Point	Quizzes & semester exam

		☐ Making final impression utilizing digital intraoral scanner			
20	1	<ul style="list-style-type: none"> • Anatomy of TMJ • How does the TMJ move during function? • The muscles and ligaments of TMJ • Mandibular axis • Mandibular movement. (Basic and functional movement) • Border movement (sagittal, horizontal and coronal) • Jaw registration of condylar movements • Articulator's classifications • Face-bow transfer 	TMJ and mandibular movement.	Theoretical lecture using Power Point	Quizzes & semester exam
21	1	<ul style="list-style-type: none"> • Digital partial dentures and rapid prototyping procedure 	Digital RPD	Theoretical lecture using Power Point	Quizzes & semester exam

		<ul style="list-style-type: none"> • Difference between conventional and digital RPD Procedure • Advantages highlight the benefits of the digital over the conventional method 			
22	1	<ul style="list-style-type: none"> • Definition • Importance of Vertical Jaw Relation • Factors Affecting Vertical Jaw Relation • Effects of increased vertical relation • Effects of decreased vertical relation • Vertical Dimension at Rest • Facial measurements after swallowing and relaxing • Vertical Dimension at Occlusion • Methods of Measuring 	Vertical jaw relation	Theoretical lecture using Power Point	Quizzes & semester exam

جامعة البتة

		<ul style="list-style-type: none"> ☐ Mechanical methods ☐ Physiological methods 			
23	1	<ul style="list-style-type: none"> • Centric relation ☐ Methods must be used to position the jaw in centric relation 	Horizontal jaw relation (Centric occlusion)	Theoretical lecture using Power Point	Quizzes & semester exam
24	1	<ul style="list-style-type: none"> • Definition • Importance of trial denture • Objective of trial denture • Extra oral examination of trial denture • Trial denture assessment in the mouth • Incorporation of posterior palatal seal • Patient role in trial denture • Technician role in trial denture 	Try in stage in CD	Theoretical lecture using Power Point	Quizzes & semester exam
25	1	<ul style="list-style-type: none"> • Complete denture insertion procedure 	Insertion of CD	Theoretical lecture using Power Point	Quizzes & semester exam

جامعة البتة

		<ul style="list-style-type: none"> • Denture base adjustment • Adjustment of denture border • Dentist evaluation • Patient evaluation • Friend's evaluation 			
26	1	<ul style="list-style-type: none"> • Errors in occlusion • Intra oral occlusal correction • Extra oral selective grinding (centric and eccentric correction) • Appearance with new denture • Mastication with new denture • Speaking with new denture • Oral hygiene with dentures 	Adjustments of CD	Theoretical lecture using Power Point	Quizzes & semester exam
27	1	<ul style="list-style-type: none"> • Freeway space problem • Pain in the sulcus 	Post insertion complications in CD	Theoretical lecture using Power Point	Quizzes & semester exam


جامعة البتة

		<ul style="list-style-type: none"> • Pain on crest of the alveolar ridge • Looseness of one or both dentures • Speech problems • Chewing problems 			
28	1	<ul style="list-style-type: none"> • Factors influencing the decision to reline an existing denture • Impression Technique for relining and rebasing 	relining and rebasing of CD	Theoretical lecture using Power Point	Quizzes & semester exam
29	1	<ul style="list-style-type: none"> • Repair of fractured denture teeth • Complex fracture repairs 	Repair of fractured RPD	Theoretical lecture using Power Point	Quizzes & semester exam
30	1	<ul style="list-style-type: none"> • Denture base material • Clasp material • Types of clasps 	Esthetic denture materials	Theoretical lecture using Power Point	Quizzes & semester exam

160. Course Evaluation	
Distribution of the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily exams, oral, monthly, written and records.	
161. Learning & Teaching Resources	
Required textbooks (curricular if any)	<ul style="list-style-type: none"> ➤ Zarb, Hobkirk, Eckert, Jacob et al. Prosthodontic treatment for edentulous patients ➤ Complete dentures and implant-supported Mosby, prostheses. 13th edition 2013 Elsevier Inc. ➤ McCracken's removable partial prosthodontics, 13th edition 2016 by Elsevier, Inc
Main References (sources)	
Recommended Books & References (Scientific Journals, Reports ...)	
Websites or Electronic References	

Course Description (1)

162. Course Title	Orthodontics	
163. Course Code	050405	
164. Semester/Year	annual	
165. Description Preparation Date	21/9/2025	
166. Available Attendance Form	Lectures and laboratory work	
167. No. of Hours (Total)	30 hr. theoretical and 120 hr. practical	
168. No. of Credits (Total)	6	
169. Course Administrator Name	Assistant lecturer Ghassan Bahir Abdulkareem	
170. E-mail	Ghassan.bahir@albayan.edu.iq	
171. Course Objectives This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the program specification		
11 · Learning Outcomes, Teaching, Learning and Assessment Methods		
A. Knowledge	A1.	Acquire the knowledge about the causes of malocclusion

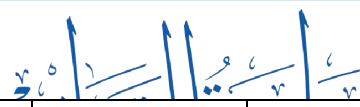


	A2.	Knowing the methods of diagnosis and treatment of these problems
	A3.	Knowing different types of orthodontic appliances
B. Subject-specific skills	B1.	Learning how to construct a removable orthodontic appliance
	B2.	Learning how to adjust and activate the appliance
C. Thinking Skills	C1.	Solutions the problems of malocclusion
	C2.	Learning how to design a removable appliance
D. General & Transferable Skills	D1.	Prepare the students practically to construct a removable appliance
	D2.	Prepare the students practically how to design a removable appliance.
	D3.	Manage the removable orthodontic appliance

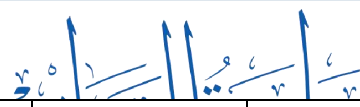
12. Teaching and Learning Strategies			
1.	Lectures using data show and power point	4.	Educational films
2.	Display screens	5.	Smart boards
3.	E-learning	6.	Practical application in the laboratory

13. Course Structure (Theoretical)

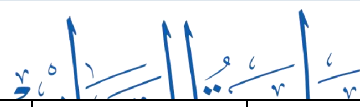
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Methods	Assessment Method
1	1	<ul style="list-style-type: none"> - Definition of orthodontics - Definition of occlusion, normal, ideal and malocclusion 	Introduction	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
2	1	<ul style="list-style-type: none"> - Six keys of normal occlusion - Aims of orthodontic treatment 	Introduction	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
3	1	<ul style="list-style-type: none"> - Important orthodontic definitions - Classification of malocclusion 	Introduction	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
4	1	<ul style="list-style-type: none"> - Definitions of growth, development and maturity - Stages of development (ovum till birth) 	Growth and development	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams



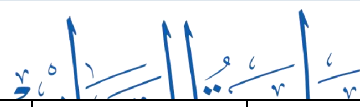
5	1	<ul style="list-style-type: none">- Theories of bone growth- Definitions of growth site, growth center, displacement, and drift	Growth and development	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
6	1	<ul style="list-style-type: none">- Growth curve and maximum growth spurt- Prenatal and postnatal growth and development of hard tissues	Growth and development	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
7	1	<ul style="list-style-type: none">- Prenatal and postnatal growth and development of soft tissues- Developmental anomalies	Growth and development	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
8	1	<ul style="list-style-type: none">- Jaw rotation- Compensation and adaptation	Growth and development	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
9	1	a-Stages of tooth development: (Formation, calcification and root completion)	Deciduous and permanent dentition	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams



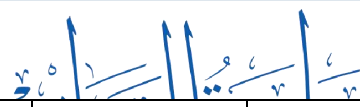
10	1	b-Tooth eruption (stages and theories), Sequences and timing of eruption	Deciduous and permanent dentition	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
11	1	a. new born oral cavity. b. Deciduous dentition stage - Dental changes till 6 years of age.	Development of occlusion	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
12	1	c. Early mixed dentition stage - eruption of first molars and incisors. d. Late mixed dentition stage - eruption of canines and premolars e. Permanent dentition - eruption second and third molars.	Development of occlusion	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
13	1	-Genetic and inherited etiological factors of malocclusion	Etiology of malocclusion:	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
14	1	-Classification of etiological factors	Etiology of malocclusion:	Theoretical lecture using power	Quizzes, semester, mid-year



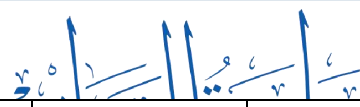
		a. General factors i. Skeletal factors		point presentation	and final year exams
15	1	ii. Soft tissue factors	Etiology of malocclusion:	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
16	1	iii. dental factors	Etiology of malocclusion:	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
17	1	b. Local factors (definitions without treatment)	Etiology of malocclusion:	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
18	1	a. Tissue changes associated with tooth movement: i. Histology of periodontium ii. Theories of tooth movement b. Accelerated tooth movement.	Tooth movement	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams



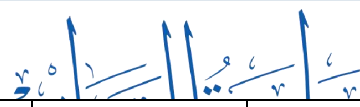
19	1	<p>c. Biomechanics</p> <p>i. Force (application, type, magnitude, duration and direction)</p> <p>ii. Center of resistance and rotation, moment of force and moment of couple.</p> <p>iii. Types of tooth movement</p> <p>iv. Rate of tooth movement and factors affecting it.</p>	Tooth movement	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
20	1	d. iatrogenic effect of orthodontic treatment (pain, mobility, pulp effect, root resorption, white spot lesions).	Tooth movement	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
21	1	Biomechanics	Biomechanics	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
22	1	(definition, indications, types)	Anchorage	Theoretical lecture using power point	Quizzes, semester, mid-year and final year exams



				presentatio n	
23	1	<p>a. Overview:</p> <ul style="list-style-type: none"> 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, lingual orthodontics) 	Orthodontic appliances	Theoretical lecture using power point presentatio n	Quizzes, semester, mid-year and final year exams
24	1	<p>b. Removable Orthodontic Appliance:</p> <ul style="list-style-type: none"> i. Properties of various components (SS wire, acrylic) ii. Components: <ul style="list-style-type: none"> 1) active components (springs, screws and elastics) 2) retentive components (clasps) 3) acrylic base plate and bite planes 4) anchorage 	Orthodontic appliances	Theoretical lecture using power point presentatio n	Quizzes, semester, mid-year and final year exams

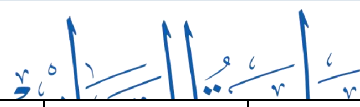


25	1	iii. Design of a removable orthodontic appliance iv. Construction of a removable orthodontic appliance v. Soldering and welding vi. Post-insertion instructions and guidelines	Orthodontic appliances	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
26	1	c. Fixed orthodontic appliance: Types, components, advantages, limitation, biomechanics, banding vs. bonding	Orthodontic appliances	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
27	1	d. Orthopedic and Myofunctional appliance: Types, components, advantages, limitation, mode of action	Orthodontic appliances	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
28	1	<u>continue</u> Orthopedic and Myofunctional appliance: Types, components, advantages, limitation, mode of action	Orthodontic appliances	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
29	1	f. Retention and retainers	Orthodontic appliances	Theoretical lecture using power	Quizzes, semester, mid-year



		-Retention (definition, reason, time) -Retainers (Hawley, clear overlay, positioners, permanent fixation, precision)		point presentation	and final year exams
30	1	<i>Continue</i> retention and retainers	Orthodontic appliances	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams

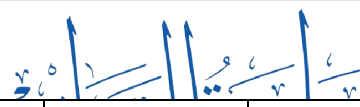
14. Course Structure (Practical)					
Week	Hours	ILOs	Unit/Module or Topic Title	Teaching Methods	Assessment Method
1	4	Seminar 1 (Introduction to orthodontics, Orthodontic Pliers)	Orthodontics	Practical demonstration	Practical evaluation, Quizzes, semester, mid-year and final year exams
2	4	Seminar 2 (Types of orthodontic appliances)	Orthodontics	Practical demonstration	Practical evaluation, Quizzes



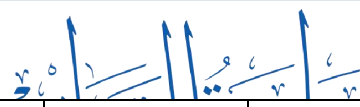
		(Introduction to removable appliance)			
3	4	Seminar 4 (Stainless steel alloy properties)	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
4	4	Seminar 5 (Principles of wire bending)	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
5	4	Wire bending training	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
6	4	<i>Continue</i> wire bending training	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
7	4	Z-Spring	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
8	4	Recurved Z-Spring	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
9	4	Review	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
10	4	Simple Finger Spring	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
11	4	Modified Finger Spring	Orthodontics	Practical demonstration	Practical evaluation, Quizzes



12	4	Review	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
13	4	Buccal Canine Retractor	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
14	4	Modified Buccal Canine Retractor	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
15	4	Review	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
16	4	Quarterly Exam	Orthodontics	Practical demonstration	Practical evaluation
17	4	Adams' Clasps on Upper Right 1 st Molar	Orthodontics	Practical demonstration	Practical evaluation, Quizzes, semester,
18	4	Adams' Clasps on Upper Left 1 st Molar	Orthodontics	Practical demonstration	Practical evaluation, Quizzes,
19	4	Adams' Clasps on Upper Right 1 st Premolar	Orthodontics	Practical demonstration	Practical evaluation, 20 Quizzes,
20	4	Double Adams' Clasps on Upper Right 2 nd premolar & 1 st molar	Orthodontics	Practical demonstration	Practical evaluation, Quizzes, semester, mid



21	4	Review	Orthodontics	Practical demonstration	Practical evaluation, Quizzes,
22	4	Fitted Labial Arch	Orthodontics	Practical demonstration	Practical evaluation, Quizzes, semester, mid
23	4	Hawley Arch	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
24	4	Review	Orthodontics	Practical demonstration	Practical evaluation, Quizzes,
25	4	Robert's Retractor	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
26	4	Acrylic baseplate	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
27	4	Soldering and Welding	Orthodontics	Practical demonstration	Practical evaluation, Quizzes,
28	4	Review	Orthodontics	Practical demonstration	Practical evaluation, Quizzes
29	4	Quarterly Exam	Orthodontics	Practical demonstration	Practical evaluation,



30	4	Final Exam	Orthodontics	Practical demonstration	Practical evaluation,
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Every laboratory work includes the following:

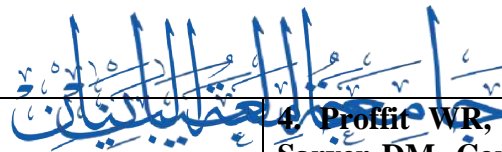
Presentation of figures.

Demonstration done by teaching staff.

Wire bending done by the student.

Assessment of the figure.

15. Assessment Curriculum	
First semester + second semester	25%
Mid-year examination Theoretical	15%
Final exam Theoretical	60%
Total	100%
16. Learning and teaching resources	
Required textbooks, methodology if present	1. Singh G. Textbook of orthodontics. 3rd ed. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd.; 2015.
	2. Littlewood SJ, Mitchell L. An introduction to orthodontics. 5th ed. Oxford: Oxford university press; 2019.
	3. Nakajima E. Manual of wire bending technique. 1st ed. Chicago: Quintessence Publishing Co., Inc; 2010.



	4. Proffit WR, Fields Jr HW, Larson BE, Sarver DM. Contemporary orthodontics. 6th ed. Philadelphia: Elsevier; 2019.
	5. Graber LW, Vanarsdall RL, Vig KWL, Huang GJ. Orthodontics: current principles and techniques. 6th ed. St. Louis: Elsevier, Inc.; 2017.
Special requirements (include for example workshops, periodicals, IT software, websites)	The students are guided to perform seminars and reports and invite them to the continuous education programs
Electronic References, Internet Sites	Google Scholar, research gate

جامعة البيان

Department of basic sciences

Course

Course Description (1)

1. Course Title	Biology	
2. Course Code	050102	
3. Semester/Year	Year	
4. Description Preparation Date	2025-9-22	
5. Available Attendance Form	Lectures+ Labs	
6. No. of Hours (Total)	60 hours Lectures 60 hours labs	
7. No. of Credits (Total)	6	
8. Course Administrator Name	Hamsa Faisal najim	
9. E-mail	hamsa.faisal@albayan.edu.iq	
10. Course Objectives		
Knowledge	A1	The first stage aims to provide all that the student needs of solid theoretical curricula and practical applications
	A2	outputs to be compatible with the needs of the labor market
	A3	keep pace with scientific and technological developments in the field of laboratory techniques and medical devices that our contemporary world is witnessing
	A4	the aim of bringing the graduate to the required level to contribute to advancement and playing his role in achieving comprehensive renaissance in all areas of work.
Skills	B1	Applications contribute to medical Biology in all aspects of our daily lives
	B2	including the medical field, diagnostic devices.
	B3	Study the structure, function and formation of this field in human body system
	B4	The diseases related to human body systems including their treatments
	C1	the development of modern devices,



C2	the study of Biological devices and its effect on the human body and the physi functions of the human body's organs.
C3	
C4	
10. Teaching and Learning Strategies	

جامعة البتة

1.	<p>A- Knowledge and understanding 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 deduction and deduction method... and it may be all methods at the same time, in addition to the use of laboratories to increase the student's understanding and awareness.</p>	4.	<p>General and transferable skills (other skills related to employability and personal development). 1- Professional preparation and encouraging the student to have positive behavior in his public life 2- Scientific preparation and urging the student to communicate in other fields of science 3- Cultural preparation and refining the student's personality. Utilizing the acquired skills so that the student becomes a dentist capable of understanding the physical functions of the organs of the human body.</p>
2.	<p>Subject-specific skills 1- - Lectures and discussion to consolidate ideas 2- Experiments, laboratories, and preparing bottles Performing seminars to consolidate information and strengthen the student's educational and intellectual potential.</p>	5.	<p>Teaching and learning methods 1- Lectures using data show and power point 1- Educational films 2- Display screens 3- E-learning 4- Laboratories and preparing reports 5- Homework</p>
3.	<p>C- Thinking skills 1- Motivating the student through the method of expression, thinking, and response 2- Urging the student to solve problems and possess distinctive thinking 3- The lecture relies on student interaction, brainstorming, and intellectual questions 4- Giving the student the necessary space to express their scientific opinions 5- Laboratory reports Homeworks</p>	6.	<p>Evaluation methods 1- Daily and quarterly exams for theoretical subjects 2- Seminars 3- Daily evaluation 4- Preparing and submitting laboratory reports 5- Mid-year exam 6- A final practical and theoretical exam</p>

11. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	2	Introduction to Medical and oral Biology	Introduction to Medical and oral Biology	Data Show and white board	Oral Quiz
2	2	Prokaryotes and Eukaryotes	Prokaryotes and Eukaryotes	Data Show and white board	Oral Quiz
3	2	General and oral Immunity	General and oral Immunity	Data Show and white board	Oral Quiz
4	2	Bacteria and oral disease	Bacteria and oral disease	Data Show and white board	Oral Quiz
5	2	Genetics and its role oral disease	Genetics and its role oral disease	Data Show and white board	Oral Quiz
6	2	Simple Epithelial tissue (Tongue)	Simple Epithelial tissue (Tongue)	Data Show and white board	Oral Quiz
7	2	Stratified epithelial tissue	Stratified epithelial tissue	Data Show and white board	Oral Quiz
8	2	Glandular epithelial tissue (salivary gland)	Glandular epithelial tissue (salivary gland)	Data Show and white board	Oral Quiz
9	2	General connective tissue (blood)	General connective tissue (blood)	Data Show and white board	Oral Quiz
10	2	Muscular tissue	Muscular tissue	Data Show and white board	Oral Quiz
11	2	Nerve tissue	Nerve tissue	Data Show and white board	Oral Quiz
12	2	Cell structure (oral mucus membrane)	Cell structure (oral mucus membrane)	Data Show and white board	Oral Quiz
13	2	Plasma membrane structure	Plasma membrane structure	Data Show and white board	Oral Quiz
14	2	Passage of Materials across	Passage of Materials across	Data Show and white board	Oral Quiz

جامعة المغيرة

		Cell Membrane	Cell Membrane		
15	2	Cell cycle	Cell cycle	Data Show and white board	Oral Quiz
16	2	Mitosis and Meiosis	Mitosis and Meiosis	Data Show and white board	Oral Quiz
17	2	Cell energy	Cell energy	Data Show and white board	Oral Quiz
18	2	Nucleic acid, DNA and RNA	Nucleic acid, DNA and RNA	Data Show and white board	Oral Quiz
19	2	Introduction to parasitology	Introduction to parasitology	Data Show and white board	Oral Quiz
20	2	Types of parasites and host	Types of parasites and host	Data Show and white board	Oral Quiz
21	2	General and oral protozoa	General and oral protozoa	Data Show and white board	Oral Quiz
22	2	Human <i>amoebas</i> , <i>E.histolytica</i> , <i>E.coli</i> , <i>E.gingivali</i>	Human <i>amoebas</i> , <i>E. histolytica</i> , <i>E.coli</i> , <i>E.gingivali</i>	Data Show and white board	Oral Quiz
23	2	Flagellates, <i>Giardia lamblia</i> , <i>Trichomonas tenax</i> , <i>T.hominas</i> , <i>T.vaginalis</i>	Flagellates, <i>Giardia lamblia</i> , <i>Trichomonas tenax</i> , <i>T.hominas</i> , <i>T.vaginalis</i>	Data Show and white board	Oral Quiz
24	2	<i>Leishmania</i> , cutaneous and vesira	<i>Leishmania</i> , cutaneous and vesiral	Data Show and white board	Oral Quiz
25	2	Sporozoa, <i>Plasmodium spp.</i>	Sporozoa, <i>Plasmodium spp.</i>	Data Show and white board	Oral Quiz
26	2	<i>Toxoplasma gondii</i>	<i>Toxoplasma gondii</i>	Data Show and white board	Oral Quiz
27	2	Nemathelminthes, <i>Ascaris lumbricoides</i>	Nemathelminthes, <i>Ascaris lumbricoides</i>	Data Show and white board	Oral Quiz
28	2	<i>Ancylostoma duodenale</i> , <i>Entrobilus vermicularis</i>	<i>Ancylostoma duodenale</i> , <i>Entrobilus vermicularis</i>	Data Show and white board	Oral Quiz
29	2	Platyhelminthes, <i>Fasciola hepatic</i>	Platyhelminthes, <i>Fasciola hepatica</i>	Data Show and white board	Oral Quiz
30	2	<i>Schistosoma spp.</i>	<i>Schistosoma spp.</i>	Data Show and white board	Oral Quiz

12. Course Evaluation

Distribution of the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily exams, oral, monthly, written and records.

13. Learning & Teaching Resources

Required textbooks (curricular if any)	Principles of Biology – An Introduction to Biological Concepts has been modified from several OpenStax textbooks including Concepts of Biology, Biology 2E, Microbiology and Anatomy and Physiology. These textbooks have been cited and attributed below
Main References (sources)	
Recommended Books & References (Scientific Journals, Reports ...)	
Websites or Electronic References	https://dept.clillinois.edu/biodv/PrinciplesOfBiology.pdf

Course Description (1)

1. Course Title		General Medicine
2. Course Code		050407
3. Semester/Year		Year
4. Description Preparation Date		2025/9/22
5. Available Attendance Form		Theoretical and practical lectures
6. No. of Hours (Total)		30 hours theory
7. No. of Credits (Total)		1
8. Course Administrator Name		Dr.Mays maher mustafa
9. E-mail		Mays.m@albayan.edu.iq
10. Course Objectives		
<p>1- Provide the students with the basic sciences of the general medicine.</p> <p>2- Enable the students to understand the most important diseases like Gastroenterology, Cardiology, Oncology, Hematology, Endocrinology, Dermatology, Neurology, Rheumatology and Pulmonology.</p> <p>3- Recognize the students with the etiology and clinical features of important medical diseases.</p> <p>4- Provide the students with the Practice in basic theoretical skills, such as history taking and recognition of diseases in general and specifically medical emergencies which might be encountered in the dental clinic.</p> <p>5- Train the student to improve their attitudes that foster patient centered care and support the first standards of the medical profession.</p>		
Knowledge	A1	Demonstrate the anatomical, biological, histological, and physiological principles related to general health, oral health, disease processes, immunity and the dental material sciences, their applications and manipulations and the concepts related to all branches of dentistry.
	A2	Determine the principles of health promotion, disease prevention, the current infection control procedures and their scientific basis and show the knowledge and understanding of the organization and provision of health care in the community and in hospital.
	A3	Recognize the etiology, clinical features, diagnostic approaches, complications, treatment, prevention, and management of common medical diseases.
	A4	
Skills	B1	Diagnose and analyze the clinical problems of the oral cavity and paraoral structures and create a proper treatment plan.
	B2	Collect and integrate information from number of resources to gain a coherent understanding of theory and practice and interpret the evidence to understand

		practice of clinical dentistry.	
	B3	Integrate the results of history, physical examination, laboratory tests, imag investigations and provide a plan for the management and discharge of patie with common medical disorders.	
	B4		
Values	C1	Practice the practical and clinical skills in all branches of dentistry, working saf in clinical environment that reflect skilled competent, safe, evaluative clini dentistry practice.	
	C2	Manage the patient effectively and safely with continual analysis and evaluation outcomes and appropriate modification of intervention.	
	C3	Manage the patient correctly during dental procedure and make consultation w specialists when required with continual analysis and evaluation of patient hea status.	
	C4		
11. Teaching and Learning Strategies			
1.	Lectures	4.	Dialogue and discussion
2.	Problem based learning	5.	Brain storming
3.	Self-learning	6.	

12. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	1	Introduction, pathogenesis, etiolo	Diabetes Mellitus 1	Data show and white board	Homework and quiz
2	1	clinical management. manifestatio	Diabetes Mellitus 2	Data show and white board	Homework and quiz
3	1	Introduction, pathogenesis, etiolo	White Blood Cells Disorders 1	Data show and white board	Homework and quiz
4	1	clinical management. manifestatio	White Blood Cells Disorders 2	Data show and white board	Homework and quiz
5	1	Introduction, pathogenesis, etiolo	Hemostasis and Bleeding Disorders 1,	Data show and white Board	Homework and quiz
6	1	clinical management. manifestatio	Hemostasis and Bleeding Disorders 2	Data show and white Board	Homework and quiz
7	1	Introduction, pathogenesis, etiolo	Adrenal Gland Disorders 1	Data show and white Board	Homework and quiz
8	1	clinical management. manifestatio	Adrenal Gland Disorders 2	Data show and white Board	Homework and quiz
9	1	Introduction, etiology,	Gastrointestinal Diseases	Data show and white Board	Homework and quiz
10	1	pathogenesis,	Peptic Ulcer Disease 1	Data show and white Board	Homework and quiz
11	1	clinical management. manifestatio	Peptic Ulcer Disease 2	Data show and white Board	Homework and quiz
12	1	Introduction,	Intestine	Data show and white Board	Homework and quiz
13	1	etiology, pathogenesis,	Inflammatory Bowel Disease 1	Data show and white Board	Homework and quiz
14	1	clinical management. manifestatio	Inflammatory Bowel Disease 2	Data show and white Board	Homework and quiz

جامعة الكويت

		Management		Board		
15	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Pseudomembranous Colitis	Data show and w board	Homework and quiz
16	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Hypertension	Data show and w board	Homework and quiz
17	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Infective Endocarditis	Data show and w board	Homework and quiz
18	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Ischemic Heart Disease	Data show and w board	Homework and quiz
19	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Heart Failure	Data show and w board	Homework and quiz
20	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Cardiac Arrhythmias	Data show and w board	Homework and quiz
21	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Thyroid Diseases	Data show and w board	Homework and quiz
22	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Kidney Diseases	Data show and w board	Homework and quiz
23	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Immunologic Diseases	Data show and w board	Homework and quiz
24	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Liver Diseases	Data show and w board	Homework and quiz
25	1	Introduction, pathogenesis,	etiolo clini	Pulmonary Diseases	Data show and w Board	Homework and quiz

جامعة الكويت

		manifestations, management				
26	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Red Blood Cells Disorders	Data show and w board	Homework and quiz
27	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Drug and Alcohol Abuse	Data show and w board	Homework and quiz
28	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Psychiatric Disorders	Data show and w board	Homework and quiz
29	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Anxiety and Eating Disorders	Data show and w board	Homework and quiz
30	1	Introduction, pathogenesis, manifestations, management	etiolo clini	Neurologic Disorders	Data show and w board	Homework and quiz
		Assessment Curriculum				

13. Course Evaluation

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

14. Learning & Teaching Resources

Required textbooks (curricular if any)	Davidsons principles and practice of medicine
Main References (sources)	Cecil's essentials of medicine
Recommended Books & References (Scientific Journals, Reports ...)	
Websites or Electronic References	

Course Description (1)

1. Course Title	Biochemistry	
2. Course Code	050207	
3. Semester/Year	Year	
4. Description Preparation Date	2025/9/22	
5. Available Attendance Form	Lectures and laboratories	
6. No. of Hours (Total)	60 hours lectures 60 hours labs	
7. No. of Credits (Total)	6	
8. Course Administrator Name	Aya mohammed saadoun	
9. E-mail	aya.m@albayan.edu.iq	
10. Course Objectives		
Knowledge	A1	Preparing dental students to be fully aware of the importance of biochemistry and connection with dentistry.
	A2	studying the percentage of essential minerals in visceral and structural structures,
	A3	And studying some chemical reactions within the body of a living organism in or for its outputs to fit the needs of the labor market and keep pace with scientific a technological developments in the field of laboratory techniques.
	A4	And medical devices that our contemporary world is witnessing, with the aim bringing the graduate to the required level to contribute to advancing the wheel development and playing his role in achieving comprehensive renaissance in all fie of work.
Skills	B1	Knowledge and understanding
	B2	Gaining experience, information and developing skills
	B3	Increasing students' knowledge of biochemical sciences and their connection w dentistry
	B4	Learn how to assess the risks of patients contracting chronic diseases or infections and study them while conducting the necessary laboratory analyzes
Values	C1	Daily and quarterly exams for theoretical subjects
	C2	Mid-year exam
	C3	final exam
	C4	Throwing seminars
11. Teaching and Learning Strategies		

جامعة الجليلية للبيات

1.	Lectures using data show and power point	4.	E-learning Educational laboratories
2.	Educational films	5.	Smart boards
3.	Display screens	6.	Homework assignments and preparing seminars

12. The Structure of the Course					
Week	Hours	Learning method	Evaluation Method	Topic/Subject Name	RLOs
1	2				
2	2	Quiz	Data show and white board	Enzymes:	Enzymes: Definition, Terminology, and Classification
3	2	Quiz	Data show and white board	Mechanism of of enzym	Mechanism of enzyme action Role of enzyme Enzyme catalyzed reaction
4	2	Quiz	Data show and white board	Clinical significance of enzyme assays	advance enzyme assay enzyme analysis for metabolic disorder methods used for predetermined mutation
5	2	Quiz	Data show and white board	Vitamins,	Vitamins, definition, classification Function
6	2	Quiz	Data show and white board	Digestion and absorpction of carbohydrates, lipids and proteins	Pyruvate metabolisim disorder Pancreatic enzyme replacement thereby
7	2	Quiz	Data show and white board	Chemistry of carbohydrates	Definition, Terminology, and Classification
8	2	Quiz	Data show and white board	Chemistry of carbohydrates	Functions Structure of glucose Ketose aldose isomer

جامعة النيلين

9	2	Quiz	Data show and white board	Metabolism of Carbohydrates :part 2	Metabolism definition Digestion and absorpti Krebs cycle
10	2	Quiz	Data show and white board	Carbohydrates metabolism regulation	Glycogenesis (glycogen synthesis) Regulation of blood glucose
11	2	Quiz	Data show and white board	Chemistry of Proteins and amino acids	definition Structure classification
12	2	Quiz	Data show and white board	Metabolism of Proteins and amino acids	Protein synthesis Protein breakdown Amino acid metabolism Urea cycle
13	2	Quiz	Data show and white board	Metabolism of Protein and amino acid regulation	Regulation by small molecule Protein phosphorylation
14	2	Quiz	Data show and white board	Metabolism of Protein and amino acid inherited Disorder	Liver, renal disorder Acidosis
15	2	Quiz	Data show and white board		Exam
16	2	Quiz	Data show and white board	Lipid	definition classification
17	2	Quiz	Data show and white board	Metabolism of Lipid:	oxidation of Fatty Acids
18	2	Quiz	Data show and white board	Biosynthesis of Fatty Acids	Membrane lipid biosynthesis Fatty acid biosynthesis
19	2	quiz	Data show and white board	Integration of metabolism of carbohydrates, lipid, and Proteins	Hydrolysis to simpler units Preparatory

جامعة عميلكيات

					Oxidative-aerobic final
20	2	quiz	Data show and white board	Metabolism of Purines and pyrimidines	Biosynthesis Regulation Catabolism
21	2	quiz	Data show and white board	Metabolism of Purines and pyrimidines disord	Nucleotide to base Uric acid Goat and hyperuricemi
22	2	quiz	Data show and white board	Nucleic Acids Definition and Protein synthesis	Definition Composition Sequences classification
23	2	quiz	Data show and white board	Hormone	Definition Classification functions
24	2	quiz	Data show and white board	Hormone disorder	metabolism Hormone imbalance Symptoms and causes
25	2	quiz	Data show and white board	Acid-base balance	Acid base concept Lewis acid and base
26	2	quiz	Data show and white board	Trace elements disorde	Element deficiency Coronary disease
27	2	quiz	Data show and white board	Salivary secretion(saliv Pancreatic juice	Salivary gland disorder Symptoms
28	2	quiz	Data show and white board	Electrolytes	Types Purpose Normal levels
29	2	quiz	Data show and white board	Liver Function Test	Functions Disease Symptoms
30	2	quiz	Data show and white board	Study Kidney Function Test	Functions Disease symptoms

جامعة الخليل

	quiz	Data show and white board	Exam	Exam
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13. Course Evaluation

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

14. Learning & Teaching Resources

Required textbooks (curricular if any)	Lippincott, basic of organic chemistry, stereochemistry of organic compounds,
Main References (sources)	Lippincott's Illustrated Reviews: Biochemistry "Denise R. Ferrier
Recommended Books & References (Scientific Journals, Reports ...)	Marks' Basic Medical Biochemistry: A Clinical Approach" Michael A. Lieberman و Alisa Peet
Websites or Electronic References	"Biochemistry for Dental Students "D. C. Smith N. A. Smith و A. Duncan Reid

Course Description (1)

1. Course Title		Medical chemistry
2. Course Code		050104
3. Semester/Year		Year
4. Description Preparation Date		2024-2025
5. Available Attendance Form		Lectures and laboratories
6. No. of Hours (Total)		60 hours lectures 60 hours labs
7. No. of Credits (Total)		6
8. Course Administrator Name		Sarah Mohammed Hamid
9. E-mail		sarah.m@albayan.edu.iq
10. Course Objectives		
Knowledge	A1	Preparing dental students to be fully aware of the importance of medical chemis and its connection with dentistry
	A2	studying the percentage of essential minerals in visceral and structural structures
	A3	studying some chemical reactions within the body of a living organism in order for outputs to fit the needs of the labor market and keep pace with scientific a technological developments in the field of laboratory techniques
	A4	medical devices that our contemporary world is witnessing, with the aim of bring the graduate to the required level to contribute to advancing the wheel of developm and playing his role in achieving comprehensive renaissance in all fields of work
Skills	B1	Motivating the student through the style of expression and thinking and the speed of communication and response
	B2	Urging the student to solve problems and possess distinctive thinking
	B3	The lecture depends on student interaction and brainstorming
	B4	Conducting home tests
Values	C1	Daily and quarterly exams for theoretical subjects
	C2	Mid-year exam
	C3	Final exam
	C4	Delivering seminars
11. Teaching and Learning Strategies		

جامعة الجليلية للبيات

1.	Lectures using data show and power point	4.	E-learning
2.	Educational films	5.	Smart boards
3.	Display screens	6.	Educational laboratories

12. The Structure of the Course

Week	Hours	Topic/Subject Name	RLOs	Learning Method	Evaluation Method
1	2	Acid, Base and Salt	Acid base concept Lewis acid and base	Data show presentation and white board	quiz
2	2	salts, preparation of salts	How to prepare salts Strong acid weak base Strong base weak acid	Data presentation white board	Quiz
3	2	Fluid and electrolyte	Study the electrolyte solutions Solubility of solution	Data presentation white board	Quiz
4	2	Buffer-pH and Acid-B Balance	PH scale PH in digestive system Respiratory mechanism of PH control	Data show presentation and white board	Quiz
5	2	acid-base balance and blood pH	Acidosis alkalosis & PH of blood Type of PH control mechanism Study the buffer solutions	Data presentation white board	Quiz
6	2	Colloids	Colloids and colloidal dispersions	Data presentation white board	Quiz
7	2	Chirality	Chirality atom and its importance biological	Data presentation white board	Quiz
8	2	Concentration	type of solutions molarity weight, volume, weight to volume ratio	Data presentation white board	Quiz

جامعة المغيرة

9	2	Pollution	Ecological pollution The nature of the pollution Concentration of pollution Effect of environmental pollution	Data presentation white board	sh a Quiz
10	2	Radiochemistry	Study the radioactive materials Natural & artificial radio chemistry	Data presentation white board	sh a Quiz
11	2	Alkanes and Cycloalkanes	Knowledge the aliphatic & cy compound and preparation Isomers Alkyl group	Data presentation white board	sh a Quiz
12	2	Alkenes and Alkynes	Study the structure & preparation and reactions of them Cis-trans isomers Electrophilic addition Polymers	Data presentation white board	sh a Quiz
13	2	Aromatic compounds	Naming of aromatic compound Benzene ring preparation Electrophilic aromatic substitution	Data presentation white board	sh a Quiz
14	2	Aromatic compounds Nature	Study the reactions of aroma compound sulfonation Nitration Reduction, oxidation	Data presentation white board	sh a Quiz
15	2	Stereoisomers of Carbon	Conformational isomer Knowledge the chirality carbon	Data presentation white board	sh a Quiz
16	2	Stereoisomers chemistry	Diastereomers Conformational isomer	Data presentation white board	sh a Quiz

جامعة المغيرة

17	2	Alcohols, Phenols, Ethers and Thiols (preparation, reactions)	properties of alcohols and phenols preparation Reactions	Data presentation white board	sh a	Quiz
18	2	Carboxylic Acids and Their Derivatives , part 1	Study the derive of carboxylic acid (1)	Data presentation white board	sh a	Quiz
19	2	Carboxylic Acids and Their Derivatives , part 2	Study the derive of carboxylic acid (2)	Data presentation white board	sh a	Quiz
20	2	Aldehydes and ketones	Naming of aldehydes, ketones Preparation reaction	Data presentation white board	sh a	Quiz
21	2	Carbohydrates	classification of carbohydrate cyclic structure reactions	Data presentation white board	sh a	Quiz
22	2	Monosaccharide's	composition	Data presentation white board	sh a	Quiz
23	2	Disaccharides Carbohydrates and oral health	composition the Disaccharides the effective of mouth	Data presentation white board	sh a	Quiz
24	2	Lipids	Classified of lipid metabolism of lipids phospholipid	Data presentation white board	sh a	Quiz
25	2	Derived lipids	The role of lipids in teeth diseases Type of surfactant	Data presentation white board	sh a	Quiz

جامعة المغيرة

26	2	Proteins	Structure of proteins Organization and structure cell	Data presentation white board	sh a	Quiz
27	2	Amino acids	Amino acid structure Amino acid behavior Synthesis of amino acid Effects of protein on oral health	Data presentation white board	sh a	Quiz
28	2	Nucleic Acids	Structure of nucleic acid Biosynthesis and degradation	Data presentation white board	sh a	quiz
29	2	Nucleosides, Nucleotides	Study the composition Nuclease Sequence determination	Data presentation white board	sh a	quiz
30	2	Dioxy and ribo Nucliec acid	DNA RNA chemical structure Type of RNA Ribozyme DNA polymerase	Data presentation white board	sh a	quiz

13. Course Evaluation

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

14. Learning & Teaching Resources

Required textbooks (curricular if any)	Lippincott, basic of organic chemistry, stereochemistry of organic compounds,
Main References (sources)	
Recommended Books & References (Scientific Journals, Reports ...)	
Websites or Electronic References	

Course Description (1)

1. Course Title	Pharmacology	
2. Course Code	050305	
3. Semester/Year	Year	
4. Description Preparation Date	2025/9/22	
5. Available Attendance Form	Lectures and Laboratory	
6. No. of Hours (Total)	60 hours theory , 60 hours practical	
7. No. of Credits (Total)	6	
8. Course Administrator Name	Huda abd Al-baqi Rasheed	
9. E-mail	huda.ab@albayan.edu.iq	
10. Course Objectives		
Knowledge	A1	Pharmacokinetics Concepts of absorption, distribution, metabolism, and excretion (ADME)
	A2	Pharmacodynamics <input type="checkbox"/> Mechanisms of drug action <input type="checkbox"/> Dose-response relationships
	A3	Pathophysiology <input type="checkbox"/> Basic understanding of disease processes <input type="checkbox"/> Common conditions and their pharmacological treatments
	A4	Drug Classifications <input type="checkbox"/> Knowledge of major drug classes and their uses
	A5	Drug Interactions <input type="checkbox"/> Understanding of how drugs can affect each other
	A6	Clinical Applications <input type="checkbox"/> Familiarity with therapeutic uses of drugs <input type="checkbox"/> Side effects and contraindications
	A7	Research Methods <input type="checkbox"/> Basic principles of clinical research and study design <input type="checkbox"/> Ability to evaluate scientific literature
	A8	Ethics in Pharmacology <input type="checkbox"/> Understanding ethical considerations in drug development and use
Skills	B1	Critical Thinking Analyzing and evaluating drug information and research studies.
	B2	Clinical Application Applying pharmacological principles to patient care and treatment plans.
	B3	Problem-Solving

		Addressing medication-related issues and optimizing therapeutic outcomes	
	B4	Communication Effectively conveying complex pharmacological concepts to healthcare professionals and patients.	
	B5	Research Skills Conducting literature reviews and interpreting scientific studies related to pharmacology.	
Values	C1	Ethical and Scientific Values Scientific Integrity: Commitment to ethical research practices. Critical Thinking: Ability to analyze drug data and clinical evidence. Regulatory Awareness: Understanding drug safety and regulations.	
	C2	Ethical and Scientific Values Scientific Integrity: Commitment to ethical research practices. Critical Thinking: Ability to analyze drug data and clinical evidence. Regulatory Awareness: Understanding drug safety and regulations.	
	C3	Collaborative and Lifelong Values Interprofessional Collaboration: Working within healthcare teams for optimal outcomes. Lifelong Learning: Commitment to staying updated on pharmacological advancements. Problem-Solving: Addressing medication-related challenges effectively	
10. Teaching and Learning Strategies			
1.	Lectures using Data show and power point.	4.	Educational films
2.	Homework	5.	
3.	Laboratories and preparing reports	6.	

11. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	2	Definition and scope of pharmacology Key pharmacological principles Drug absorption, distribution, metabolism, and excretion (ADME) Dose-response relationships Therapeutic index and safety Drug classification and mechanisms of action	Pharmacology: General Concepts	Data show presentation and white board	Short quiz ,Oral examination
2	2	Pharmacokinetics Absorption: factors affecting drug absorption. Distribution: volume of distribution and protein binding. Metabolism: hepatic metabolism and drug interactions Excretion: renal clearance and half-life Pharmacodynamics Mechanisms of drug action Receptors and signaling pathways Agonists vs. antagonists	Pharmacokinetics and Pharmacodynamics	Data show presentation and white board	Short quiz ,Oral examination
3	2	Overview of the autonomic nervous system Cholinergic Agonists Mechanism of action Clinical uses and side effects Cholinergic Antagonists Mechanism of action Clinical uses and side effects	Autonomic Nervous System from a Pharmacological Perspective	Data show presentation and white board	Short quiz ,Oral examination
4	2	Classification of adrenergic agonists (α , β -agonists) Mechanism of action Clinical applications and adverse effects	Adrenergic Agonists	Data show presentation and white board	Short quiz ,Oral examination

جامعة العمليين

5	2	Classification (α , β -antagonists) Mechanism of action Clinical applications and side effects	Adrenergic Antagonists	Data show presentation and white board	Short quiz ,Oral examination
6	2	Overview of hypertension Classes of antihypertensive agents Diuretics ACE inhibitors Calcium channel blockers Beta-blocker Mechanisms and clinical use	Antihypertensive Drugs	Data show presentation and white board	Short quiz ,Oral examination
7	2	Pathophysiology of angina Classes of drugs used in angina management Heart failure: types and pharmacological management Importance of lifestyle modifications	Management of Angina and Heart Failure	Data show presentation and white board	Short quiz ,Oral examination
8	2	Overview of cardiac arrhythmias Classifications of antiarrhythmic drugs Mechanisms of action and clinical uses	Management of Arrhythmia	Data show presentation and white board	Short quiz ,Oral examination
9	2	Mechanisms of action Clinical indications and monitoring Risks and side effects	Anticoagulants, Antiplatelet, and Anti-Hyperlipidemic Drugs	Data show presentation and white board	Short quiz ,Oral examination
10	2	Overview of CNS drug classifications Sedatives and Hypnotics Mechanisms and clinical uses Antiseizure Drugs Mechanisms and types	Introduction to Pharmacology of CNS Drugs	Data show presentation and white board	Short quiz ,Oral examination
11	2	Types of antipsychotics and their mechanisms Classes of antidepressants and their clinical applications	Antipsychotic and Antidepressant Drugs	Data show presentation and white board	Short quiz ,Oral examination
12	2	Mechanism of action of local anesthetics Overview of general anesthetics and their use in surgery	Local and General Anesthetics	Data show presentation and white board	Short quiz ,Oral examination
13	2	Mechanisms of action of opioids Clinical uses and risks of abuse	Drugs of Abuse and Opioid Analgesics	Data show presentation and white board	Short quiz ,Oral examination

جامعة العين

14	2	Overview of diabetes types Classes of antidiabetic medications Mechanisms of action and monitoring	Management of Diabetes Mellitus	Data show presentation and white board	Short quiz ,Oral examination
15	2	Overview of gastrointestinal pharmacology Types of drugs (antacids, laxatives, antiemetics)	Drugs Affecting GIT	Data show presentation and white board	Short quiz ,Oral examination
16	2	Antihistamines Mechanism and clinical applications Corticosteroids Mechanism and uses in respiratory disease	Drugs Acting on Respiratory System	Data show presentation and white board	Short quiz ,Oral examination
17	2	Mechanisms of action Clinical uses and side effects	Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) Part 1	Data show presentation and white board	Short quiz ,Oral examination
18	2	Comparison with steroids Specific NSAIDs used in dental practice	Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) Part 2 and Steroids in Dentistry	Data show presentation and white board	Short quiz ,Oral examination
19	2	Overview of antimicrobial therapy Mechanisms of action of various antimicrobials	Chemotherapeutic Drugs: Principles of Antimicrobial Therapy	Data show presentation and white board	Short quiz ,Oral examination
20	2	Mechanisms and examples (e.g., penicillin)	Cell Wall Inhibitors (Part 1)	Data show presentation and white board	Short quiz ,Oral examination
21	2	Continued discussion and examples (e.g., cephalosporins)	Cell Wall Inhibitors (Part 2)	Data show presentation and white board	Short quiz ,Oral examination
22	2	Classes and mechanisms (e.g., macrolides, tetracyclines)	Protein Synthesis Inhibitors	Data show presentation and white board	Short quiz ,Oral examination
23	2	Mechanisms and clinical applications	Quinolones, Folic Acid Antagonists, and Antimycobacterial Drugs	Data show presentation and white board	Short quiz ,Oral examination
24	2	Mechanisms and clinical use of each class	Antifungal, Antiviral, and Antiprotozoal Drugs	Data show presentation and white board	Short quiz ,Oral examination
25	2	Mechanisms of action and clinical applications	Sex Hormones and Contraceptive	Data show presentation and white board	Short quiz ,Oral examination

جامعة العمليان

26	2	Mechanisms and therapeutic uses	Thyroid Hormones and Anti-Thyroid Drugs	Data show presentation and white board	Short quiz ,Oral examination
27	2	Overview of cancer pharmacotherapy Classes of anticancer drugs and mechanisms	Anticancer Drugs	Data show presentation and white board	Short quiz ,Oral examination
28	2	Overview of pharmacological agents used in dentistry Specific drugs and their applications	Dental Pharmacology: Drugs and Chemicals Used in Dental Clinic	Data show presentation and white board	Short quiz ,Oral examination
29	2	Mechanisms and clinical use of anticaries agents	Anticaries and Drugs Used in Prevention of Dental Plaque	Data show presentation and white board	Short quiz ,Oral examination
30	2	Overview of emergency situations Key drugs and their uses in emergencies	Essential Emergency Drugs in Dental Clinic	Data show presentation and white board	Short quiz ,Oral examination

12. Course Evaluation	
The first + the second semester %25	Theoretical 10% Practical 15%
Midyear exam 15%	Theoretical 15%
Final exam 60%	Theoretical 40% Practical 20%
13. Learning & Teaching Resources	
Required textbooks (Curricular if any)	Lippincott pharmacology^{8th} edition
Main References (sources)	1 -Clinical Pharmacology, 11th Ed (2012)- Bennett, Brown. 2 -Basic and clinical pharmacology by katzung 16th edition
Recommended Books & References (Scientific Journals, Reports ...)	PubMed
Websites or Electronic References	Google scholar and research gate

Course Description (1)

1. Course Title	General histology	
2. Course Code	050204	
3. Semester/Year	Year	
4. Description Preparation Date	2025-9-22	
5. Available Attendance Form	Theoretical and practical lectures	
6. No. of Hours (Total)	60 hours theory , 60 hours practical	
7. No. of Credits (Total)	6	
8. Course Administrator Name	Hadeel talal ayash	
9. E-mail	hadeel.t@albayan.edu.iq	
10. Course Objectives :		
Learning outputs		
The objectives of the course can be summarized as enabling Second-year students of the Dentistry College is Explaining the process of preparing tissue sections for different sections of the body and using optical microscopes to examine and distinguish different tissues and organs of the body.		
Knowledge	A1	To teach students the practical and theoretical applications of the various general body tissues and all organs of the body, the General Tissue Laboratory looks forward to explaining the structures of the various tissues and organs of the body in several sections and directions, preparing tissue sections for different sections of the body and using light microscopes to examine and distinguish the various tissues and organs of the body.
	A2	
	A3	
	A4	
Skills	B1	1. Acquiring skills and information's that help the student in diagnosing and how to examine different histological slide sections.
	B2	Motivating the student through the expression style, thinking, and quick communication and response.
	B3	Encouraging the student to solve problems and possess distinctive thinking.
	B4	Relying on student interaction and brainstorming in the lecture.
Values	C1	Professional preparation and promotion of positive behavior in public life
	C2	Scientific preparation and encouragement of students to communicate in other fields science.

جامعة الجليلية للبيات

C3	Cultural preparation and refining of the student's personality.
C4	Employing acquired skills for the student to become a dentist capable of Examining histological sections.

11. Teaching and Learning Strategies

1.	Lectures using Data show and power point.	4.	Electronic education
2.	Educational films	5.	Practical Examination of histological Slides
3.	Monitors	6.	

12. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	2	<ul style="list-style-type: none"> • Introduction to Cells • Structure of the cell • Cell organelles and their functions • Cell membrane and transport mechanisms • Basic Tissue Types • Overview of the four basic tissue types: epithelial, connective, muscle, and nervous tissue 	Cells, Basic Tissue	Data show presentation and white board	Short quiz
2	2	<ul style="list-style-type: none"> • Types of Epithelial Tissue <ul style="list-style-type: none"> ○ Simple vs. stratified epithelium ○ Squamous, cuboidal, and columnar shapes • Functions of Epithelial Tissue <ul style="list-style-type: none"> ○ Protection, absorption, secretion, and sensation • Locations and Examples <ul style="list-style-type: none"> ○ Skin, lining of organs, glands 	Epithelial Tissue	Data show presentation and white board	Oral examination
3	2	<ul style="list-style-type: none"> • Types of Connective Tissue <ul style="list-style-type: none"> ○ Loose connective tissue ○ Dense connective tissue ○ Specialized connective tissues (adipose, cartilage, bone, blood) • Functions of Connective Tissue <ul style="list-style-type: none"> ○ Support, protection, 	Connective Tissue	Data show presentation and white board	Oral examination

		<p>insulation, transportation</p> <ul style="list-style-type: none"> • Components of Connective Tissue <ul style="list-style-type: none"> ○ Extracellular matrix, fibers, and cells 			
4	2	<ul style="list-style-type: none"> • Anatomy of the Conducting Portion <ul style="list-style-type: none"> ○ Nose, nasal cavity, pharynx, larynx, trachea, bronchi • Functions <ul style="list-style-type: none"> ○ Air passage, filtration, humidification, and warming • Histology of Conducting Structures <ul style="list-style-type: none"> ○ Mucosa, submucosa, and adventitia layers 	Respiratory System: conducting portion	Data show presentation and white board	Oral examination
5	2	<ul style="list-style-type: none"> • Anatomy of the Respiratory Portion <ul style="list-style-type: none"> ○ Bronchioles, alveolar ducts, alveoli • Gas Exchange Mechanism <ul style="list-style-type: none"> ○ Structure of alveoli and pulmonary capillaries • Respiratory Membrane <ul style="list-style-type: none"> ○ Composition and function 	Respiratory System: respiratory portion	Data show presentation and white board	1st term examination
6	2	<ul style="list-style-type: none"> • Structure of the Kidney <ul style="list-style-type: none"> ○ Anatomy of the nephron (glomerulus, tubules) • Nephron Functions <ul style="list-style-type: none"> ○ Filtration, reabsorption, secretion 	Urinary System: kidney nephrons, collecting tubules and	Data show presentation and white board	Oral examination

		<ul style="list-style-type: none"> • Collecting System <ul style="list-style-type: none"> ○ Role of collecting tubules and ducts in urine formation 	ducts		
7	2	<ul style="list-style-type: none"> • Anatomy of the Ureters <ul style="list-style-type: none"> ○ Structure and function • Urinary Bladder <ul style="list-style-type: none"> ○ Layers of the bladder wall and function • Urethra Differences <ul style="list-style-type: none"> ○ Male vs. female urethra anatomy and function 	Urinary System: ureter, urinary bladder, and male and female urethra	Data show presentation and white board	Oral examination
8	2	<ul style="list-style-type: none"> • Layers of the Skin <ul style="list-style-type: none"> ○ Epidermis: cell types, keratinization ○ Dermis: papillary and reticular layers • Skin Functions <ul style="list-style-type: none"> ○ Protection, temperature regulation, sensation 	Integumentary System: Skin: epidermis, dermis	Data show presentation and white board	Oral examination
9	2	<ul style="list-style-type: none"> • Skin Glands <ul style="list-style-type: none"> ○ Sebaceous glands, sweat glands, and their functions • Hair Structure and Function <ul style="list-style-type: none"> ○ Follicles, growth cycle • Nails <ul style="list-style-type: none"> ○ Structure, growth, and function 	Integumentary System: skin glands, hair, and nails	Data show presentation and white board	Oral examination
10	2	<ul style="list-style-type: none"> • Bone Marrow Structure <ul style="list-style-type: none"> ○ Red vs. yellow marrow 	Hemopoiesis : bone	Data show presentation and white board	Oral examination

		<ul style="list-style-type: none"> • Hemopoiesis Process <ul style="list-style-type: none"> ○ Stem cells and differentiation into blood cells 	marrow		
11	2	<ul style="list-style-type: none"> • Types of Blood Cells <ul style="list-style-type: none"> ○ Erythrocytes, leukocytes, thrombocytes • Functions of Blood Cells <ul style="list-style-type: none"> ○ Oxygen transport, immune response, clotting 	Hemopoiesis : blood cells	Data show presentation and white board	Oral examination
12	2	<ul style="list-style-type: none"> • Components of the Circulatory System <ul style="list-style-type: none"> ○ Heart, blood vessels, blood • Heart Anatomy and Function <ul style="list-style-type: none"> ○ Chambers, valves, and conduction system 	Circulatory System	Data show presentation and white board	Oral examination
13	2	<ul style="list-style-type: none"> • Blood Vessels <ul style="list-style-type: none"> ○ Arteries, veins, capillaries • Blood Flow Pathway <ul style="list-style-type: none"> ○ Systemic vs. pulmonary circulation 	Circulatory System	Data show presentation and white board	Oral examination
14	2	<ul style="list-style-type: none"> • Overview of the Lymphatic System <ul style="list-style-type: none"> ○ Components: lymph nodes, lymph vessels, spleen, thymus • Functions of the Lymphatic System <ul style="list-style-type: none"> ○ Fluid balance, immune response 	Lymphoid System	Data show presentation and white board	Oral examination
15	2	<ul style="list-style-type: none"> • Lymphatic Organs <ul style="list-style-type: none"> ○ Structure and function of 	Lymphoid System	Data show presentation and white board	Mid term examination

		<p>lymph nodes, spleen, and thymus</p> <ul style="list-style-type: none"> • Lymphocyte Development <ul style="list-style-type: none"> ○ Role of bone marrow and thymus 			
16	2	<ul style="list-style-type: none"> • Overview of the Nervous System <ul style="list-style-type: none"> ○ Central vs. peripheral nervous system • Neurons and Glial Cells <ul style="list-style-type: none"> ○ Structure and function of neurons ○ Types and roles of glial cells 	Nervous System	Data show presentation and white board	Oral examination
17	2	<ul style="list-style-type: none"> • Brain Anatomy and Function <ul style="list-style-type: none"> ○ Major regions (cerebrum, cerebellum, brainstem) • Spinal Cord Structure <ul style="list-style-type: none"> ○ Segments and function 	Nervous System	Data show presentation and white board	Oral examination
18	2	<ul style="list-style-type: none"> • Overview of the Endocrine System <ul style="list-style-type: none"> ○ Major glands: pituitary, thyroid, adrenal • Hormones and Their Functions <ul style="list-style-type: none"> ○ Mechanisms of hormone action 	Endocrine System	Data show presentation and white board	Oral examination
19	2	<ul style="list-style-type: none"> • Regulation of Hormonal Activity <ul style="list-style-type: none"> ○ Feedback mechanisms (negative and positive) • Disorders of the Endocrine System <ul style="list-style-type: none"> ○ Common endocrine disorders 	Endocrine System	Data show presentation and white board	Oral examination

20	2	<ul style="list-style-type: none"> • Interactions with Other Systems <ul style="list-style-type: none"> ○ Nervous and endocrine system interplay • Clinical Applications <ul style="list-style-type: none"> ○ Hormone replacement therapies and treatments 	Endocrine System	Data show presentation and white board	Oral examination
21	2	<ul style="list-style-type: none"> • Overview of the Digestive System <ul style="list-style-type: none"> ○ Anatomy: mouth, esophagus, stomach • Digestive Processes <ul style="list-style-type: none"> ○ Mechanical and chemical digestion 	Digestive System	Data show presentation and white board	Oral examination
22	2	<ul style="list-style-type: none"> • Small Intestine Anatomy and Function <ul style="list-style-type: none"> ○ Duodenum, jejunum, ileum • Absorption Mechanisms <ul style="list-style-type: none"> ○ Nutrient absorption processes 	Digestive System	Data show presentation and white board	Oral examination
23	2	<ul style="list-style-type: none"> • Large Intestine Anatomy and Function <ul style="list-style-type: none"> ○ Structure and role in water absorption • Gut Microbiota <ul style="list-style-type: none"> ○ Importance in digestion and health 	Digestive System	Data show presentation and white board	Oral examination
24	2	<ul style="list-style-type: none"> • Accessory Organs <ul style="list-style-type: none"> ○ Liver, pancreas, gallbladder • Digestive Enzymes and Bile <ul style="list-style-type: none"> ○ Functions and roles in 	Digestive System	Data show presentation and white board	Oral examination

		Digestion			
25	2	<ul style="list-style-type: none"> • Anatomy of Male Reproductive Organs <ul style="list-style-type: none"> ○ Testes, epididymis, vas deferens • Spermatogenesis <ul style="list-style-type: none"> ○ Process of sperm production 	Male Reproductive System	Data show presentation and white board	Oral examination
26	2	<ul style="list-style-type: none"> • Accessory Glands <ul style="list-style-type: none"> ○ Seminal vesicles, prostate gland, bulbourethral glands • Hormonal Regulation <ul style="list-style-type: none"> ○ Role of testosterone and its effects 	Male Reproductive System	Data show presentation and white board	Oral examination
27	2	<ul style="list-style-type: none"> • Anatomy of Female Reproductive Organs <ul style="list-style-type: none"> ○ Ovaries, fallopian tubes, uterus, vagina • Oogenesis <ul style="list-style-type: none"> ○ Process of egg formation 	Female Reproductive System	Data show presentation and white board	Oral examination
28	2	<ul style="list-style-type: none"> • Menstrual Cycle Phases <ul style="list-style-type: none"> ○ Follicular, ovulatory, luteal phases • Hormonal Regulation <ul style="list-style-type: none"> ○ Role of estrogen and progesterone 	Female Reproductive System	Data show presentation and white board	2nd term examination
29	2	<ul style="list-style-type: none"> • Anatomy of the Eye <ul style="list-style-type: none"> ○ Structure of the eyeball (cornea, lens, retina) 	Special Sense Organs: eye	Data show presentation and white board	Oral examination

		<ul style="list-style-type: none"> • Visual Pathway <ul style="list-style-type: none"> ○ How light is processed and transmitted to the brain 			
30	2	<ul style="list-style-type: none"> • Anatomy of the Ear <ul style="list-style-type: none"> ○ Outer, middle, and inner ear structures • Hearing Mechanism <ul style="list-style-type: none"> ○ Sound transmission and processing 	Special Sense Organs: ear	Data show presentation and white board	Final examination

13. Course Evaluation

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

Distribution of the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily exams, oral, monthly, written and records

Includes:

1. Daily and term exams
2. Mid term exam

Final exam (theory and practical)

Distribution degree	Method of evaluation
Theory 10 % practical 15%	1 st + 2 nd term 25%
15%	Mid term theory
20% practical + 40% theory	Final exam 60%
65 % theory 35 % practical	Total 100%

14. Learning & Teaching Resources

Required textbooks (curricular if any)	1. unqueira's Basic Histology TEXT & ATLAS illustrated Dental ,Histology ,Embryology and Anatomy . Author: Anthony L MESCHER .Margaret J Fehrenbach and Tracy Popowics
Main References (sources)	1. Atlas of human histology Handbook of basic general histology (author:datis kalali)
Recommended Books & References (Scientific Journals, Reports ...)	HISTOLOGY FULL-TEXT William A Beresford MA, D Phil© Professor of Anatomy Anatomy Department, West Virginia University, Morgantown, USA

جامعة الجليلية للبحوث والدراسات

Websites or Electronic References

1. Pubmed
2. Scopas

Course Description (1)

1. Course Title		General pathology
2. Course Code		050306
3. Semester/Year		Year
4. Description Preparation Date		2025 / 9/22
5. Available Attendance Form		Theoretical and practical lectures
6. No. of Hours (Total)		60 hr. Theoretical and 60 hr. practical
7. No. of Credits (Total)		6
8. Course Administrator Name		Mays Maher Mustafa
9. E-mail		Mays.m@albayan.edu.iq
10. Course Objectives		
Preparing dentists who are able to know the important causes of various general diseases and study the diagnosis of various diseases and methods of using different dyes to know these diseases and their causes		
Knowledge	A1	The ability to distinguish between different diseases
	A2	How to use dyes
	A3	Learning about tissue sectioning
	A4	
Skills	B1	The ability to distinguish between different diseases
	B2	How to use dyes
	B3	Learning to cut tissue
	B4	
Thinking skills		Identifying diseases and methods of diagnosing them microscopically using electron microscope, stains, and tissue sectioning
		Teaching and learning methods
		Theoretical lectures
		Scientific discussions and seminars

		Use of screens (LCD)
		Using clarification methods such as x-ray films and videos
Evaluation methods		Weekly exams
		Mid-year and end-of-year exams
		Evaluation of seminars prepared by the student
		Evaluation of the practical product
Evaluation methods		Weekly exams
		Mid-year and end-of-year exams
		Evaluation of seminars prepared by the student
		Evaluation of the practical product
Methods of evaluation	1	Theoretical daily and semester examinations
	2	Practical daily and semester examinations
	3	Mid-year examination
	4	Practical and theoretical final examination
11. Teaching and Learning Strategies		
1.	Theoretical lectures	4. Using clarification methods such as x-ray films and videos
2.	Scientific discussions and seminars	5.
3.	Use of screens (LCD)	6.



12. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	1	Introduction pathology Clinical pathology Molecular pathology Cell damage reversible cell injury	Introduction	Data show presentation and white board	Oral examination
2	3	Irreversible cell injury Deposit and pigmentation External and internal pigmentation	Cell damage	Data show presentation and white board	Oral examination
3	4	Acute inflammation Chronic pathology	Inflammation	Data show presentation and white Board	Oral examination
4	2	Healing of skin wound Healing of bone	Healing and repair	Data show presentation and white board	Oral examination

جامعة البصرة

5	1	Hemodynamic Disorders Thromboembolic Disease Shock	Deposits and pigmentation	Data show presentation and white board	Oral examination
6	5	Describe all Disease related the genetic history	Infections	Data show presentation and white board	Oral examination
7	4	Hypersensitivity Autoimmune diseases Transplantation	Immunopathology	Data show presentation and white board	Oral examination
8	3	Neoplasia benign and malignant tumors molecular basis of tumors	Disorders of cell growth and development	Data show presentation and white board	Oral examination
9	5	All disease relate with it	Neoplasia	Data show presentation and white board	Oral examination
10	4	All disease relate with it	Genetics	Data show presentation and white board	Oral examination
11	4	All disease relate with it	Disturbances in body fluids and blood flow	Data show presentation and white board	Oral examination

جامعة البصرة

12	4	All disease relate with it	Diseases of the cardiovascular system	Data show presentation and white board	Oral examination
13	2	All disease relate with it	Diseases of respiratory system	Data show presentation and white board	Oral examination
14	6	All disease relate with it	Hematological diseases	Data show presentation and white board	Oral examination
15	4	All disease relate with it	Diseases of G.I.T	Data show presentation and white board	Oral examination
16	3	All disease relate with it	Diseases of liver, pancreas and gall bladder	Data show presentation and white board	Oral examination
17	2	All disease relate with it	Bone diseases	Data show presentation and white board	Oral examination
18	3	All disease relate with it	Joints , Muscle and C.T. Diseases	Data show presentation and white board	Oral examination
	60	Total			
Assessment Curriculum					
Robin,s Basic Pathology					

13. Course Evaluation

- The first + the second semester 25 %
- Midyear exam 15%
- Theoretical 15%
- Final exam 60% Theoretical 40% Practical 20
- Theoretical 10%
- Practical 15%
- 100% (Theoretical 65% & Practical 35%)

14. Learning & Teaching Resources

Required textbooks (curricular if any)	Robin,s Basic Pathology
Main References (sources)	Robin,s Basic Pathology
Recommended Books & References (Scientific Journals, Reports ...)	
Websites or Electronic References	

number	Laboratory sessions	Hours
1	Introduction to general pathology	2
2	Power points slides	2
3	Power points and histopathological slides demonstrating fatty changes in liver and cloudy swelling in kidney	2
4	Power points and histopathological slides of coagulative necrosis in heart muscles and caseous necrosis in lung	2
5	Power points and histopathological slides of anthracosis of lung and hemosiderosis in liver	2

جامعة الجليلية للبنات

6	Power points and histopathological slides of amyloidosis in kidney, H&E. and congo-red stain	2
7	Power points and histopathological slides of acute appendicitis (appendix), acute osteomyelitis and lobar pneumonia (lung,)	2
8	Power points and histopathological slides of chronic cholecystitis in gall bladder and chronic osteomyelitis in bone	2
9	Power points and histopathological slides of keloid in skin and granulation tissue	2
10	Power points and histopathological slides of TB in lung and actinomycosis	2
11	Power points and histopathological slides of Sarcoidosis	2
12	Power points slides of CVC in lung and liver	2
13	Power points slides of blood vessels thrombosis	2
14	Power points and histopathological slides of lipoma, S.C papilloma of skin	2
15	Power points and histopathological slides of osteoma of the bone	2
16	Power points and histopathological slides of S.C. carcinoma and adeno carcinoma of the colon	2
17	Power points and histopathological slides of thyrotoxicosis of thyroid and hashimoto's thyroiditis in thyroid	2
18	Data show slides	2
19	Data show slides	2
02	Power points and histopathological slides of myocardial	2

جامعة الجليلية للبنات

	infarction of heart and atherosclerosis in blood vessels	
21	Power points and histopathological slides of chronic gastritis in stomach and peptic ulcer	2
22	Power points and histopathological slides of liver cirrhosis and hepatocellular carcinoma	2
23	Power points and histopathological slides of emphysema in lung and chronic bronchitis in bronchus	2
24	Data show	2
25	Data show	2
26	Data show	2
27	Data show	2
28	Data show	2
29	Power points slides	2
30	Power points slides	2
Total		60

Course Description (1)

1. Course Title	Medical Physics	
2. Course Code	050103	
3. Semester/Year	Year	
4. Description Preparation Date	2025-9-22	
5. Available Attendance Form	Lectures and Laboratory	
6. No. of Hours (Total)	60 hours theory , 60 hours practical	
7. No. of Credits (Total)	6	
8. Course Administrator Name	Areej talal ayash	
9. E-mail	areej.t@albayan.edu.iq	
10. Course Objective:	The objectives of the course are summarized in the College of Dentistry/ The first stage aims to provide all that the student needs, including solid theoretical curricula and practical applications, and to bring the graduate to the level required to contribute to advancing the wheel of development and to play his role in achieving comprehensive renaissance in all areas of work. Applications in medical physics contribute to all aspects of our daily lives, including the medical field, diagnostic devices, radiological imaging, physical therapy, audio and optics, the development of modern devices, and the study of physics and its effect on the human body and the physical functions of the human body's organs.	
Knowledge	A1	The teaching method changes according to the student's perception and interaction w the lecture. It may be the discussion method, the interrogation method, or the deduc and deduction method... and it may be all methods at the same time, in addition to the of laboratories to increase the student's understanding and awareness.
	A2	
	A3	
	A4	
Skills	B1	Motivating the student through expression, thinking and response
	B2	The lecture relies on student interaction, brainstorming, and intellectual questions
	B3	Giving the student the necessary space to express their scientific opinions
	B4	Urging the student to solve problems and possess distinctive thinking
Values	C1	Professional preparation and encouraging the student to have positive behavior in public life
	C2	Cultural preparation and refining the student's personality
	C3	Utilizing the acquired skills so that the student becomes a dentist capable understanding the physical functions of the organs of the human body.
	C4	

11. Teaching and Learning Strategies

1.	Lectures using Data show and power point.	4.	Educational films
2.	Homework	5.	
3.	Laboratories and preparing reports	6.	

12. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	2	Medical Physics, physical medicine, Physical therapy, Health Physics.	Terminology	Data show presentation and white board	Short quiz ,Oral examination
2	2	Radiological Physics, clinical physics. Modeling, Accuracy, Precision, False Positive, False Negative	Terminology	Data show presentation and white board	Short quiz ,Oral examination
3	2	Static forces :(type of levers with medical examples).	Force on &in body	Data show presentation and white board	Short quiz ,Oral examination
4	2	Dynamic forces (Centrifuge	Force on &in body	Data show presentation and white Board	Short quiz ,Oral examination
5	2	Bones:(Function of bones, Composition of bone, bone remodeling, compact and trabecular bone).	Physics of the skeleton	Data show presentation and white board	Short quiz ,Oral examination
6	2	Stress-strain curve :(compressive and tensile stress, young modulus). Bone joints :(Synovial fluid, coefficient of a joint).	Physics of the skeleton	Data show presentation and white board	Short quiz ,Oral examination
7	2	Physical basis of heat and temperature, Temperature scales, Converting Temperatures, Temperature in Dentistry, Thermal	Heat and cold in medicine:	Data show presentation and white board	Short quiz ,Oral examination

جامعة الكويت

8	2	expansion, (Linear, Area, Volume Thermal Expansion), Thermometry, Heat therapy, Thermography, Cold in medicine and cryosurgery. Thermal conductivity.	Heat and cold in medicine:	Data show presentation and white board	Short quiz ,Oral examination
9	2	First law of thermodynamic. Energy change in the body (Met, Basal metabolic rate (BMR).	Energy, work and power of the body	Data show presentation and white board	Short quiz ,Oral examination
10	2	Work and power. Efficiency heat losses from the body. Anaerobic phase and aerobic phase. Hypothalamus (body's thermostat).Heat lost by (radiation, convection, evaporation of sweat and respiration).	Energy, work and power of the body	Data show presentation and white board	Short quiz ,Oral examination
11	2	Definition, absolute pressure, gauge pressure, negative pressure, unit of pressure. Measurement of pressure in the body (Manometer). Pressure inside the skull.	Pressure	Data show presentation and white board	Short quiz ,Oral examination
12	2	Eye pressure. Pressure in the skeleton. Pressure in the urinary bladder. Boyle's law: (pressure diving). HOT (hyperbaric while oxygen therapy).	Pressure	Data show presentation and white board	Short quiz ,Oral examination

جامعة العمليان

13	2	Electrical potential of nerves (resting potential, action potential in myelinated and unmyelinated nerves). Electromyogram	Electricity within the body	Data show presentation and white board	Short quiz ,Oral examination
14	2	(EMG). Electrical potential in the heart (electrocardiogram ECG). Electroencephalogram (EEG).	Electricity within the body	Data show presentation and white board	Short quiz ,Oral examination
15	2	Properties of sound.	Sound in medicine	Data show presentation and white board	Short quiz ,Oral examination
16	2	Stethoscope (including heart sound mechanism of hearing.	Sound in medicine	Data show presentation and white board	Short quiz ,Oral examination
17	2	(A-scan, B-scan, M-scan and Doppler effect).	Ultrasound	Data show presentation and white board	Short quiz ,Oral examination
18	2	Physiological effect of ultrasound in therapy	Ultrasound	Data show presentation and white board	Short quiz ,Oral examination
19	2	Light nature, Planck Equation, (Reflection, Refraction and Absorption of Light, Properties of light).	Light in medicine	Data show presentation and white board	Short quiz ,Oral examination
20	2	Diffuse reflection, Specular reflection, Phototherapy, Application of ultraviolet and infrared light in medicine, Tanning and Skin Cancer.	Light in medicine	Data show presentation and white board	Short quiz ,Oral examination
21	2	What is laser? Application of laser in medicine Atomic Transitions, Population inversion, Laser Typical	Laser in medicine	Data show presentation and white board	Short quiz ,Oral examination
22	2	Characteristics, General Applications of Laser, Laser Dental Applications, Reshape	Laser in medicine	Data show presentation and white board	Short quiz ,Oral examination

جامعة العمليين

		gum tissue, Laser aided teeth whitening, Laser Drill			
23	2	Focusing element of the eye (cornea, lens). Element of the eye (pupil, aqueous humor, vitreous humor sclera).	Physics of eye and vision	Data show presentation and white board	Short quiz ,Oral examination
24	2	Visual acuity, Snellen chart, optical density.	Physics of eye and vision	Data show presentation and white board	Short quiz ,Oral examination
25	2	Properties of X-ray, production of X-ray. Absorption of X-ray, contrast media-ray image	Physics of diagnostic X-ray	Data show presentation and white board	Short quiz ,Oral examination
26	2	penumbra, grid, and intensifying screens). Radiation to patients from X-ray (filters).	Physics of diagnostic X-ray	Data show presentation and white board	Short quiz ,Oral examination
27	2	Radioactivity decay, half-life, units. Basic instrumentation and its medical application (GM-tube, Photomultiplier tube	Physics of nuclear medicine	Data show presentation and white board	Short quiz ,Oral examination
28	2	detector, solid state Scintillation detector). Therapy with radioactivity. Radiation doses in nuclear medicine.	Physics of nuclear medicine	Data show presentation and white board	Short quiz ,Oral examination
29	2	The dose units (Rad and Gray). Principles of radiation therapy	Physics of radiation therapy	Data show presentation and white board	Short quiz ,Oral examination
30	2	Brach therapy, quality factor (QF).	Physics of radiation therapy	Data show presentation and white board	Short quiz ,Oral examination

13. Course Evaluation

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

14. Learning & Teaching Resources

Required textbooks (curricular if any)	Medical Physics (John Cameron)
Main References (sources)	Physics of of the human body(Irving Herman)
Recommended Books & References (Scientific Journals, Reports ...)	
Websites or Electronic References	

Course Description (1)

1. Course Title	PHYSIOLOGY	
2. Course Code	050205	
3. Semester/Year	Year	
4. Description Preparation Date	2025 / 9/22	
5. Available Attendance Form	Theoretical and practical lectures	
6. No. of Hours (Total)	60 hours theory , 60 hours practical	
7. No. of Credits (Total)	6	
8. Course Administrator Name	Prof. Dr. Sahib M. H. Mohammadbakir	
9. E-mail	sahib.mohammad@albayan.edu.iq	
10. Course Objectives		
<p>The course in human physiology, highlight about the study of the function and regulation of the human body and the complexities and interactions of cells, tissues, major organs and systems. Lectures covering membrane transport mechanisms; intracellular and electrical signaling; the physiology of excitable tissues; the physiology of blood; the cardiovascular system, gastrointestinal tract; the respiratory system; the renal system; endocrinology; and the reproductive system.</p> <p>Practical part of physiology: Students will study most the experiments that have relationship with the blood picture.</p>		
Knowledge	A1	Urging students to identify the normal functions of the human body and compare that with abnormal imbalances.
	A2	Gaining experience and information that will help him identify the disease and know its causes.
	A3	Increasing students' knowledge of methods for examining and helping to identify some of conditions associated with blood changes through practical lectures in the laboratory
	A4	
Skills	B1	Acquiring skills in conducting some blood-related tests
	B2	Motivating the student through the expression style, thinking, and quick communication response.
	B3	Encouraging the student to solve problems and possess distinctive thinking
	B4	Relying on student interaction and brainstorming in the lecture
Value	C1	Professional preparation and promotion of positive behavior in public life
	C2	Scientific preparation and encouragement of students to communicate in other fields of science

جامعة الجليلية للبيات

C3	Cultural preparation and refining of the student's personality
C4	Employing acquired skills for the student to become a dentist capable of Examining histological sections.

10. Teaching and Learning Strategies

1.	Lectures using Data show and power point.	4.	Electronic education
2.	Educational films	5.	Practical Examination of physiology experiments
3.	Monitors	6.	

11. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	2	(Function organization of the human body, Cell physiology, Cell membrane, Cell components, Cell Junction)	Introduction	Data show presentation and white board	Short quiz
3	2	(Diffusion passive), Carrier-mediated transport (passive or active), Vesicular transport). 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 contribute to the movement of fluid, Specialized Fluids of the Body) Edema (Types of Edema, Causes of edema, Dehydration, Types of dehydration Classification, Causes, Signs and Symptoms of Dehydrations)	Homeostasis and Transport across cell membrane	Data show presentation and white board	Short quiz
4	2	(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)	ORAL CAVITY and Salivary Glands	Data show presentation and white board	Short quiz
5	2	(Composition of Saliva, Saliva Components, Properties of Saliva, Functions of Saliva, Effect of Drugs and	Salivary function and Salivary Secretion	Data show presentation and white board	Short quiz

جامعة المغيرة

		Chemicals on Salivary Secretion, Maintenance of Tooth Integrity, The Diagnostic. Applications of Saliva and forensic uses of saliva, Disadvantages/Limitations of Saliva)			
6	2	(Composition of blood, Hematocrit, Plasma, Functions of blood), Red blood cells (Genesis of R.B.C, polycythemia, Anemia, Destruction of R.B.C.s)	Blood	Data show presentation and white board	Short quiz
7	2	(Types of W.B.C., Genesis of the leukocytes, Life span of the W.B.C, Phagocytosis, Inflammation, Leukemia's, Leukopenia)	White Blood Cells	Data show presentation and white board	Short quiz
8	2	(Formation of Hemoglobin. Iron Metabolism. Hb Compounds. Destruction of Hb. The common causes of jaundice)	Hemoglobin	Data show presentation and white board	Short quiz
9	2	(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)	Blood Groups	Data show presentation and white board	Short quiz
10	2	(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)	Hemostasis and blood coagulation	Data show presentation and white board	Short quiz
11	2	(Heart: Layers, Valves, Actions of	Cardiovascular system:	Data show presentation	Short quiz

جامعة المغيرة

		heart, Blood Vessels, Division of circulation, Properties of Cardiac Muscle, Action Potential and Ionic Basis, Conductive system of Human Heart)	Blood vessels	and white board	
12	2	(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)	Cardiovascular system: Blood pressure	Data show presentation and white board	Short quiz
13	2	(Electrocardiogram, Hemorrhage, Circulatory Shock and Heart Failure, Cardiovascular Adjustments during Exercise)	Cardiovascular system (Electrocardiogram)	Data show presentation and white board	Short quiz
14	2	(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)	Respiratory system	Data show presentation and white board	Short quiz
15	2	(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)	Respiratory system: Lung volumes and capacities	Data show presentation and white board	Short quiz
16	2	(Structure of Eye, Visual Process and	Special sensation: Vision Hearing, taste & smell	Data show presentation and white board	Short quiz

جامعنا للمعلمات

		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)			
17	2	Examination	Examination	Data show presentation and white board	Short quiz
18	2	(Normal body Temperatures, Physiological Variations of body temperature, Heat Balance, Heat gain or heat production in the body, Heat loss fro the body, Insulator System of the Body, Blood flow to the skin from the body core provides heat transfer, Regulation of bod temperature, Mechanisms to decrease or increase body temperature, Sympathetic "Chemical" Excitation of heat production)	Temperature of the Body	Data show presentation and white board	Short quiz
19	2	(Parts of Renal system, The Kidney, Functions of kidneys, Components of kidney, Parenchyma of kidney, Nephron and Juxtglomerular Apparatus, Renal corpuscle, Structure of renal corpuscle, Tubular portion of nephron, Collecting duct)	Urinary system	Data show presentation and white board	Short quiz
20	2	(Mechanism of urine formation, Glomerul Filtration, Pressure determining filtration, Tubular Reabsorption, Tubular secretion. Micturition, Nerve supply to urinary bladder and sphincters, Renal Function Tests, Relation between renal disease & oral health)	Urinary system: Urine formation	Data show presentation and white board	Short quiz

جامعة المغيرة

21	2	(Introduction, Endocrine glands, Hormone 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)	Endocrine system	Data show presentation and white board	Short quiz
22	2	(Oral manifestations of endocrine dysfunction, Control Systems Involving Hypothalamus and Pituitary glands, The pituitary gland, Thyroid gland, Pancreas gland, Adrenal glands)	Major Endocrine Gland	Data show presentation and white board	Short quiz
23	2	(The Functions of the digestive, Structural layers of digestive, Stomach, Secretions of the Stomach. Regulation of Stomach Secretion, Mixing of Stomach Contents, Stomach Emptying)	Digestive system	Data show presentation and white board	Short quiz
24	2	(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)	Digestive system	Data show presentation and white board	Short quiz
25	2	(Types, Structure, Microscopic Structure, Muscle Physiology, Properties, Contractile and contractile elements, Tone, Electrical and Molecular Changes during Muscular Contraction)	Muscular system: Muscle structure	Data show presentation and white board	Short quiz
26	2	(Molecular Changes During Muscular Contraction, Neuromuscular Junction- Neuromuscular Transmission and Blockade)	Muscular system: Tone, contraction	Data show presentation and white board	Short quiz

جامعة المغيرة

		Nutrition and Metabolism (Energy Requirements)			
27	2	(Nervous System Division, Cranial nerves Neuron and Neuroglia, Receptors, Nerve impulse, Synapse and Neurotransmitters)	Nervous System: Nerve impulse, synapses	Data show presentation and white board	Short quiz
28	2	(Reflex Activity, Somatosensory System and Somatomotor System, Physiology of Pain)	Nervous System	Data show presentation and white board	Short quiz
29	2	(Male Reproductive System Female Reproductive System, Meiosis, Aging and Reproductive system.	Reproductive system: Aging & reproductive system	Data show presentation and white board	Short quiz
30		(Body Response in high altitudes, physiological Changes in the Sea deep). Nutrition and metabolism (daily energy requirement, obesity and fitness)	Aviation and Deep physiology		

12. Course Evaluation

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

Distribution of the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily exams, oral, monthly, written and records

Includes:

1. Daily and term exams
2. Mid-term exam

Final exam (theory and practical)

No	Evaluation methods	Grading Distribution
1	%25The first + the second semester	Theoretical 10% Practical 15%
2	Midyear exam 15%	Theoretical 15%
3	Final exam 60%	Theoretical 40% Practical 20%
4	100%	Theoretical 65% Practical 35%

13. Learning & Teaching Resources

Required textbooks (curricular if any)	Essentials of physiology for Dental Students. K Sembulingam A TEXTBOOK OF PRACTICAL PHYSIOLOGY. CL Ghai
Main References (sources)	Essentials of Medical Physiology. K Sembulingam and Prema Sembulingam.
Recommended Books & References (Scientific Journals, Reports ...)	Guyton and Hall Textbook of Medical Physiology. John E. Hall. Ganong's Review of Medical Physiology
Websites or Electronic References	

Course Description (1)

1. Course Title		Computer Science
2. Course Code		050106
3. Semester/Year		1 st and 2 nd semesters/ 1 st Year
4. Description Preparation Date		2025-9-22
5. Available Attendance Form		Weekly attendance
6. No. of Hours (Total)		30 hr. theoretical
7. No. of Credits (Total)		2 Units
8. Course Administrator Name		Furqan Tahseen Hussein
9. E-mail		Furqan.t@albayan.edu.iq
10. Course Objectives		
Knowledge	A1	Introduction to computers as indispensable tools in the modern civilization, types and applications of computers in various activities of civilized people. Basic knowledge about hardware, software and data processing.
	A2	Importance of acquisition, organization, analysis, exchanging, storage and recalling of information quickly and easily, taking into account that more quantity and better quality of information is the base of good knowledge.
	A3	Introduction to the technology of interconnecting people via networks using modern computers, including internet and world-wide web.
	A4	Computer applications in medical field, particularly in dentistry.
Skills	B1	Basic skills of computer driving and using of Windows operating system
	B2	Practicing Office package applications, especially text editing and word processing, presentation, and to format, organize and calculate data in a spreadsheet.
	B3	
	B4	
Values	C1	Efficient use of computers and information
	C2	Decent use of information in compliance with legal and moral values
	C3	Self-responsibility and collective cooperation relating to personal and institutional security information.
	C4	
11. Teaching and Learning Strategies		
1.	Lecture Notes using data show and white board	4. Practical exercises on computers in computer lab

جامعة عين شمس

2.	Demonstration using data show	5.	
3.	Brainstorming	6.	

12. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	3	What is a Computer – An Introduction	Basics of computers	Classroom lecture and lab	Quiz and lab exercise
2	3	Computer structure and performance	Basics of computers	Classroom lecture and lab	Quiz and lab exercise
3	3	Computer Input and Out Put Devices	Basics of computers	Classroom lecture and lab	Quiz and lab exercise
4	3	The Windows 10 Interface Desktop layout such as icons, shortcuts, taskbar and other tools	Operating systems, Windows 10	Classroom lecture and lab	Quiz and lab exercise
5	3	Auto-Hide Task Bar - Task bar controlling - Opening and searching for Programs	Windows 10	Classroom lecture and lab	Quiz and lab exercise
6	3	What is a window Opening a window, maximizing, restoring, minimizing and closing a window	Windows 10	Classroom lecture and lab	Quiz and lab exercise
7	3	Dialogue box, check box and radio button	Windows 10	Classroom lecture and lab	Quiz and lab exercise
8	3	Files & folders management Folder creating, naming, saving, copying, moving and deleting	Windows 10	Classroom lecture and lab	Quiz and lab exercise
9	3	Types of files, filename, address and extension	Windows 10	Classroom lecture and lab	Quiz and lab exercise
10	3	Microsoft Office 2019 Introduction, Word 2019, PowerPoint 2019, Excel 2019, Access 2019, etc.	Microsoft Office 2019	Classroom lecture and lab	Quiz and lab exercise
11	3	Word 2019 – Introduction	Microsoft Office 2019 Word 2019	Classroom lecture and lab	Quiz and lab exercise
12	3	PowerPoint 2019 – Introduction	Microsoft Office 2019 PowerPoint 2019	Classroom lecture and lab	Quiz and lab exercise
13	3	Windows 10 libraries and control panel	Windows 10	Classroom lecture and lab	Quiz and lab exercise
14	3	Printing and presenting files	Windows 10	Classroom lecture and lab	Quiz and lab exercise

جامعة الكويت

		Types of printers Data show			
15	3	How does the computer think and work? Arithmetic & Logical operations	Basics of computers	Classroom lecture and lab	Mid exam (theoretical)
16	3	Starting Word 2019 Components of Word 2019 Ribbon, Tabs, Groups and Commands	Word 2019	Classroom lecture and lab	Quiz and lab exercise
17	3	The main tabs are in Word File, Home, Insert, Design, Page Layout, References, Mailings, Review, View, and Help.	Word 2019	Classroom lecture and lab	Quiz and lab exercise
18	3	Adding and editing texts, tables, shapes and other objects in English	Word 2019	Classroom lecture and lab	Quiz and lab exercise
19	3	Adding and editing texts, tables, shapes and other objects in Arabic	Word 2019	Classroom lecture and lab	Quiz and lab exercise
20	3	Inserting Greek, mathematical and special characters	Word 2019	Classroom lecture and lab	Quiz and lab exercise
21	3	Starting PowerPoint 2019 Components of PowerPoint 2019	PowerPoint 2019	Classroom lecture and lab	Quiz and lab exercise
22	3	Importing text to create slides Manually creating slides Removing blank slides Changing blank slides	PowerPoint 2019	Classroom lecture and lab	Quiz and lab exercise
23	3	Starting and closing the master slide Adding new slides	PowerPoint 2019	Classroom lecture and lab	Quiz and lab exercise
24	3	Adding text to individual slides, Adding bullet points, images, clip art and images from your computer to individual slides	PowerPoint 2019	Classroom lecture and lab	Quiz and lab exercise
25	3	Adding presenter notes Adding animation effects to slide objects Showing evidence of animation effects Adding slide transitions	PowerPoint 2019	Classroom lecture and lab	Quiz and lab exercise
26	3	Starting Excel	Excel 2019	Classroom lecture and lab	Quiz and lab exercise

جامعة الكويت

		Using the Shortcut on the Desktop, Taskbar, Start and Search			
27	3	Excel elements, Interface Elements, Worksheet Elements, The Ribbon Tabs, Mini Toolbar and Shortcut Menu	Excel 2019	Classroom lecture and lab	Quiz and lab exercise
28	3	Opening and Viewing Workbooks Opening an Existing Workbook Opening a Recent Workbook Opening Multiple Workbooks	Excel 2019	Classroom lecture and lab	Quiz and lab exercise
29	3	Selecting Cells, Single Cell, Selecting a Cell Range, Selecting a Row or Column, Selecting a Range of Rows or Columns, Selecting a Range of Adjacent Data, Selecting Noncontiguous Ranges Selecting an Entire Worksheet Deselecting Cells	Excel 2019	Classroom lecture and lab	Quiz and lab exercise
30	3	Creating and saving a Workbook Creating a Formula, Creating a Function Formula, AutoSum Formatting a Worksheet	Excel 2019	Classroom lecture and lab	Final exam (theoretical and practical)

13. Course Evaluation

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

1. Total score of both semesters 1st & 2nd: 25 (10 for written & 15 for practical)
 2. Mid exam (written): 15
 3. Year endeavor: 40 (Sum of 1. & 2. above)
 4. Final exam: 60
(35 for written exam & 25 for final practical exam)
- Total score: 100**

14. Learning & Teaching Resources

Required textbooks (curricular if any)	<ul style="list-style-type: none"> • Lecture Notes “Computer Basics Part 1” • Lecture Notes “Arithmetic and Logical Operations” • Lecture Notes “Computer Basics Part 2”
Main References (sources)	<ul style="list-style-type: none"> • CSCA0101 Computing Basics • Microsoft® Computer Basics Student Edition Complete 2003 • Microsoft Windows 10 step by step, Joan Lambert • Learn Microsoft Office 2019, Linda Foulkes
Recommended Books & References (Scientific Journals, Reports ...)	
Websites or Electronic References	



Course Description (1)

1. Course Title	Arabic	
2. Course Code	050107	
3. Semester/Year	Seasonal / season 1 and Season 2	
4. Description Preparation Date	2025/9/22	
5. Available Attendance Form	Daily attendance according to the lecture schedule	
6. No. of Hours (Total)	60 Hours	
7. No. of Credits (Total)	1	
8. Course Administrator Name	Majid Mrayeh Salbookh	
9. E-mail	majid.m@albayan.edu.Iq	
Course Objectives		
10.	The student should be familiar with the principles and rules of the Arabic language	
Knowledge	A1	The program aims to raise the student's ability to the level of understanding In the field of language
	A2	. Enabling students to obtain knowledge in the origins of speech and sentences.
	A3	Enabling students to obtain knowledge in ancient and modern poetry and prose and their types
	A4	
Skills	B1	Teaching the student how to become able to use eloquent linguistic methods
	B2	. Teaching the student to analyze understand, deduce, and employ the prescribed curriculum vocabulary,
	B3	: Students acquire the skill of writing sentences correctly
	B4	Students gain the ability to pronounce letters correctly

Values	C1	The skill of reading, criticizing and judging texts
	C2	The skill of verbal and written communication with others
	C3	The skill of researching linguistic and literary sources
	C4	Promoting scientific research in the field of the Arabic language and its sciences and preparing linguistic and literary studies and research

11. Teaching and Learning Strategies

1.	ELECTRONIC LECTures	4.	Theoretical lectures in the form of recitation
2.	Asking questions and opening the door to dialogue	5.	Summarizing lectures with emphasis on vocabulary
3.	Assigning the student to reports	6.	The mission

12. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	1	Introduction to the Arabic language	auction marks	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	A quick session with the students at the end of the lecture
2	1	The student should be able to formulate behavioral goals and formulate a question that achieves the goal	How to write hamza	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
3	1	Know and understand	Sections of speech	Explanation of theoretical lectures from the teaching	Question within the lecture

جامعة الكويت

				subject using modern teaching and presentation methods	
4	1	Identifying linguistic and literary problems among students	Original and subsidiary grammatical .signs	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Question within the lecture
5	1	Know and understand	Free poetry	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
6	1	It explains the conditions of the past tense verb and the conditions of the imperative verb	The Inflected and Inflected form of verbs	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
7	1	Know and understand	The built and the Arabized are nouns	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
8	1	Know and understand	The adjective	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
9	1	Know and understand	Sections of the nominal and verbal sentence	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
10	1	Know and understand	Interrogative	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing

جامعة الكويت

11	1	Know and understand	Passive verb	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
12	1	Know and understand	Active verb	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
13	1	Know and understand	Teacher	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
14	1	Identifying the role of motivation in the learning process, contemporary reading of linguistic and literary texts	Negation	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Asking questions and answering them from the student
15	1	Know and understand	Nazik al-Malaika	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
16	1	Know and understand	Jeweler	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
17	1	Know ing the signs of jazm	Ahmad Shawqi	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing

جامعہ العالیہ اسلامیات

18	1	Know and understand	Present tense verb	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
19	1	Know ing the signs of the accusative	Badr Shaker Sayyab	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
20	1	To differentiate	Accusative present tense verb	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
21	1	Know and understand	'The bound ta' and the open ta	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
22	1	Analyzing and explaining texts	Pendants	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
23	1	Know and understand	Literary texts	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
24	1	Know and understand	Correct and incorrect verbs	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
25	1	Know and understand	Modern poetic schools	Explanation of theoretical lectures from the teaching	Daily testing

جامعة الكويت

				subject using modern teaching and presentation methods	
26	1	Knowledge and understanding of meanings rhetoric and aesthetics	Emphasis	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
27	1	Know and understand	The art of eloquence	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
28	1	Knowing the language interference or transfer of the mother tongues phonetic habits	Ancient poetic arts	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
29	1	To differentiate	Dhaad and Dhaa	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing
30	1	Know and understand	Characteristics of literature	Explanation of theoretical lectures from the teaching subject using modern teaching and presentation methods	Daily testing

13. Course Evaluation

Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc. Attendance and participation 5% Daily 5% Monthly exam 20% Final exam %70 Final grade 100%

14. Learning & Teaching Resources

Required textbooks (curricular if any)	Methodical books/help books
Main References (sources)	Basic texts prepared by the subject teacher
Recommended Books & References (Scientific Journals, Reports ...)	Reports/periodicals and scientific journals
Websites or Electronic References	International Information Network (Internet)

جامعۃ البیان

Surgery Department
course


جامعة البيان
Course Description (1)

1. Course Title	General human anatomy 2 nd
2. Course Code	050206
3. Semester/Year	Annual
4. Description Preparation Date	21\9\2025
5. Available Attendance Form	Lectures & Labs
6. No. of Hours (Total)	30 hours of Theoretical + 60 hours of practical
7. No. of Credits (Total)	4
8. Course Administrator Name	Name: lec.dr dina ahmed mahde
9. E-mail	Dina.a@albayan.edu.iq

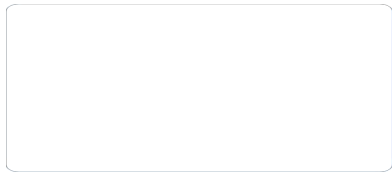
10. Course Objectives

Knowledge	A1	Enable students to learn about human anatomy, especially the head and neck,
	A2	focus on knowing the locations of vital structures (nerves and blood vessels)
	A3	their direct relationship in the oral and maxillofacial area and his specialization as a dentist
	A4	Depending on the practical side, means of illustration and explanatory videos, and encouraging the student to connect human anatomy with his work as a dentist.
Skills	B1	Asking orally questions to students through which the student connect the anatomy material with each other and connect it to student specialty as a dentist.
	B2	Acquirement full knowledge of the organs of the human body and focus on the head and neck area.
	B3	Motivating the student through thinking and speed of response in understanding to facilitate memorizing the material.
	B4	Depending on the practical side, means of illustration and explanatory videos, and encouraging the student to connect human anatomy with his work as a dentist.
Values	C1	Preparing students practically in terms of developing the knowledge gained in human anatomy in his work as a dentist.

	C2	Thinking about solving problems and how to avoid them. Teaching professional ethics
	C3	Developing the acquired skills of the student to become a dentist capable of treating patients and solving problems related to the knowledge of oral and maxillofacial anatomy to avoid their occurrence.
	C4	Developing the student's ability to deal with multiple means of learning.

11. Teaching and Learning Strategies

1.	Theoretical lectures using slides on screens.	4.	Practical lessons on anatomical models
2.	Educational films and brief explanatory videos.	5.	
3.	Student discussion groups.	6.	



12. The Structure of the Course

Week	Hours	Topic/Subject Name	RLOs	Learning method	Evaluation method
1+2	2	Scalp	<ul style="list-style-type: none">• Layers of the scalp• Muscles of the scalp• Sensory Nerve Supply of the Scalp• Arterial Supply of the Scalp• Venous Drainage of the Scalp• Lymph Drainage of the Scalp• Clinical Notes	Theoretical lecture using Data Show	Daily Theory Quiz
3+4	2	The orbital region	<ul style="list-style-type: none">• Eyelids• Movements of the Eyelids• Lacrimal Apparatus• Openings into the Orbital Cavity• Nerves of the Orbit• Blood and Lymph Vessels of the Orbit• Structure of the Eye• Clinical Notes	Theoretical lecture using Data Show	Daily Theory Quiz
5	1	The Nasal region	<ul style="list-style-type: none">• The Nose• External Nose• Nerve Supply of the External Nose• Blood Supply and Venous Drainage of the External Nose	Theoretical lecture using Data Show	Daily Theory Quiz



			<ul style="list-style-type: none">• Nasal Cavity• Mucous Membrane of the Nasal Cavity• Nerve Supply of the Nasal Cavity• Blood Supply to the Nasal Cavity• Venous Drainage of the Nasal Cavity• Lymph Drainage of the Nasal Cavity• The Paranasal Sinuses• Drainage of Mucus and Functions of Paranasal Sinuses• Clinical Notes		
6	1	Mandibular nerve	<ul style="list-style-type: none">• Introduction• Branches of the Mandibular Nerve• Otic Ganglion• Clinical Notes	Theoretical lecture using Data Show	Daily Theory Quiz
7+8	2	Face	<ul style="list-style-type: none">• Skin of the Face• Muscles of the Face (Muscles of Facial Expression)• Sensory Nerves of the Face• Arterial Supply of the Face• venous driange of the Face• venous driange of the Face• Lymphatic driange of the face• Facial nerve	Theoretical lecture using Data Show	Daily Theory Quiz
9+10	2	Oral cavity	<ul style="list-style-type: none">• The Lips• The oral Cavity vestibule and Proper Sensory innervation of the Mouth Hard Palate & Soft palate	Theoretical lecture using Data Show	Daily Theory Quiz

			<ul style="list-style-type: none"> • Muscles of the Soft Palate Palatoglossal Arch & Palatopharyngeal Arch 		
11	1	Tongue	<ul style="list-style-type: none"> • Mucous Membrane of the Tongue • Muscles of the Tongue • Movements of the Tongue 	Theoretical lecture using Data Show	Daily Theory Quiz
12	1	Temporal region	<ul style="list-style-type: none"> • The temporal fossa anatomy • The infratemporal fossa • Communications • Muscles of mastication 	Theoretical lecture using Data Show	Daily Theory Quiz
13+14	2	Parotid gland	<ul style="list-style-type: none"> • Parotid Region (Boundaries) • Parotid Gland • Parotid Duct • Innervation of Parotid Gland and Related Structures • Arterial Supply • Venous Drainage • Lymph Drainage • The Buccal Pad of Fat • Clinical Notes 	Theoretical lecture using Data Show	Daily Theory Quiz
15	1	The Pterygopalatine fossa	<ul style="list-style-type: none"> • Boundaries, Communications and openings • Maxillary nerve • Branches from the pterygopalatine ganglion • THE PTERYGOPALATINE GANGLION • THE VEINS OF THE PTERYGOPALATINE FOSSA 	Theoretical lecture using Data Show	Daily Theory Quiz

16+17	2	Temporomandibular joint	<ul style="list-style-type: none"> • Introduction • The Articular Disk • Retrodiscal Tissue • Capsule • Synovial Membrane • Ligaments • Nerve Supply • Vascular Supply • Movements • Important Relations of the Temporomandibular Joint • Clinical Notes 	Theoretical lecture using Data Show	Daily Theory Quiz
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18+19	2	The neck	<ul style="list-style-type: none"> • Overview • Skin of the Neck • Fasciae of the Neck • Superficial Cervical Fascia • Deep Cervical Fascia • Cervical Ligaments • Muscles of the Neck • Cervical Plexus • Bones of Neck • Blood Supply • Key Neck Muscles 	Theoretical lecture using Data Show	Daily Theory Quiz
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20+21	2	Triangles of the neck	<ul style="list-style-type: none"> • ANTERIOR TRIANGLE • SUBMENTAL TRIANGLE • SUBMANDIBULAR TRIANGLE • CAROTID TRIANGLE • MUSCULAR TRIANGLE 	Theoretical lecture using Data Show	Daily Theory Quiz
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			<ul style="list-style-type: none"> • Posterior Triangle • Thyroid Gland • blood supply & venous drainage • nerve supply 		
22	1	Submandibular region	<ul style="list-style-type: none"> • MUSCLES OF THE SUBMANDIBULAR REGION • The submandibular gland • Sublingual Gland 	Theoretical lecture using Data Show	Daily Theory Quiz
23+24	2	Root of the neck	<ul style="list-style-type: none"> • Muscles of the Root of the Neck • The Thoracic Duct • Main Nerves of the Neck • Cervical Plexus & Brachial Plexus • Lymph Drainage of the Head and Neck • Veins of the Head and Neck 	Theoretical lecture using Data Show	Daily Theory Quiz
25+26	2	Arteries of the neck	<ul style="list-style-type: none"> • Common Carotid Artery • Carotid Sinus • Carotid Body • External Carotid Artery • Internal Carotid Artery • Subclavian Arteries (3 parts) • Circle of Willis 	Theoretical lecture using Data Show	Daily Theory Quiz
27	1	Brain	<ul style="list-style-type: none"> • 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 	Theoretical lecture using Data Show	Daily Theory Quiz



			<ul style="list-style-type: none">• Dural Nerve Supply• Dural Arterial Supply Dural Venous DrainageClinical Focus		
28	1	Cranial nerves	<ul style="list-style-type: none">• Introduction• Functional Components• Summary of cranial nerves	Theoretical lecture using Data Show	Daily Theory Quiz
29	1	Pharynx	<ul style="list-style-type: none">• Muscles of the Pharynx• Pharynx divisions• Palatine Tonsils• Waldeyer's Ring of Lymphoid Tissue	Theoretical lecture using Data Show	Daily Theory Quiz
30	1	Larynx	<ul style="list-style-type: none">• 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	Theoretical lecture using Data Show	Daily Theory Quiz

1. Course Evaluation

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

Daily quiz for theoretical subject -1

Oral questions -2

Degree of attendance -3

Mid-year exam -4

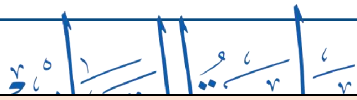
Final Exam -5

2. Learning & Teaching Resources

Required textbooks. (curricular if any)	Snell's clinical anatomy 10 th edition Netter's head and neck anatomy 3 rd edition
Main References (sources)	Snell's clinical anatomy 10 th edition Netter's head and neck anatomy 3 rd edition Gray's anatomy for students 4 th edition Atlas of clinical cross anatomy 2 nd edition
Recommended Books & References (Scientific Journals, Reports ...)	Read recent research in academic publishing journals
Websites or Electronic References	Google scholar, research gates.


Course Description (1)

172. Course Title	General surgery	
173. Course Code	050408	
174. Semester/Year	year	
175. Description Preparation Date	21\9\2025	
176. Available Attendance Form	Theory	
177. No. of Hours (Total)	30 hours Theoretical	
178. No. of Credits (Total)	2	
179. Course Administrator Name	Lec.dr ahmed saeed hamd	
180. E-mail	Ahmed.sae@albayan.edu.iq	
181. Course Objectives		
Knowledge	A1	The student is at an advanced level in the field of general surgery, including recognizing general surgical cases
	A2	methods of diagnosis and treatment, and their relationship with their specific field as a dentist.
	A3	They should be familiar with surgical emergencies and how to handle them.
	A4	fundamentals of general surgery.
Skills	B1	Acquiring knowledge about general surgical cases, their diagnosis, and treatment
	B2	Essential diagnostic methods
	B3	emergency case management
	B4	, surgical complications management
Values	C1	specific skills related to the topic,
	C2	including specialized diagnostic techniques,



	C3	types of laboratory tests, and radiology relevant to surgical cases.
	C4	Qualifying students to examine, diagnose and treat patientst

182. Teaching and Learning Strategies

1.	Lectures using data show and power point	4.	E-learning
2.	Educational films	5.	Blackboards
3.	Display screens	6.	.Student discussion groups

183. The Structure of the Course

Week	Hours	Topic/Subject Name	RLOs	Learning Method	Evaluation Method
1+2	2	Metabolic response to injury	<ul style="list-style-type: none"> • 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 	Data show &whiteboard	Quiz
3+4	2	Wound healing	<ul style="list-style-type: none"> • Introduction • Classification of wound Healing Normal sequence of wound Healing • Factors affecting healing (local & systemic) Complications of wound healing 	Data show &whiteboard	Quiz

جامعة البتة

5+6	2	Surgical wound and infections	<ul style="list-style-type: none"> • • 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 	Data show &whiteboard	Oral quiz
7+8	2	Hemorrhage	<ul style="list-style-type: none"> • 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 	Data show &whiteboard	Quiz
9+10	2	Shock	<ul style="list-style-type: none"> • Introduction Pathophysiology 	Data show &whiteboard	Quiz

جامعة البتاني

			<ul style="list-style-type: none"> • <i>Ischemia-reperfusion syndrome</i> Classification of shock Consequences • <i>Unresuscitatable shock</i> Multiple organ failure RESUSCITATION • Fluid therapy • Monitoring • End points of resuscitation 		
11+12	2	Blood transfusion	<ul style="list-style-type: none"> • 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 	Data show &whiteboard	Home work
13+14	2	Parenteral feeding	<ul style="list-style-type: none"> • Introduction Route of delivery Peripheral • central venous access • Complications of parenteral nutrition Refeeding syndrome 	Data show &whiteboard	Home work
15+16	2	Fluid	<ul style="list-style-type: none"> • Fluid balance • Abnormalities of body water Fluid overload and oedema Abnormalities of 	Data show &whiteboard	Quiz

جامعة البتة

			<p>electrolytes replacement</p> <ul style="list-style-type: none"> • Acid-base balance • Abnormalities of acid-base balance 		
17+18	2	Fluid and electrolytes balance	<p>Fluid balance</p> <ul style="list-style-type: none"> • Electrolytes balance Introduction • Principles of electrolyte balance Normal homeostasis • Barriers between compartments, osmolality and electrolyte concentrations • Homeostatic mechanisms 	Data show &whiteboard	Report
19+20	2	Head injury	<ul style="list-style-type: none"> • 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 	Data show &whiteboard	Quiz
21	1	Preoperative preparation (History Taking)	<ul style="list-style-type: none"> • Introduction to the Patient • History of the presenting Complaint • Relevant medical history 	Data show &whiteboard	Quiz

جامعة البتة

			<ul style="list-style-type: none"> • Family history Drug therapy Social history Allergies • Common surgical symptoms • Terms used in General Surgery and History Taking 		
22	1	Anesthesia and pain	<ul style="list-style-type: none"> • HISTORY • GENERAL ANAESTHESIA • Management of airway during 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 	Data show short movie	Discussion group
23+24	2	Perioperative care	<ul style="list-style-type: none"> • 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 	Data show short movie	Discussion group

جامعة البتة

			<ul style="list-style-type: none"> Ischemic heart disease Respiratory failure <p>SPECIFIC Strategies</p>		
25	1	Postoperative care	<ul style="list-style-type: none"> SYSTEM-SPECIFIC POSTOPERATIVE COMPLICATIONS Respiratory complications Cardiovascular complications Renal and urinary complications COMPLICATIONS RELATED TO SPECIFIC SURGICAL SPECIALTIES <i>Paralytic ileus</i> <i>Compartment syndrome</i> Neck surgery Neurosurgery 	Data show short movie	Discussion group
26+27	2	GENERAL POSTOPERATIVE PROBLEMS AND MANAGEMENT	<ul style="list-style-type: none"> Nausea and vomiting Bleeding Deep vein thrombosis Hypothermia and shivering Fever Pressure sores Drains Wound care Wound dehiscence DISCHARGE OF PATIENTS 	Data show short movie	Discussion group
28	1	Day case surgery	<ul style="list-style-type: none"> Definition SELECTION CRITERIA PREOPERATIVE ASSESSMENT SURGERY 	Data show short movie	Discussion group

جامعة البتراء

			<ul style="list-style-type: none"> • DISCHARGE 		
29	1	Surgical ethics and law	<ul style="list-style-type: none"> • INTRODUCTION INFORMED CONSENT • MATTERS OF LIFE AND DEATH CONFIDENTIALITY • RESEARCH 	Data show short movie	Discussion group
30	1	Patient safety	<ul style="list-style-type: none"> • INTRODUCTION • THE PREVALENCE OF ADVERSE HEALTHCARE EVENTS COMMON CAUSES OF ADVERSE HEALTHCARE EVENTS PATIENT SAFETY AND THE SURGEON • CARING FOR THE SECOND VICTIM 	Data show short movie	Discussion group

184. Course Evaluation

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

1 st and 2 nd semester 25%	Theoretical 10% Clinical 15%
Mid year exam	Theoretical 15%
Final exam	Theoretical 40% Clinical 20%
100%	Theoretical 65% Clinical 35%

185. Learning & Teaching Resources

Required textbooks (curricular if any)	1. Baily and Love's short practice of surgery 25th edition 2008. 2. Schwarz principles of surgery.
Main References (sources)	
Recommended Books & References (Scientific Journals, Reports ...)	New articles from journals
Websites or Electronic References	Articles from goggle scholar and pupmed


Course Description (1)

186. Course Title	periodontics/ fifth grade	
187. Course Code	050507	
188. Semester/Year	year	
189. Description Preparation Date	21\9\2025	
190. Available Attendance Form	lectures, clinics	
191. No. of Hours (Total)	30 hrs theoretical, 90 hrs clinical 4.5 units	
192. No. of Credits (Total)	4.5	
193. Course Administrator Name	Manar ibrahim ahmed	
194. E-mail	manar.i@albayan.edu.iq	
195. Course Objectives		
Knowledge	A1	- Gaining experience and information that will help him identify the disease and know its causes
	A2	Developing motivational interviewing skills to encourage patients to take preventive measures
	A3	Increasing the student's knowledge of methods for examining teeth and detecting car and gingivitis, based on factors such as oral hygiene and habits
	A4	,Learn how to assess patients' risks of dental diseases, including dietary diseases tobacco use, and chronic diseases
Skills	B1	Motivating the student through the style of expression,thinking, and speed of communication and response
	B2	Urging the student to solve problems and possess distinctive thinking
	B3	The lecture depends on student interaction and brainstorming
	B4	Qualifying students to examine, diagnose and treat patients



Values	C1	Acquiring skills in conducting clinical examinations for early detection of periodontal diseases
	C2	Developing motivational interviewing skills to encourage patients to take preventive measures
	C3	Identify the indicators and techniques for applying gum disease treatments and the correct methods for using chemical and mechanical prevention methods
	C4	Qualifying students to examine, diagnose and treat patients

196. Teaching and Learning Strategies

1.	Lectures using data show and power point	4.	E-learning
2.	Educational films	5.	Blackboards
3.	Display screens	6.	Student discussion groups

197. The Structure of the Course

Week	Hours	Topic/Subject Name	RLOs	Learning Method	Evaluation Method
1	1	Periodontal examination and diagnosis	<ul style="list-style-type: none"> - Overall appraisal of the patient - Medical history - Dental history: <ul style="list-style-type: none"> o Chief complaint - Photographic documentation - Clinical Examination: <ul style="list-style-type: none"> o Extraoral examination o Intraoral examination o Examination of the periodontium o Visual examination of biofilm and calculus o Visual examination of the gingiva - Probing force and angulation - Periodontal examination: <ul style="list-style-type: none"> o Suppuration o Probing depth o Probing around implants o Bleeding on probing 	Data show & whiteboard	Quiz
2	1	Bone loss and patterns of bone destruction	<ul style="list-style-type: none"> - Bone destruction caused by the extension of gingival inflammation: <ul style="list-style-type: none"> o Histopathology o Rate of bone loss 	Data show & whiteboard	Quiz

جامعة البيان

			<ul style="list-style-type: none"> ○ Mechanisms of bone destruction - Bone destruction caused by trauma from occlusion - Bone destruction caused by systemic disorders - Factors determining bone morphology in periodontal disease: ○ Normal variation in alveolar bone ○ Exostoses ○ Trauma from occlusion ○ Buttressing bone formation ○ Food impaction - Bone destruction patterns in periodontal disease: ○ Horizontal bone loss ○ Vertical or angular defects ○ Osseous craters ○ Bulbous bone contours ○ Reversed architecture ○ Ledges ○ Furcation involvement 		
3	1	Radiographic aids in the diagnosis of periodontal disease	<ul style="list-style-type: none"> - Normal interdental bone - Radiographic techniques - Bone Loss: <ul style="list-style-type: none"> ○ Amount ○ Distribution - Radiographic appearance of periodontal disease <ul style="list-style-type: none"> ○ Periodontitis 	Data show & whiteboard	Oral quiz

جامعة البيان

			<ul style="list-style-type: none"> ○ Interdental craters ○ Furcation involvement ○ Periodontal abscess ○ Clinical probing ○ Trauma from occlusion - Digital intraoral radiography 		
4	1	Learn about the new and advanced methods of diagnosis	<p>diagnosis</p> <ul style="list-style-type: none"> - Objectives of diagnosis - Advances in periodontal probing - Generations of periodontal probes: <p>First-generation (conventional) probes</p> <ul style="list-style-type: none"> ○ Second-generation (constant-pressure) probes i- Pressure-sensitive probe ii- Electronic pressure-sensitive (Yeaple) probe ○ Third-generation (automated) probes: i- Foster-Miller probe ii- Florida Probe® iii- Toronto Automated probe iv- InterProbe™ ○ Fourth-generation probes: i- Three-dimensional (3D) probes ○ Fifth-generation probes: i- UltraSonographic (US) probe 	Data show & whiteboard	Quiz

جامعة البيان

			<ul style="list-style-type: none">- Advances in microbiologic/biochemical analyses<ul style="list-style-type: none">○ Conventional culture techniques○ Molecular biology techniques:<ul style="list-style-type: none">i- DNA-analysis methodii- Checkboard DNA-DNA hybridizationiii- Polymerase Chain Reaction (PCR)○ Immunologic-based tests for putative pathogens:<ul style="list-style-type: none">i- Immunofluorescent microscopyii- ELISAiii- Flow cytometryiv- Latex agglutination testv- Microbiologic enzyme assay- Advances in characterizing host response<ul style="list-style-type: none">○ Assessment of the susceptible host using makers in peripheral blood○ Identification of host constituent in GCF○ Salivary biomarkers○ Subgingival temperature- Advanced Imaging Modalities<ul style="list-style-type: none">○ Conventional radiograph○ Digital radiograph○ Subtraction radiography		
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جامعة البيان

			<ul style="list-style-type: none"> ○ Computer-assisted-densitometric-image-analysis (CADIA) ○ Cone Beam Computed Tomography (CBCT) <p>§ For each section, mention the limitations for the “conventional” technique to justify using more advanced methods. For the rest of diagnostic modalities, mentioning principle of action/mechanism, advantages, and disadvantage is essential.</p>		
5	1	Learn about the external forces, traumatic occlusion and the outcomes	<p>Periodontal response to external forces</p> <ul style="list-style-type: none"> - Occlusion - Assessment of occlusion - Adaptive capacity of the periodontium to occlusal forces - Trauma from occlusion: <ul style="list-style-type: none"> ○ Classification of trauma from occlusion: i- Acute and chronic ii- Primary and secondary - Stages of tissue response to trauma from occlusion: ○ Stage I: Injury ○ Stage II: Repair ○ Stage III: Adaptive remodeling of the periodontium 	Data show & whiteboard	Quiz

جامع البیان

			<ul style="list-style-type: none"> - Relationship between plaque-induced periodontal diseases and trauma from occlusion - Clinical and radiographic signs of trauma from occlusion - Pathologic tooth migration: <ul style="list-style-type: none"> o Pathogenesis: <ul style="list-style-type: none"> i- Weakened periodontal support ii- Changes in the forces exerted on the teeth - Treatment 		
6	1	Learn the immune system, parts, reactions with periodontal tissues	<p>Immunology</p> <ul style="list-style-type: none"> - Innate immunity <ul style="list-style-type: none"> o Components of innate immunity: <ul style="list-style-type: none"> i- Saliva: <ul style="list-style-type: none"> ● Salivary peroxidase system ● Lactoferrin ● Lysozyme ii- Gingival epithelial barrier iii- Gingival crevicular fluid o Pathogen recognition and activation of cellular innate responses: <ul style="list-style-type: none"> i- Toll like receptors ii- Pro inflammatory cytokines o Cells of innate immunity: <ul style="list-style-type: none"> i- Neutrophils ii- Macrophages 	Data show & whiteboard	Home work

جامعة البيان

7	1	Learn the immune system, parts, reactions with periodontal tissue	<p>Immunology</p> <ul style="list-style-type: none"> - Adaptive immunity <ul style="list-style-type: none"> ○ Characteristics ○ Cellular elements ○ Cellular immunity to dental plaque ○ The humoral response to plaque ○ Osteo-immunology in periodontal diseases - Therapeutic Strategies 	Data show & whiteboard	Home work
8	1	Tooth mobility	<ul style="list-style-type: none"> - Introduction - Types: <ul style="list-style-type: none"> ○ Physiologic mobility ○ Pathologic mobility - Directions of movement: <ul style="list-style-type: none"> ○ Horizontal ○ Vertical - Factors influencing tooth mobility - Classification of tooth mobility - Initial & secondary tooth mobility - Sign & symptoms 	Data show & whiteboard	Quiz
9	1	Epidemiology of periodontal diseases	<ul style="list-style-type: none"> - Introduction: The need for epidemiology - Measuring the occurrence of conditions or diseases: <ul style="list-style-type: none"> ○ Prevalence ○ Risk ○ The odds ○ Incidence 	Data show & whiteboard	Report

جامعة البيان

			<ul style="list-style-type: none"> - Typical measurement of periodontal disease - True and surrogate measures of the periodontal condition - Epidemiologic study designs: <ul style="list-style-type: none"> o Randomized controlled trials o Cohort studies o Case-control studies - Suspected modifiable causative factors for periodontal disease: <ul style="list-style-type: none"> o Tobacco smoking o Nutrition o Dental plaque 		
10	1	Determination of prognosis	<ul style="list-style-type: none"> - Definitions - Types of prognosis - Overall versus individual tooth prognosis - Detrimental factors: <ul style="list-style-type: none"> o Overall clinical factors: <ul style="list-style-type: none"> i. Patient age ii. Disease severity iii. Biofilm control iv. Patient compliance 	Data show & whiteboard	Quiz

جامعة البيان

			<ul style="list-style-type: none"> o Systemic and environmental factors: <ul style="list-style-type: none"> i. Smoking ii. Systemic disease or condition iii. Genetic factors iv. Stress o Local factors <ul style="list-style-type: none"> i. Biofilm and calculus ii. Subgingival restorations 		
11	1	Interrelationships of periodontal disease and therapy with other dental disciplines	Restorative interrelationships <ul style="list-style-type: none"> - Biologic considerations: <ul style="list-style-type: none"> o Margin placement and biologic width o Biologic width evaluation o Margin placement guidelines o Marginal fit o Crown contour - Aesthetic tissue management: <ul style="list-style-type: none"> o Managing interproximal embrasures o Pontic design o Correcting open gingival embrasures Periodontal – orthodontic interaction	Data show & whiteboard	Quiz

جامعة البتاني

			<ul style="list-style-type: none"> - Orthodontic tooth movement in adults with periodontal tissue breakdown - Orthodontic treatment considerations - Periodontal surgery associated with ortho therapy Prosthodontic and Periodontic interaction 		
12	1	Periodontal surgery. General principles	<ul style="list-style-type: none"> - Rationale for periodontal surgery - Indications - Contraindication - Surgical instruments <ul style="list-style-type: none"> o Excisional and incisional instruments <ul style="list-style-type: none"> i- Periodontal knives (gingivectomy knives) ii- Interdental knives iii- Surgical blades o Surgical curettes and sickles o Periosteal elevators o Surgical chisels o Tissue forceps 	Data show short movie	Discussion group

جامعة البيان

			<ul style="list-style-type: none"> o Scissors and nippers o Needleholders o Additional instruments - Fundamentals of periodontal surgery: o Incisions: <ul style="list-style-type: none"> i- Horizontal incisions ii- Vertical incisions - Papilla management - Flap elevation 		
13	1	Sonic and ultrasonic instrumentation and irrigation	<ul style="list-style-type: none"> - Power-driven instruments: overview - Mechanism of action of power scalers - Type of power instruments - Mechanized instruments vs manual instruments - Clinical outcomes of power-driven instruments: <ul style="list-style-type: none"> o Special considerations o Root surface roughness o Aerosol production o Cardiac pacemakers - Principles of instrumentation - Power-driven devices and COVID-19- associated limitations - Irrigators: 	Data show short movie	Discussion group

جامعة البيان

			<ul style="list-style-type: none"> ○ Mechanism of action of irrigation ○ Clinical outcomes of irrigation ○ Individuals with special considerations 		
14	1	Gingivectomy and local excision	<ul style="list-style-type: none"> - Gingivectomy: <ul style="list-style-type: none"> ○ Indications and contraindication ○ Advantages and disadvantages ○ Surgical procedure - Gingivoplasty - Gingival curettage - Periodontal dressings (Periodontal Packs) <ul style="list-style-type: none"> ○ Zinc oxide-eugenol dressing ○ Non-eugenol dressing - Postoperative instructions - Management of postoperative pain 	Data show short movie	Discussion group
15	1	Flap surgery	<ul style="list-style-type: none"> - Objectives, indication, and contraindications - Flap techniques: § <ul style="list-style-type: none"> ○ Modified Widman flap ○ Undisplaced flap Apically displaced flap <ul style="list-style-type: none"> ○ Distal wedge flap ○ Papilla preservation flap - Full and partial thickness flap - Osteoplasty 	Data show short movie	Discussion group

جامعة البيان

			<p>- Suturing techniques</p> <p>§ For each surgical technique demonstrate advantage, disadvantage, and surgical technique</p>		
16	1	Mucogingival and aesthetic surgery	<p>- Objectives</p> <p>- Techniques to increase attached gingiva:</p> <p>o Gingival augmentation apical to recession: i- Free gingival graft</p> <p>ii- Free connective tissue graft iii- Apically displaced flap §</p> <p>o Gingival augmentation coronal to recession i- Free gingival graft</p> <p>ii- Subepithelial connective tissue graft iii- Pouch and tunnel technique</p> <p>- Techniques to deepen the vestibule</p> <p>- Techniques to remove the frenum:</p> <p>o Frenectomy and frenotomy:</p> <p>i- Procedure</p>	Data show short movie	Discussion group

جامعة البيان

			<ul style="list-style-type: none"> - Techniques to improve aesthetics: <ul style="list-style-type: none"> o Root coverage o Papilla reconstruction - Therapy to correct excessive gingival display: <ul style="list-style-type: none"> o Surgical techniques o Osseous surgery <p>§ This technique has been described sufficiently in previous lecture. Brief reminder of the concept and technique is only required</p>		
17	1	Furcation involvement and treatment	<ul style="list-style-type: none"> - Introduction - Anatomy of furcation area: <ul style="list-style-type: none"> o Root complex o Root trunk o Root cone o Furcation entrance - Local anatomic factors - Classification of furcation involvement - Diagnosis: <ul style="list-style-type: none"> o Clinical o Radiographic analysis - Differential diagnosis: <ul style="list-style-type: none"> o Pulpal pathologies 	Data show & whiteboard	Quiz

جامعة البيان

			<ul style="list-style-type: none"> o Trauma from occlusion - Treatment: o Objectives Scaling and root planing o Furcation plasty o Tunnel preparation o Root resection/separation, tooth division& hemisection o Tooth extraction o Treatment guidelines according to degree of involvement o Regeneration of Furcation Defects: i- Guided tissue regeneration & Bone grafting o Failures of furcation therapy - Prognosis 		
18	1	Laser therapy	<ul style="list-style-type: none"> - Laser physics and biologic interactions - Laser Types: o Diode Laser o Neodymium:Yttrium-Aluminum-Garnet Laser o Erbium:Yttrium-Aluminum-Garnet Laser 	Data show & whiteboard	Quiz

جامعة البيان

			<ul style="list-style-type: none"> ○ Er,Cr:YSGG Laser ○ CO2 Laser - Laser applications in periodontics: <ul style="list-style-type: none"> ○ Aesthetic and pre-prosthetic surgeries ○ Nonsurgical periodontal therapy: <ul style="list-style-type: none"> i- Lasers in the management of periodontitis ii- Lasers in the management of peri-implantitis - Advantages and disadvantages - Complications and risks of laser therapy <p>§ Case scenario, questions about decision whether using laser or not should be formulated</p>		
19	1	Locally delivered, controlled-release antimicrobials	<ul style="list-style-type: none"> - Objectives - Types: <ul style="list-style-type: none"> ○ Chlorhexidine-based products: <ul style="list-style-type: none"> i- Chlorhexidine chip ii- PerioCol-CG iii- Chlo-Site ○ Doxycycline-based products: <ul style="list-style-type: none"> i- Ligosan slow release ii- Doxycycline gel ○ Periodontal Plus AB ○ Minocycline Microspheres - Rationale for local delivery and controlled release - Clinical significance 	Data show & whiteboard	Quiz

جامعة البيان

			<ul style="list-style-type: none"> - Clinical indications: <ul style="list-style-type: none"> ○ Adjunctive therapy ○ Surgical therapy ○ Peri-implantitis ○ Tobacco smoking - Adverse effects 		
20	1	Management of medically compromised patients	<ul style="list-style-type: none"> - Cardiovascular diseases: <ul style="list-style-type: none"> ○ Hypertension ○ Angina pectoris ○ Myocardial infarction ○ Previous cerebrovascular accident ○ Congestive heart failure ○ Cardiac pacemakers ○ Infective endocarditis - Renal disease - Chemotherapy 	Data show & whiteboard	Quiz
21	1	Management of medically compromised patients	<ul style="list-style-type: none"> - Endocrine/metabolic disorders: <ul style="list-style-type: none"> ○ Diabetes mellitus ○ Thyroid disorders ○ Adrenal Insufficiency - Pregnancy - Hemorrhagic disorders - Blood dyscrasias - Liver diseases - Neurologic Disorders: <ul style="list-style-type: none"> ○ Epilepsy - Infectious diseases: <ul style="list-style-type: none"> ○ COVID-19 ○ Hepatitis 	Data show & whiteboard	Quiz

جامعة البتاني

			<ul style="list-style-type: none"> ○ AIDS ○ Tuberculosis 		
22	1	Gingival crevicular fluid (GCF)	<ul style="list-style-type: none"> - Introduction - Permeability of junctional and sulcular epithelia - Function - Amount: <ul style="list-style-type: none"> ○ Methods for estimating GCF amount - Composition: <ul style="list-style-type: none"> ○ Cellular elements ○ Electrolytes ○ Organic compounds - Methods of collection: <ul style="list-style-type: none"> ○ Absorbing paper strip: i- Intra-crevicular method ii- Extra-crevicular method <ul style="list-style-type: none"> ○ Crevicular washing ○ Micropipettes or capillary tubes - Cellular and humoral activity in GCF - Clinical significance: <ul style="list-style-type: none"> ○ Circadian periodicity ○ Sex hormones ○ Mechanical stimulation ○ Smoking Periodontal therapy <ul style="list-style-type: none"> - Drugs in GCF - GCF as a diagnostic/prognostic tool for periodontal disease 	Data show & whiteboard	Quiz

جامعة البيان

23	1	Dentin hypersensitivity	<ul style="list-style-type: none"> - Introduction - Epidemiology - Etiology - Theories of dentin hypersensitivity: <ul style="list-style-type: none"> o Direct innervation o Odontoblast receptor o Fluid movement/hydrodynamic - Diagnosis - Measurement methods - Prevention and management <ul style="list-style-type: none"> o Classification of desensitizing agents: i- Mode of administration ii- Mechanism of action 	Data show & whiteboard	Quiz
24	1	Tissue regeneration	<ul style="list-style-type: none"> . General principles Periodontal Wound Healing - Wound healing: Outcomes and definitions <ul style="list-style-type: none"> o Healing patterns in the periodontal tissues o Outcomes of periodontal wound healing: i- Repair ii- Reattachment iii- New attachment iv- Regeneration v- Resorption vi- Ankylosis - Phases of wound healing: <ul style="list-style-type: none"> o Inflammation phase o Granulation phase 	Data show short movie	Quiz

جامعة البتاني

			<ul style="list-style-type: none"> ○ Matrix formation and remodeling (maturation) phase - Factors that affect healing: <ul style="list-style-type: none"> ○ Local factors ○ Systemic factors - Periodontal wound healing: <ul style="list-style-type: none"> ○ Healing after nonsurgical treatment ○ Healing after periodontal surgery: i- Gingivectomy ii- Flap operation iii- Grafting procedures ○ Healing after regenerative therapy ○ Healing after implant placement: i- bone tissue interface ii- Mucosal interface 		
25	1	Learn about the indication, contraindication, advantages, disadvantages and the principles of tissue regeneration	<p>Regenerative periodontal therapy</p> <ul style="list-style-type: none"> - Regenerative capacity of bone cells - Regenerative capacity of gingival connective tissue cells - Regenerative capacity of periodontal ligament cells 	Data show short movie	Quiz

جامعة البيان

			<ul style="list-style-type: none">- Role of epithelium in periodontal wound healing- The possible outcomes of periodontal therapy- Regenerative concepts:<ul style="list-style-type: none">o Grafting procedureso Root surface biomodificationo Guided tissue regeneration- Assessment of periodontal regeneration:<ul style="list-style-type: none">o Clinical assessment i- Pocket probing.ii- Attachment level iii- Gingival indicesiv- Alveolar bone levelo Radiographic methodso Re-entry operationso Histologic methods		
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جامعة البيان

26	1	Reconstructive surgical techniques	<p>o Non- bone graft associated new attachment:</p> <p>i- Principles</p> <p>ii- Procedure</p> <p>Bone Graft associated new attachment or combination of both approaches</p> <p>i- Types of bone graft:</p> <ul style="list-style-type: none"> ● Autogenous graft ● Allograft ● Xenograft ● Alloplastic (synthetic) materials <p>- Guided tissue regeneration (principle, advantages, disadvantages, and indications)</p>	Data show short movie	Quiz
27	1	Advanced regenerative approaches	<p>- Enamel matrix Derivatives</p> <p>- Acellular dermal matrix allograft</p> <p>- Clinical applications of growth factors</p>	Data show short movie	Quiz

جامعة البيان

			<ul style="list-style-type: none"> - Cell therapy for periodontal regeneration - Gene therapeutics for periodontal tissue repair - Factors influencing the success or failure of all regeneration techniques 		
28	1	Oral implantology	<p>Peri-implant anatomy and Peri-implant diseases classification</p> <ul style="list-style-type: none"> - Introduction - Epithelial structure around natural tooth - Epithelial structure around dental implant - Structure of the interface between the tooth and gingivae - Structure of the interface between implant and oral epithelium - Structure of the interface between the implant and connective tissue - Keratinized tissue (attached gingiva) around implant - Clinical Comparison of Teeth and Implants - Peri-implant health - Peri-implant mucositis: <p>Diagnosis o Treatment</p> <ul style="list-style-type: none"> - Peri-implantitis 	Data show & whiteboard	Quiz

جامعة البيان

			<ul style="list-style-type: none"> o Diagnosis o Treatment 		
29	1	Oral implantology	<ul style="list-style-type: none"> Implant-related complications and failure <ul style="list-style-type: none"> - Definitions of implant survival and success - Types and prevalence of implant complications - Surgical complications: <ul style="list-style-type: none"> o Hemorrhage and hematoma o Neurosensory disturbances o Implant malposition - Biologic Complications: <ul style="list-style-type: none"> o Inflammation and proliferation o Dehiscence and recession o Peri-implantitis and bone loss o Implant loss or failure - Prosthetic or mechanical complications: <ul style="list-style-type: none"> o Screw loosening and fracture o Implant fracture o Fracture of restorative materials - Aesthetic and phonetic complications: <ul style="list-style-type: none"> o Aesthetic complications o Phonetic problems 	Data show & whiteboard	Quiz

30	1	Oral implantology Supportive implant treatment	<ul style="list-style-type: none"> - Rationale for supportive implant treatment - Examination of implants <ul style="list-style-type: none"> ○ Peri-implant probing ○ Microbial testing ○ Stability measures ○ Implant percussion ○ Radiographic examination - Assessment of peri-implant health <ul style="list-style-type: none"> ○ Evaluation of biofilm control ○ Evaluation of peri-implant health and disease ○ Evaluation of implant osseointegration ○ Evaluation of implant restorations - Implant maintenance <ul style="list-style-type: none"> ○ Methods for patient oral hygiene ○ Methods for professional recall maintenance - Treatment of peri-implant diseases <ul style="list-style-type: none"> ○ Peri-implant mucositis ○ Peri-implantitis - Referral of patients to the periodontist 	Data show & whiteboard	Quiz
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198. Course Evaluation

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

1 st and 2 nd semester 25%	Theoretical 10% Clinical 15%
Mid year exam	Theoretical 15%
Final exam	Theoretical 40% Clinical 20%
100%	Theoretical 65% Clinical 35%

199. Learning & Teaching Resources

Required textbooks (curricular if any)	Carranza's Clinical Periodontology
Main References (sources)	1- lindhe 2015 2-Newman_and Carranza's Clinical_Periodontology
Recommended Books & References (Scientific Journals, Reports ...)	Clinical periodontology Periodontal 2000
Websites or Electronic References	Pubmed Google scholar

جامعة البصرة

Course Description (1)

200. Course Title	periodontics/ fourth grade	
201. Course Code	050404	
202. Semester/Year	annual	
203. Description Preparation Date	21\9\2025	
204. Available Attendance Form	lectures, clinics	
205. No. of Hours (Total)	30 hrs theoretical, 90 hrs clinical 5 units	
206. No. of Credits (Total)	5	
207. Course Administrator Name	Hayder sadiq baker	
208. E-mail	Hayder.sadiq@albayan.edu.iq	
209. Course Objectives		
Knowledge	A1	Preparing dental students to maintain oral and dental health, with a focus on how to examine diagnose periodontal diseases. Through this, dental students can contribute to reducing the bur of gum disease in their future practices and enhancing the overall health of their patients
	A2	<ul style="list-style-type: none"> • <u>Learning Outcomes</u> A- Knowledge and understanding 1- Gaining experience and information that will help him identify the disease and know its causes Developing motivational interviewing skills to encourage patients to take -2 .preventive measures Increasing the student's knowledge of methods for examining teeth and -3 detecting caries and gingivitis, based on factors such as oral hygiene and habits ,Learn how to assess patients' risks of dental diseases, including dietary diseases -4 tobacco use, and chronic diseases
	A3	
	A4	
Skills	B1	<u>B - Subject-specific skills</u> 1- Acquiring skills in conducting clinical examinations for early detection of periodontal diseases Developing motivational interviewing skills to encourage patients to take -2 .preventive measures



		Identify the indicators and techniques for applying gum disease treatments and the correct methods for using chemical and mechanical prevention methods	
	B2	<ul style="list-style-type: none"> • <u>C- Thinking skills</u> Motivating the student through the style of expression, thinking, and speed of-1 communication and response Urging the student to solve problems and possess distinctive thinking -2 The lecture depends on student interaction and brainstorming -3 Qualifying students to examine, diagnose and treat patients -4	
	B3	<u>D -General and transferable skills (other skills related to employability and personal development)</u> Professional preparation and urging the student to have positive behavior in his -1 public life Scientific preparation and urging the student to communicate in other fields of -2 science Cultural preparation and refining the student's personality -3 Utilizing the acquired skills so that the student becomes-4 dentist capable of treat patients	
	B4		
Values	C1	Acquiring skills in conducting clinical examinations for early detection of periodontal diseases	
	C2	Developing motivational interviewing skills to encourage patients to take preventive measures	
	C3	Identify the indicators and techniques for applying gum disease treatments and the correct methods for using chemical and mechanical prevention methods	
	C4	Acquiring skills in conducting clinical examinations for early detection of periodontal diseases	
210. Teaching and Learning Strategies			
1.	Lectures using data show and power point	4.	E-learning

جامعة البتة

	.		
2.	Educational films	5.	Blackboards
3.	Display screens	6.	Student discussion groups

211. The Structure of the Course					
Week	Hours	Topic/Subject Name	RLOs	Learning Method	Evaluation Method
1	1	Terms & definitions frequently used in periodontology	Terms & definitions frequently used in periodontology	Datashow & whiteboard	quiz
2	1	Oral mucosa	-Gingiva o Macroscopic features: i- Marginal gingiva ii- Attached gingiva iii- Interdental papilla o Microscopic features: i- Oral epithelium ii- Sulcular epithelium iii- Junctional epithelium iv- Epithelial connective tissue interface v- Gingival connective tissue (gingival fibers and cellular elements) o Gingival sulcus and gingival crevicular fluid o Blood Supply, Lymphatics, and Nerves o Clinical features of gingiva in health and disease: i- Color • Physiologic pigmentation ii- Size iii- Contour iv- Shape	Datashow & whiteboard	quiz

جامعة البتاني

			v- Consistency vi- Texture vii- Position		
3	1	Anatomy of the periodontium	- Periodontal ligaments (PDL) o Cellular elements o Ground substance o Development of principal fibers of PDL o Functions of periodontal ligaments: i- Physical functions ii- Formative and Remodeling Function iii- Nutritional and sensory functions o Clinical consideration	Datashow &whiteboard	quiz
4	1	Anatomy of the periodontium	-Cementum o Definition o Function of cementum o Classification of cementum: i- Acellular afibrillar cementum ii- Acellular extrinsic fiber cementum iii- Cellular mixed stratified cementum iv- Cellular intrinsic fiber cementum o Development and mineralization of cementum o Cementoenamel junction o Cementodentinal junction o Thickness of Cementum in response to physiologic and pathologic conditions Normal thickness ii- Cemental apla	Datashow &whiteboard	quiz

جامعة البتة

			<ul style="list-style-type: none"> iii- Hypercementosis iv- Ankylosis v- neoplastic and nonneoplastic sia 		
5	1	Anatomy of the periodontium	<ul style="list-style-type: none"> -Alveolar process <ul style="list-style-type: none"> o Definition o Function of alveolar process o Parts of the alveolar process <ul style="list-style-type: none"> i- Alveolar bone proper ii- An external plate of cortical bone iii- Cancellous trabeculae or spongy bone o Basal bone <ul style="list-style-type: none"> o Anatomic division of the alveolar process <ul style="list-style-type: none"> i- Interproximal bone ii- Inter radicular bone iii- Radicular bone o Composition of the bone <ul style="list-style-type: none"> i- Cellular elements ii- Organic components iii- Inorganic components o Haversian system or Osteon o Periosteum and Endosteum o Remodeling of alveolar bone 	Datashow &whiteboard	Discussion groups
6	1	Classification of periodontal diseases and conditions (2017)	<ul style="list-style-type: none"> - Reasons for classification - Major changes from previous classification - Periodontal health and gingival diseases and conditions 	Datashow &whiteboard	Home work

جامعۃ البیان

			<p>Periodontal health and gingival health:</p> <ul style="list-style-type: none">o Clinical gingival health on an intact periodontiumo Clinical gingival health on a reduced periodontium: i- Stable periodontitisii- Non-periodontitis patients <p>The classification of dental biofilm induced gingivitis:</p> <ul style="list-style-type: none">o Associated with bacterial dental biofilm onlyo Mediated by systemic or local risk factors i- Systemic conditionsii- Oral factors enhancing plaque accumulationo Drug-influenced gingival enlargements <p>Case definition of gingivitis:</p> <ul style="list-style-type: none">o Gingivitis on an intact periodontiumo Gingivitis on a reduced periodontium <p>Non-dental biofilm induced gingival disease:</p> <ul style="list-style-type: none">o Genetic/developmental disorderso Specific infectionso Inflammatory and immune conditions and lesionso Reactive processeso Neoplasmso Endocrine, nutritional, and metabolic diseases	
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جامعة البتة

			<ul style="list-style-type: none"> o Traumatic lesions o Gingival pigmentation 		
7	1	Classification of periodontal diseases and conditions (2017)	<ul style="list-style-type: none"> -Periodontitis <ul style="list-style-type: none"> o Periodontitis (Extent, Staging, Grading, Status, Risk factors) o Necrotizing periodontal diseases: <ul style="list-style-type: none"> i- Necrotizing gingivitis ii- Necrotizing periodontitis iii- Necrotizing Stomatitis) o Periodontitis as a manifestation of systemic disease -Peri-implant disease and conditions: § <ul style="list-style-type: none"> o Peri- implant health o Peri-implant mucositis o Peri-implantitis o Peri-implant soft and hard tissues deficiency 	Datashow &whiteboard	quiz
8	1	Classification of periodontal disease and conditions (2017)	<ul style="list-style-type: none"> Other conditions affecting the periodontium <ul style="list-style-type: none"> -Periodontal abscess: <ul style="list-style-type: none"> o Periodontal abscess in periodontitis patients o Periodontal abscess in non-periodontitis patients -Endodontic periodontal lesions: 	Datashow &whiteboard	quiz

جامعہ البیان

			<p>o Endo-periodontal lesions associated with endodontic and periodontal infections</p> <p>o Endo-periodontal lesions associated with trauma and iatrogenic factors</p> <p>-Mucogingival deformity and conditions</p> <p>-Traumatic occlusal force</p> <p>-Tooth and prosthetic related factors</p>		
9	1	Etiology of periodontal disease	<p>-Periodontal disease pathogenesis</p> <p>o Mechanisms of pathogenicity</p> <p>o Histopathology of periodontal disease:</p> <p>i- Clinically healthy gingival tissues</p> <p>ii- Histopathology of gingivitis and periodontitis:</p> <ul style="list-style-type: none"> • The initial lesion • The early lesion • The established lesion • The advanced lesion <p>o Inflammatory responses in the periodontium:</p> <p>i- Microbial virulence factors:</p> <ul style="list-style-type: none"> • Lipopolysaccharide • Bacterial enzymes • Microbial invasion • Fimbriae 	Datashow & whiteboard	Report

جامعة البتاني

			<ul style="list-style-type: none"> • Bacterial DNA <p>ii- Host-Derived Inflammatory Mediators:</p> <ul style="list-style-type: none"> • Cytokines • Prostaglandins • Matrix metalloproteinases 		
10	1	Etiology of periodontal disease and risk factors	<p>Dental plaque biofilm and periodontal microbiology</p> <ul style="list-style-type: none"> - Definitions: <ul style="list-style-type: none"> o Supragingival plaque o Subgingival plaque - Structure of a mature dental plaque biofilm - Accumulation of a dental plaque biofilm: <ul style="list-style-type: none"> o Formation of the pellicle o Initial adhesion/attachment of bacteria o Colonization and plaque maturation - Factors affecting supragingival dental plaque formation: <ul style="list-style-type: none"> o Topography of supragingival plaque o Surface microroughness o Individual variables that influence plaque formation o Variation within the dentition o Impact of gingival inflammation and saliva o Impact of patient's age 	Datashow & whiteboard	Home work

جامعة البتاني

			<ul style="list-style-type: none"> o Spontaneous tooth cleaning - Metabolism of dental plaque bacteria - Communication between biofilm bacteria - Biofilms and antimicrobial resistance 		
11	1	Microbiologic specificity of periodontal diseases	<ul style="list-style-type: none"> - Traditional nonspecific plaque hypothesis - Specific plaque hypothesis - Updated nonspecific plaque hypothesis - Ecologic plaque hypothesis - Keystone Pathogen Hypothesis 	Datashow & whiteboard	quiz
12	1	Dental calculus	<ul style="list-style-type: none"> - Clinical appearance and distribution (Supragingival and Subgingival Calculus) - Calculus formation: <ul style="list-style-type: none"> o Theories of calculus formation - Calculus composition: <ul style="list-style-type: none"> o Inorganic content o Organic content - Attachment to tooth surfaces and implants - Clinical significance 	Datashow & whiteboard	report
13	1	Dental stain	<ul style="list-style-type: none"> - Color and color perception - Classification of tooth discoloration: <ul style="list-style-type: none"> o Intrinsic discoloration o Extrinsic discoloration 	Datashow & whiteboard	Quiz

جامعة البتة

			<ul style="list-style-type: none"> o Internalized discoloration - The mechanisms of tooth discoloration - Prevention - Treatment approaches 		
14	1	Etiology of periodontal disease	<ul style="list-style-type: none"> - Risk factors for periodontal diseases: <ul style="list-style-type: none"> o Definitions of risk factors o Systemic risk factors: <ul style="list-style-type: none"> i- Modifiable risk factors ii- Non-modifiable risk factors o Local predisposing factors: <ul style="list-style-type: none"> i- Calculus ii- Iatrogenic factors iii- Margins of restorations iv- Malocclusion v- Associated with orthodontic therapy o Local anatomic risk factors 	Datashow & whiteboard	Quiz
15	1	Etiology of periodontal disease	<ul style="list-style-type: none"> - Molecular biology of host-microbe interactions o Microbe-associated molecular patterns o Toll-like receptors: <ul style="list-style-type: none"> i- Toll-like receptor-4- lipopolysaccharide recognition 	Datashow & whiteboard	Quiz

جامعہ البیان

			<ul style="list-style-type: none"> ii- Toll-like receptor-2-lipoprotein/lipoteichoic acid/peptidoglycan recognition iii- Role of toll-like receptors periodontitis o Complement system: <ul style="list-style-type: none"> i-Classical/Lectin/Alternativ pathways ii- Role complement in periodontitis 		
16	1	Etiology of periodontal disease and risk factors	<ul style="list-style-type: none"> - Smoking and Periodontal Disease <ul style="list-style-type: none"> o Effects of smoking on the prevalence and severity of periodontal diseases: <ul style="list-style-type: none"> i- Gingivitis ii- Periodontitis o Effects of smoking on the etiology and pathogenesis of periodontal disease: <ul style="list-style-type: none"> i- Microbiology ii- Immune-inflammatory responses iii- Physiology o Effects of smoking on the response to periodontal therapy: <ul style="list-style-type: none"> i- Nonsurgical Therapy 	Datashow &whiteboard	Quiz

جامعة البتاني

			<ul style="list-style-type: none"> ii- Surgical Therapy and Implants iii- Maintenance Therapy o Effects of smoking cessation periodontal treatment outcomes 		
17	1	Impact of periodontal infection on systemic health	<ul style="list-style-type: none"> - Focal infection theory revisited - Subgingival environment as a reservoir for bacteria - Periodontal disease, coronary heart disease, and atherosclerosis: <ul style="list-style-type: none"> o Ischemic heart disease o Atherosclerosis - Periodontal disease and stroke - Periodontal disease and diabetes mellitus: o Periodontal infection associated with glycemic control in diabetes 	Datashow &whiteboard	Quiz
18	1	Impact of periodontal infection on systemic health	<ul style="list-style-type: none"> - Periodontal disease and asthma - Periodontal disease and pregnancy outcome - Periodontal disease and chronic obstructive pulmonary disease - Periodontal disease and acute respiratory infections 	Datashow &whiteboard	Quiz

جامعة البنيان

19	1	Periodontal indices o Definition	<ul style="list-style-type: none"> o Gingival index (Loe and Silness) o Plaque index (Silness and Loe) o Plaque index (O'leary) o Plaque index (Quigely Hein) o Probing pocket depth o Clinical attachment loss o Basic Periodontal Examination (BPE) o Modified Gingival Index o Bleeding on probing o Furcation involvement index o Calculus index o Recession index (Miller) o Recession index (Cairo) 	Datashow &whiteboard	Quiz
20	1	The periodontal pocket	<ul style="list-style-type: none"> - Classification - Clinical features - Pathogenesis - Histopathology: <ul style="list-style-type: none"> o Bacterial invasion o Microtopography of the gingival wall o Periodontal pockets as healing lesions o Pocket contents o Root surface walls 	Datashow &whiteboard	Quiz
21	1	The periodontal pocket	<ul style="list-style-type: none"> - Periodontal disease activity - Pulp changes associated with periodontal pockets - Relationship of attachment loss and bone loss to pocket depth 	Datashow &whiteboard	Quiz

جامعة البتاني

			<ul style="list-style-type: none"> - Area between base of pocket and alveolar bone - Relationship of pocket to bone - Periodontal abscess - Lateral periodontal cyst 		
22	1	Treatment plan guidelines	<p>§</p> <ul style="list-style-type: none"> - Phase 1 (behavior change, removal of supragingival dental biofilm and risk factor control): <ul style="list-style-type: none"> o Self-performed supragingival biofilm control: <ul style="list-style-type: none"> i- Oral hygiene practices to control gingival inflammation ii- Behavioral change for oral hygiene improvement iii- Motivational interviewing and cognitive behavioral therapy o Adjunctive therapies for gingival inflammation <ul style="list-style-type: none"> o Professional supragingival dental biofilm control o Risk factor control: <ul style="list-style-type: none"> i- Local risk factor control ii- Tobacco smoking cessation interventions iii- Promotion of diabetes control interventions 	Datashow & whiteboard	Home work
23	1	Treatment plan guidelines	<ul style="list-style-type: none"> - Phase 2 (cause-related therapy) <ul style="list-style-type: none"> o Subgingival instrumentation: <ul style="list-style-type: none"> Scaling Root planing 	Datashow & whiteboard	Oral quis

جامعة البتاني

			<ul style="list-style-type: none"> o Removal of plaque-retentive factors o Use of adjunctive systemically administered antibiotics to subgingival instrumentation o Re-evaluation of the cause-related therapy o Decision to refer for specialist 		
24	1	Treatment plan guidelines	<ul style="list-style-type: none"> - Phase 3 (corrective/surgical phase) <ul style="list-style-type: none"> o Objectives of surgical therapy o Periodontal access surgery: <ul style="list-style-type: none"> i- Resective ii- Regenerative o Extraction of hopeless teeth o Periodontal plastic surgery: <ul style="list-style-type: none"> i- Mucogingival surgery ii- Aesthetic crown lengthening o Pre-prosthetic surgery: <ul style="list-style-type: none"> i- Crown lengthening ii- Implant site preparation 	Datashow & whiteboard	Quiz
25	1	Treatment plan guidelines	<ul style="list-style-type: none"> - Phase 4 (maintenance therapy) <ul style="list-style-type: none"> o Clinical recommendations o Self-performed supragingival dental biofilm control o Adjunctive therapies for gingival inflammation o Professional supragingival dental biofilm control o Risk factor control 	Datashow & whiteboard	Quiz

جامعة البتاني

26	1	Plaque biofilm control for the periodontal patient	<ul style="list-style-type: none"> - The toothbrush: <ul style="list-style-type: none"> o Toothbrush design - Powered toothbrushes - Dentifrices - Toothbrushing methods - Interdental cleaning aids: <ul style="list-style-type: none"> o Dental floss o Interdental brushes o Other interdental cleaning devices - Oral irrigation: <ul style="list-style-type: none"> o Supragingival irrigation o Subgingival irrigation - Caries control 	Datashow &whiteboard	Quiz
27	1	Plaque biofilm control for the periodontal patient	<ul style="list-style-type: none"> - Chemical plaque biofilm control with oral rinses <ul style="list-style-type: none"> o Chlorhexidine digluconate: <ul style="list-style-type: none"> i- Mode of action ii- Clinical use iii- Side-effects o Nonprescription essential oil rinse o Other products - Disclosing agents - Patient motivation and education: <ul style="list-style-type: none"> o Motivation for effective plaque biofilm control o Education and scoring systems: 	Datashow &whiteboard	Quiz

جامعة البتاني

			<p>i- Plaque biofilm control record (O'Leary Index) ii- Bleeding points index</p> <p>o Instruction and demonstration</p>		
28	1	Periodontal instruments and sharpening	<p>- Types of periodontal instruments:</p> <p>i- Diagnostic instruments</p> <p>ii- Scaling, root planing, and curettage instruments</p> <ul style="list-style-type: none"> • Plastic and Titanium Instruments for Implants <p>iii- Cleansing and polishing instruments</p> <p>iv- Surgical instruments</p> <p>- Instrument stabilization:</p> <p>i- Instrument Grasping ii- Finger Rest</p> <p>- Condition of the instruments resharpening</p>	Datashow & whiteboard	Home work
29	1	Breath Malodor (Halitosis	<p>)</p> <ul style="list-style-type: none"> - Definitions - Epidemiology - Classification - Etiology: <p>o Intraoral Causes:</p> <ul style="list-style-type: none"> i- Tongue and tongue coating ii- Periodontal infections iii- Dental disorders iv- Dry mouth <p>o Extraoral Causes</p> <ul style="list-style-type: none"> o Pseudo-halitosis or Halitophobia 	Datashow & whiteboard	Quiz

جامعة البتاني

			<ul style="list-style-type: none"> - Diagnosis of malodor - Prevention and management: <ul style="list-style-type: none"> o Mechanical reduction of intraoral nutrients and microorganisms o Chemical reduction of oral microbial load: <ul style="list-style-type: none"> i- Chlorhexidine ii- Essential oils iii- Chlorine dioxide iv- Two-phase oil-water rinse v- Triclosan vi- Hydrogen Peroxide vii- Amine Fluoride or Stannous Fluoride o Conversion of volatile sulfur compounds: <ul style="list-style-type: none"> i- Metal Salt Solutions o Masking the Malodor 		
30	1	Systemic anti-infective therapy periodontal diseases	- Definitions	Datashow & whiteboard	Discussion group

212. Course Evaluation

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

213. Learning & Teaching Resources

Required textbooks (curricular if any)	Carranza's Clinical Periodontology
Main References (sources)	1- lindhe 2015 2-Newman_and Carranza's Clinical_Periodontology
Recommended Books & References (Scientific Journals, Reports ...)	
Websites or Electronic References	pumbemed Google scholar

Course Description (1)

214.	Course Title	Oral surgery/ 4 th
215.	Course Code	050403
216.	Semester/Year	Annually
217.	Description Preparation Date	21/9/2025
218.	Available Attendance Form	Lectures and clinic
219.	No. of Hours (Total)	Theories =30h. clinic =120 h
220.	No. of Credits (Total)	6
221.	Course Administrator Name	Doctor lecturer: Natheer Ayed Jassem
222.	E-mail	natheer.ayed@albayan.edu.iq
223.	Course Objectives	
Knowledge	A1	Enable students to obtain knowledge and understanding of oral and maxillofacial surgery
	A2	Enabling students to obtain knowledge and understanding of general diseases of human body and their relationship to oral and dental health and their impact on treatment plan.
	A3	Enabling the student to perform simple tooth extraction operations
	A4	Training the student in simple surgical operations and suturing wounds
Skills	B1	Enabling students to acquire and understand the basic principles of oral surgery
	B2	Enabling students to write down the patient's general medical history.
	B3	Enabling students to possess self-learning skills to acquire information, skills, and practices related to tooth extraction in general.
	B4	Enabling students to possess self-learning skills to acquire information, skills, and practices related to tooth extraction in general.

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Values	C1	Enabling students to possess self-learning skills to acquire information, skills, and practices related to tooth extraction in general.
	C2	
	C3	
	C4	

224. Teaching and Learning Strategies

1.	Online Authoring systems	4.	Microsoft power point for lecture presentations
2.	Internet access and E-mail	5.	Video and audio media equipment
3.	A data show projector	6.	Training extraction of teeth in clinic

225. The Structure of the Course					
Week	Hours	Topic/Subject Name	RLOs	Learning Method	Evaluation Method
1	1	Cardiovascular diseases	<ul style="list-style-type: none"> ☐ Hypertension ☐ Dental management ☐ Oral Manifestations ☐ Ischemic heart diseases ☐ Angina pectoris ☐ Myocardial infarction (MI) ☐ Dental management ☐ Heart failure ☐ Dental management ☐ Oral manifestations 	Display data show and blackboard	quiz
2	1	Cardiac arrhythmia	<ul style="list-style-type: none"> Dental management <ul style="list-style-type: none"> ➤ Infective endocarditis ☐ Dental management <ul style="list-style-type: none"> ➤ Rheumatic fever and rheumatic heart Disease ☐ Dental management <ul style="list-style-type: none"> ➤ Congenital heart disease ☐ Dental management ☐ Oral manifestations 	Display data show and blackboard	quiz

جامعة البتة

3	1	Bleeding disorder	<p>Dental management of the patient with bleeding disorder:</p> <ul style="list-style-type: none"> ☒ 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 ☒ Dental management 	Display data show and blackboard	quiz
4	1	Endocrinology	<p>Thyroid diseases</p> <ul style="list-style-type: none"> ☒ Dental management of hyper- and hypothyroidism ☒ Oral complications and manifestations <ul style="list-style-type: none"> ➤ Adrenal insufficiency ☒ Dental management of Adrenocortical insufficiency and adrenal crisis ☒ Dental management of Adrenocortical hyperfunction ☒ Oral complications and manifestations <ul style="list-style-type: none"> ➤ Diabetes Mellitus 	Display data show and blackboard	Discussion question

جامعة البتة

			☑ Dental management of the patient with diabetes mellitus		
5	1	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	Display data show and blackboard	quiz
6	1	Liver Diseases	Viral hepatitis ☑ Dental management ☑ Oral manifestations and complications ➤ Alcoholic liver disease ☑ Dental management ☑ Oral complications and manifestations	Display data show and blackboard	1st trim exam.
7	1	Chronic kidney disease and dialysis	Chronic kidney disease <input type="checkbox"/> Dental management <input type="checkbox"/> Patients receiving conservative care	Data show and blackboard display + explanatory films	quiz

جامعة البتاني

			<input type="checkbox"/> Dialysis <input type="checkbox"/> Renal transplant <input type="checkbox"/> Oral complications and manifestations		
8	1	Neurologic disorders	Epilepsy <input checked="" type="checkbox"/> Dental management <input type="checkbox"/> Oral complications and manifestations ➤ Cerebrovascular accidents (stroke) <input type="checkbox"/> Medical management <input type="checkbox"/> Dental management	Data show and blackboard display explanatory films	quiz
9	1	Pregnancy	Dental management <input checked="" type="checkbox"/> Medical considerations <input checked="" type="checkbox"/> Treatment timing <input checked="" type="checkbox"/> Dental radiographs <input checked="" type="checkbox"/> Drugs in pregnancy <input checked="" type="checkbox"/> Oral manifestations and complications	Data show and blackboard display + explanatory films	Discussion question
10	1	AIDS and HIV infection	Oral manifestations <input checked="" type="checkbox"/> Dental managements: ✓ Asymptomatic patient. ✓ Symptomatic patient. ✓ Patient with severe symptoms	Data show and blackboard display + explanatory films	Discussion groups

جامعة البتاني

11	1	Rheumatologic and connective tissue disorders	Rheumatoid arthritis ✓ Dental management ✓ Oral manifestations and complications ☐ Dental management of patients with prosthetic joint	Display data show and blackboard	quiz
12	1	Allergy	Dental management ☐ Oral complications and manifestations	Data show and blackboard display + explanatory films	quiz
13	1	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	Data show and blackboard display + explanatory films	Discussion question
14	1	Odontogenic infections and fascial space infections	Odontogenic Infections ☐ Spread of odontogenic infections ☐ The factors that influence the spread of odontogenic infections	Display data show and blackboard	quiz
15	1	Fascial space infections	Fascial space infections ☐ Infection of spaces in relation to the lower jaw ☐ Infections of spaces in relation to the upper jaw ☐ Cavernous sinus thrombosis	Data show and blackboard display + explanatory films	Discussion groups

جامعة البتة

16	1	Principles of treatment of odontogenic infections	<p>Principles of treatment of odontogenic infections</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Principles for the use of appropriate antibiotics <input checked="" type="checkbox"/> Sinus formation <input checked="" type="checkbox"/> Necrotizing fasciitis 	Display data show and blackboard	quiz
17	1	Principles of Flaps, suturing and management of difficult extraction	<p>Principles of Flaps, suturing and management of difficult extraction</p> <ul style="list-style-type: none"> <input type="checkbox"/> Flaps in oral cavity <input type="checkbox"/> Incision <input type="checkbox"/> Flap design <input type="checkbox"/> Types of Mucoperiosteal Flaps <input type="checkbox"/> Flap reflection <input type="checkbox"/> Suturing <input type="checkbox"/> Suture Materials <input type="checkbox"/> Needles <input type="checkbox"/> Needle Holder <input type="checkbox"/> Tissue Forceps <input type="checkbox"/> Suture Scissor <input type="checkbox"/> Principles of suturing <input type="checkbox"/> Suturing Techniques 	Display data show and blackboard	Discussion question

جامعة البتاني

18	1	Management of difficult extraction	<p>The main indications for surgical extraction of teeth are</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Steps of surgical extraction <input checked="" type="checkbox"/> Indications for leaving root fragments <input checked="" type="checkbox"/> Multiple Extractions <input checked="" type="checkbox"/> Extraction sequencing 	Display data show and blackboard	quiz
19	1	Principles of management of impacted teeth	<p>Definition and stages of eruption</p> <ul style="list-style-type: none"> <input type="checkbox"/> Impacted lower third molars <input type="checkbox"/> Indications for removal of impacted lower third molars <input type="checkbox"/> Classification of impacted lower third molars <input type="checkbox"/> Clinical examination <input type="checkbox"/> Radiographic examination and assessment <input type="checkbox"/> Surgical extraction of lower third molar <input type="checkbox"/> Complications <input type="checkbox"/> Other lines of treatment 	Data show and blackboard display + explanatory films	quiz
20	1	Impacted upper third molars	<p>Impacted upper third molars</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Surgical extraction <input checked="" type="checkbox"/> Complications <input checked="" type="checkbox"/> Impacted maxillary canine 	Display data show and blackboard	Discussion groups

جامعة البتة

			<input type="checkbox"/> Classification <input type="checkbox"/> Clinical examination <input type="checkbox"/> Radiographic examination and assessment <input type="checkbox"/> Options of treatment <input type="checkbox"/>		
21	1	Impacted mandibular canines	Impacted mandibular canines <input type="checkbox"/> Impacted lower premolars <input type="checkbox"/> Impacted maxillary premolars <input type="checkbox"/> Impacted first and second molars <input type="checkbox"/> Buried deciduous molars <input type="checkbox"/> Supernumerary teeth <input type="checkbox"/> Dilacerated incisors	Display data show and blackboard	quiz
22	1	Surgical aids to orthodontics	Corticotomy assisted orthodontic treatment and labial <input type="checkbox"/> Labial frenectomy. <input type="checkbox"/> Temporary skeletal anchorage	Data show and blackboard display + explanatory films	Discussion question
23	1	Principles of endodontic surgery	Definition <input type="checkbox"/> Indications for periapical surgery <input type="checkbox"/> Contraindications for periapical surgery	Display data show and blackboard	quiz

جامعة البتاني

			<input type="checkbox"/> Important considerations in periapical surgery <input type="checkbox"/> Factors Associated with Success and Failures in Periapical Surgery		
24	1	Surgical procedure of apicectomy	Surgical procedure <input type="checkbox"/> To perform biopsy or not <input type="checkbox"/> Determination of success <input type="checkbox"/> Microsurgical technique	Display data show and blackboard	quiz
25	1	Osteomyelitis and osteonecrosis of the jaw	Osteomyelitis <input checked="" type="checkbox"/> Definition. <input checked="" type="checkbox"/> Classification <input checked="" type="checkbox"/> Etiology and pathogenesis <input type="checkbox"/> Clinical presentation <input type="checkbox"/> Diagnostic imaging <input type="checkbox"/> Microbiology <input type="checkbox"/> Treatment: surgical, antimicrobial and hyperbaric oxygen <input type="checkbox"/> Other types of osteomyelitis: infantile, focal and diffuse sclerosing and Garre's sclerosing osteomyelitis	Display data show and blackboard	Discussion question
26	1	Radiation induced osteomyelitis and osteoradionecrosis	Definition <input checked="" type="checkbox"/> Etiology <input checked="" type="checkbox"/> Stages <input checked="" type="checkbox"/> Treatment <input checked="" type="checkbox"/> Prevention <input checked="" type="checkbox"/> Medication related osteonecrosis of the jaw <input type="checkbox"/> Definition <input type="checkbox"/> Pathophysiology	Data show and blackboard display + explanatory films	2nd trim exam

			<input type="checkbox"/> Clinical presentation and staging <input type="checkbox"/> Imaging <input type="checkbox"/> Treatment <input type="checkbox"/> Prevention		
27	1	Dental Implants: Basic Concepts and Techniques	Implant Geometry (Macrodesign) <input checked="" type="checkbox"/> Implant Surface Characteristics (Microdesign) <input checked="" type="checkbox"/> Hard Tissue Interface <input checked="" type="checkbox"/> Soft Tissue-Implant Interface <input checked="" type="checkbox"/> Biomechanical Considerations <input checked="" type="checkbox"/> Preoperative Assessment and Treatment Planning (hard tissue evaluation, soft tissue evaluation, radiographic examination)	Display data show and blackboard	quiz
28	1	Surgical Treatment Planning Considerations of dental implant	Final Treatment Planning <input checked="" type="checkbox"/> Basic Implant Surgical Procedures <input checked="" type="checkbox"/> One-Stage versus Two-Stage Implant Placement Surgery <input checked="" type="checkbox"/> Implant Stability <input checked="" type="checkbox"/> Complications <input checked="" type="checkbox"/> Implant Components <input checked="" type="checkbox"/> Defining implant outcomes	Display data show and blackboard	Discussion groups
29		Biopsy in oral and maxillofacial surgery	Medical History <ul style="list-style-type: none"> • History of the lesion • Examination • Differential Diagnosis • Biopsy Principles • Contraindication • Excisional Biopsy • Incisional Biopsy 	Data show and blackboard display + explanatory films	quiz

جامعة البتة


			<ul style="list-style-type: none"> • Surgical technique 		
30		Diagnostic imaging in oral and maxillofacial surgery	<p>Classification: Invasive and Non-invasive</p> <ul style="list-style-type: none"> • 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 	Display data show and blackboard	Discussion question

1. Course Evaluation

No.	Assessment measurement	Score distribution concerning theoretical lectures	Score distribution concerning clinic
1	First semester	5%	7.5%
2	Mid year examination (15%)	15%	
3	Second semester	5%	7.5%
4	Final examination (60%)	40%	20%
Total	100%	65%	35%

2. Learning & Teaching Resources

Required textbooks (curricular if any)	
Main References (sources)	Dental management of medically compromised patient 9 th edit. Contemporary Oral and Maxillofacial Surgery 7 th edit.
Recommended Books & References (Scientific Journals, Reports ...)	Make periodic reports and read recent research in reputable journals
Websites or Electronic References	Google scholar, research gates


Course Description (1)

226. Course Title	Oral surgery /3 rd	
227. Course Code	050303	
228. Semester/Year	Annually	
229. Description Preparation Date	21/5/2025	
230. Available Attendance Form	Theoretical and practical lectures	
231. No. of Hours (Total)	90 hours	
232. No. of Credits (Total)	4	
233. Course Administrator Name	Assist. Prof . Dr. Mudher MB. Al-Sunubli	
234. E-mail	mudher.m@albayan.edu.iq	
235. Course Objectives		
Knowledge	A1	Enable the students to acquire basic knowledge about oral surgery
	A2	Enable the students to Identify the surgical tools used in oral surgery and surgical meth
	A3	Enable the students to acquire basic knowledge about local anesthesia and its method
	A4	
Skills	B1	Knowledge of the basics of oral diagnosis and surgical instruments
	B2	Methods of tooth extraction and oral surgery
	B3	Learn the different methods of local anesthesia
	B4	
Values	C1	Preparing the student practically in what is related to oral surgery and local anesthesia
	C2	
	C3	
	C4	



236. Teaching and Learning Strategies

1.	Online Authoring systems	4.	Microsoft power point for lecture presentations
2.	Internet access and E-mail	5.	Video and audio media equipment
3.	A data show projector	6.	

237. The Structure of the Course					
Week	Hours	Topic/Subject Name	RLOs	Learning Method	Evaluation Method
1	1	Diagnosis in oral surgery	<ul style="list-style-type: none"> ➤ History taking • Demographic data • Chief complaint • History of present complaint • Past dental and medical history • Social and family history 	Quiz + oral exam	Data show and white board
2	1	Diagnosis in oral surgery	<ul style="list-style-type: none"> ➤ Examination • Extra-oral examination • Intra-oral examination ➤ Differential diagnosis ➤ Diagnosis of pain, lump, and ulcer ➤ Consent 	Quiz + oral exam	Data show and white board
3	1	Infection Control in Surgical Practice	<ul style="list-style-type: none"> ➤ Communicable pathogenic organisms ➤ Aseptic techniques • Terminology • Concepts • Techniques of Instrument Sterilization; Sterilization with Heat; Sterilization with Gas • Techniques of Instrument Disinfection 	Quiz + oral exam	Data show and white board

جامعة البتة

4	1	Infection Control in Surgical Practice	<ul style="list-style-type: none"> • Maintenance of Sterility • Surgical Field Maintenance • Operatory Disinfection • Surgical Staff Preparation • Postsurgical Asepsis 	Quiz + oral exam	Data show and white board
5	1	Extraction of teeth and Contra indications of extraction	<ul style="list-style-type: none"> • Extraction of teeth (exodontia). • Definition. • Methods of extraction. • Indications of teeth extraction. 	Student discuss groups.	Data show and white board
6	1	Extraction of teeth and Contra indications of extraction	<ul style="list-style-type: none"> • Contra-indications of teeth extraction. <ul style="list-style-type: none"> ➤ Local contra-indications. ➤ Systemic contra-indications. • Pre-extraction evaluation. <ul style="list-style-type: none"> ➤ Clinical preoperative evaluation. <ul style="list-style-type: none"> ✓ General evaluation. ✓ Local evaluation. ➤ Radiological evaluation. ➤ Objectives and benefits 	Student discuss groups.	Data show and white board
7	1	General arrangement for extraction and Dental forceps (types)	<ul style="list-style-type: none"> • Light. • Position of the operator. • Position of the patient. • Height of the dental chair. • Parts of dental forceps. • Forceps for the maxillary teeth. <ul style="list-style-type: none"> ✓ Forceps of upper anterior teeth. ✓ Forceps of upper premolars. ✓ Forceps of upper molars. 	Oral exam	Data show and white board

جامعة البتاني

			✓ Bayonet of upper posterior teeth.		
8	1	General arrangement for extraction and Dental forceps (types)	<ul style="list-style-type: none"> • Forceps for the mandibular teeth. ✓ Forceps of lower anterior teeth. ✓ Forceps of lower premolars. ✓ Forceps of lower molars. ✓ Bayonet of lower posterior teeth. • Mechanical principle of forceps (traditional) extraction 	Oral exam	Data show and white board
9	1	Techniques of forceps extraction and post-operative instructions	<ul style="list-style-type: none"> • Soft tissue retraction. • Handling of the forceps. • Cheek retraction and support (the use of the non-working hand). • The application of the forceps blades to the tooth (tooth grasp). • The displacement of the tooth from its socket. • Post-operative care to the extraction socket. • Instruction to the patient. 	Quiz	Data show and white board
10	1	Elevators	<ul style="list-style-type: none"> • Line of withdrawal. • Point of application. • Parts of dental elevators. • Mechanical principles of using dental elevators. • Wheel and axil. 	Quiz	Data show and white board

جامعة البتاني

			<ul style="list-style-type: none"> • Fulcrum. • Wedging. • Combination of mechanical principles. 		
11	1	Elevators	<ul style="list-style-type: none"> • Clinical uses of elevators. • Straight elevators. • Coupland's chisel. • Cryer's elevator. • Winter's elevator. • Apexo elevator. • Warwick-James elevator. • Guiding principles for using dental elevators. • Complications of using dental elevators. 	Student discuss groups.	Data show and white board
12	1	Complications of dental extraction	<ul style="list-style-type: none"> • Failure to secure anesthesia. • Failure to remove the tooth with either forceps or elevator. • Fracture (#) of crowns and roots, alveolar bone, maxillary tuberosity, adjacent or opposing tooth, mandible. • Dislocation of the tempo-mandibular joint (T.M.J.). • Displacement of a root into the soft tissue and tissue spaces and the maxillary antrum. 	Oral exam	Data show and white board

جامعة البليان

13	1	Complications of dental extraction	<ul style="list-style-type: none"> • Excessive bleeding after extraction. • Damage to the surrounding soft tissues. • Post-operative pain. • Post-operative swelling. • Creation of an oro-antral communication. • Trismus. 	Quiz	Data show and white board
14	1	Basic surgical instruments	<ul style="list-style-type: none"> • Instruments of basic oral surgery. • Instruments to incise tissues. • Instruments for elevating mucoperiosteum. • Instruments for controlling hemorrhage. ✓ Hemostat (artery forceps). • Instruments to grasp tissues. ✓ Toothed-tissue forceps. ✓ Allis tissue forceps. • Instruments for removing bone. ✓ Rounger forceps (bone cutter and bone nibbler). ✓ Chisel and mallet. ✓ Bone file. ✓ Surgical burs and handpiece. • Instruments to remove soft tissues from bony defects. ✓ Surgical curette. • Instruments for suturing mucosa. ✓ Needle holder. 	Quiz	Data show and white board

جامعة البتاني

			<ul style="list-style-type: none"> ✓ Needles. ✓ Suture materials ✓ Scissors. • Instruments for retraction of soft tissues. ✓ Cheek retractor. ✓ Mucoperiosteal flap retractor. • Instruments for irrigation and for providing suction. • Instrument of draping 		
15	1	Introduction to local anesthesia	<ul style="list-style-type: none"> • Neurophysiology • Mode and site of action of local anesthetic • Active forms of local anesthetics 	Discussion groups	Data show and white board
16	1	Pharmacology of local anesthesia	<ul style="list-style-type: none"> • Pharmacokinetics of local anesthetics • Metabolism • Systemic actions of local anesthetics 	Oral exam	Data show and white board
17	1	Pharmacology of local anesthesia	<ul style="list-style-type: none"> • Vasoconstrictors • Mode of action • Dilutions of vasoconstrictors • Specific agents 	Discussion groups	Data show and white board
18	1	Surgical anatomy in local anesthesia	<ul style="list-style-type: none"> • Trigeminal nerve: <ul style="list-style-type: none"> ✓ Ophthalmic branch ✓ Maxillary branch ✓ Mandibular branch 	Oral exam	Data show and white board
19	1	Instruments of local anesthesia	<ul style="list-style-type: none"> • The Syringe • The Needle 	Home work	Data show and white board

جامعة البتاني

			<ul style="list-style-type: none"> • The Cartridge • Additional Armamentarium • Preparation of the Armamentarium 		
20	1	Surgical anatomy in local anesthesia	<ul style="list-style-type: none"> • Osteology of the maxilla • Osteology of the mandible 	Reports	Data show and white board
21	1	Techniques of local anesthesia	<ul style="list-style-type: none"> • Basic injection techniques • Techniques of maxillary anesthesia <ul style="list-style-type: none"> ✓ Local infiltration. ✓ Posterior superior alveolar nerve block ✓ Middle superior alveolar nerve block ✓ Anterior superior alveolar nerve block (infraorbital nerve block) ✓ Greater palatine nerve block ✓ Nasopalatine nerve block ✓ Maxillary nerve block 	Discussion groups	Data show and white board
22	1	Techniques of local anesthesia	<ul style="list-style-type: none"> • Techniques of local anesthesia <ul style="list-style-type: none"> ✓ Techniques of mandibular anesthesia ✓ Inferior alveolar nerve block ✓ Buccal nerve block ✓ Mandibular nerve block: The Gow-Gates technique ✓ Vazirani-Akinosi closed-mouth mandibular block ✓ Mental nerve block 	Open book exam	Data show and white board

جامعة البتة

			✓ Incisive nerve block		
23	1	Techniques of local anesthesia	<ul style="list-style-type: none"> • Supplemental injection techniques ✓ Intraosseous injection ✓ Periodontal ligament injection ✓ Intraseptal injection ✓ Intrapulpal injection 	Home work	Data show and white board
24	1	Complications of local anesthesia	<ul style="list-style-type: none"> • Local Complications ✓ Needle breakage ✓ Prolonged anesthesia (paresthesia) ✓ Facial nerve paralysis ✓ Ocular complications ✓ Trismus ✓ Soft tissue injury ✓ Hematoma 	Discussion groups	Data show and white board
25	1	Complications of local anesthesia	<ul style="list-style-type: none"> ✓ Pain on injection ✓ Burning on injection ✓ Infection ✓ Edema ✓ Sloughing of tissues ✓ Postanesthetic intraoral lesions 	Reports	Data show and white board
26	1	Complications of local anesthesia	<ul style="list-style-type: none"> • Systemic complications ✓ Overdose ✓ Allergy 	Reports	Data show and white board
27	1	Advances in local anesthesia	<ul style="list-style-type: none"> • Computer controlled local anesthetic delivery 	Home works	Data show and white board

جامعة البتاني

			<ul style="list-style-type: none"> • Articaine hydrochloride • Local anesthesia reversal • Buffering of local anesthetic solution • Nasal local anesthetic mist for maxillary nonmolar teeth 		
28	1	Conscious sedation	<ul style="list-style-type: none"> • Sedation techniques: Oral, sublingual, transdermal, intranasal, intramuscular, intravenous and inhalational • Nitrous oxide • Complications and medicolegal considerations 	Oral exam	Data show and white board
29	1	Fundamentals of general anesthesia	<ul style="list-style-type: none"> • Types of general anesthesia used in dentistry • Advantages • Disadvantages • Indications • Contraindications 		
30	1	Medical emergencies during dental treatment	<ul style="list-style-type: none"> • Overview of medical emergencies • Basic measures, equipment and drugs • Common emergencies <ul style="list-style-type: none"> ✓ Collapse ✓ Anaphylaxis ✓ Cardiac arrest ✓ Diabetic collapse due to hypoglycemia ✓ Fits and convulsions ✓ Adrenal crisis 		

			<ul style="list-style-type: none"> ✓ Acute severe asthma ✓ Chest pain 		
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3. The Structure of the Course

Week	Hours	RLOs	Topic/Subject Name	Learning Method	Evaluation Method
1	2		Laboratory sessions & Clinical requirements	Quiz + oral exam	Data show and white board
2	2		Introduction	Quiz + oral exam	Data show and white board
3	2		What is oral and maxillofacial surgery?	Quiz + oral exam	Data show and white board
4	2		History and diagnosis (1).	Quiz + oral exam	Data show and white board
5	2		History and diagnosis (2).	Student groups. discuss	Data show and white board
6	2		Case sheet and patient (1)	Student groups. discuss	Data show and white board
7	2		Case sheet and patient (2)	Oral exam	Data show and white board
8	2		Examination.	Oral exam	Data show and white board
9	2		Surgical instruments part (1).	Quiz	Data show and white board
10	2		Surgical instruments part (2).	Quiz	Data show and white board

جامعة البيان

11	2		Surgical instruments part (3).	Student groups. discuss	Data show and white board
12	2		Examination	Oral exam	Data show and white board
13	2		General arrangement for extraction.	Quiz	Data show and white board
14	2		Position of patient, operator, the use of chair (in the clinic)	Quiz	Data show and white board
15	2		Examination.	Discussion groups	Data show and white board
16	2		Local anesthesia (introduction)	Oral exam	Data show and white board
17	2		Dental forceps (part 1).	Discussion groups	Data show and white board
18	2		Dental forceps (part 2).	Oral exam	Data show and white board
19	2		Dental forceps (part 3).	Home work	Data show and white board
20	2		Dental elevator (part 1).	Reports	Data show and white board
21	2		Dental elevator (part 2).	Discussion groups	Data show and white board
22	2		Dental elevator (part 3).	Open book exam	Data show and white board
23	2		Examination	Home work	Data show and white board
24	2		Local anesthesia (surgical), (anatomy)	Discussion groups	Data show and white board
25	2		Local anesthesia equipment.	Reports	Data show and white board

جامعة البيان

26	2		Local anesthesia techniques (infiltration).	Reports	Data show and white board
27	2		Local anesthesia techniques (block).	Home works	Data show and white board
28	2		Local anesthesia techniques (discussion).	Oral exam	Data show and white board
29	2		Complication of local anesthesia		
30	2		Complication of extraction.		

4. Course Evaluation

No.	Assessment measurement	Score distribution concerning theoretical lectures	Score distribution concerning laboratories
1	First semester	10%	7.5%
2	Mid year examination (15%)	15%	
3	Second semester	10%	7.5%
4	Final examination (60%)	40%	20%
Total	100%	65%	35%

5. Learning & Teaching Resources

Required textbooks (curricular if any)	<ol style="list-style-type: none"> 1. Contemporary oral and maxillofacial surgery 5th edition 2008. 2. Extraction of teeth. 3- Handbook of Local anesthesia 6th edition 2011.
Main References (sources)	
Recommended Books & References (Scientific Journals, Reports ...)	
Websites or Electronic References	


Course Description (1)

238. Course Title	General human anatomy/(first year)	
239. Course Code	050105	
240. Semester/Year	Yearly	
241. Description Preparation Date	21/9/2025	
242. Available Attendance Form	Lectures & Labs	
243. No. of Hours (Total)	30 hours of Theoretical + 60 hours of practical	
244. No. of Credits (Total)	4	
245. Course Administrator Name	Ahmed saeed hamd	
246. E-mail	Ahmed.sae@albayan.edu.iq	
247. Course Objectives		
Knowledge	A1	Enable students to learn about human anatomy, especially the head and neck, and focus on knowing the locations of vital structures (nerves and blood vessels) and their direct relationship in the oral and maxillofacial area and his specialization as a dentist
	A2	Preparing students practically in terms of developing the knowledge gained in human anatomy in his work as a dentist.
	A3	Acquirement full knowledge of the organs of the human body and focus on the head and neck area.
	A4	Developing the student's ability to deal with multiple means of learning.
Skills	B1	Asking orally questions to students through which the student connect the Anatomy material with each other and connect it to student specialty as a dentist.
	B2	Motivating the student through thinking and speed of response in Understanding to facilitate memorizing the material.



		Thinking about solving problems and how to avoid them.	
	B		
	B4	Teaching professional ethics.	
	C1	Developing the acquired skills of the student in order to become a dentist capable of treating patients and solving problems related to the knowledge of oral and maxillofacial anatomy to avoid their occurrence.	
Values	C2	The theoretical lecture depends on the students' daily interaction and develops Their ability to discussion.	
	C3	Depending the practical side, means of illustration and explanatory videos,	
	C4	encouraging the student to connect human anatomy with his work as A dentist	
Teaching and Learning Strategies			
Practical lessons on anatomical models			
1.	Theoretical lectures using slides on screens.		
2.			
3.			

248. The Structure of the Course					
Week	Hours	Topic/Subject Name	RLOs	Learning Method	Evaluation Method
1	1	Defining Introduction to Human Anatomy Descriptive Anatomic Term	Introduction to Human Anatomy Descriptive Anatomic Terms	Theoretical lecture using Da Show	Daily Theory Quiz
2	1	Defining Basic Structures: Skin, Fasciae, Muscle, Joints, Ligamen Bursae	Basic Structures: Skin, Fasciae, Muscle, Joints, Ligament, Bursae	Theoretical lecture using Da Show	Daily Theory Quiz
3+4	2	Defining Basic Structures: Bone, Cartilage, Blood Vessels, Lymphatic System	Basic Structures: Bone, Cartilage, Blood Vessels, Lymphatic System	Theoretical lecture using Da Show	Daily Theory Quiz
5	1	Defining Basic Structures: Nervous System, Mucous Membranes, Serous Membranes	Basic Structures: Nervous System, Mucous Membranes, Serous Membranes	Theoretical lecture using Da Show	Daily Theory Quiz
6+7	2	Defining Skeletal system of the body Skull :Cranial Bones	Skeletal system of the body: Skull Cranial Bones	Theoretical lecture using Da Show	Daily Theory Quiz
8+9	2	Defining Skeletal system of the body Skull : Facial Bones	Skeletal system of the body: Skull : Facial Bones	Theoretical lecture using Da Show	Daily Theory Quiz
10+11	2	Defining External Views of the Skull	External Views of the Skull	Theoretical lecture using Da Show	Daily Theory Quiz

جامعة البتاني

12+13	2	<p>Defining</p> <p>* The Cranial Cavity</p> <p>*Major Foramina and Fissures locations and structures pass through</p> <p>Neonatal Skull</p>	<p>*The Cranial Cavity</p> <p>*Major Foramina and Fissures locations and structures pass through</p> <p>Neonatal Skull</p>	<p>Theoretical lecture using Data Show</p>	<p>Daily Theory Quiz</p>
14+15	2	<p>Defining</p> <p>Skeleton of the Orbital Region, Openings into the Orbital Cavity</p> <p>Skeleton of the External Nose, nasal cavity, Paranasal Sinuses</p> <p>*Auditory ossicles</p> <p>Hyoid bone</p>	<p>*Skeleton of the Orbital Region, Openings into the Orbital Cavity</p> <p>*Skeleton of the * External Nose, nasal cavity, Paranasal Sinuses</p> <p>*Auditory ossicles</p> <p>Hyoid bone</p>	<p>Theoretical lecture using Data Show</p>	<p>Daily Theory Quiz</p>
16+17	2	<p>Defining The Vertebral Column</p>	<p>The Vertebral Column</p>	<p>Theoretical lecture using Data Show</p>	<p>Daily Theory Quiz</p>
18+19	2	<p>Defining</p> <p>Structure of the Thoracic Wall</p> <p>*Joints of the Chest Wall</p> <p>*Suprapleural Membrane</p>	<p>*Structure of the Thoracic Wall</p> <p>*Joints of the Chest Wall</p> <p>*Suprapleural Membrane</p> <p>*Diaphragm</p> <p>* Surface Anatomy</p>	<p>Theoretical lecture using Data Show</p>	<p>Daily Theory Quiz</p>

جامعة البتاني

		*Diaphragm *Surface Anatomy			
20+21	2	Defining Thoracic cavity: Mediastinum, Pleurae, Trachea , Bronchi, Lungs	Thoracic cavity: Mediastinum, Pleurae, Trachea, Bronchi, Lungs	Theoretical lecture using Data Show	Daily Theory Quiz
22+23+24	3	Defining Pericardium, Heart, Large arteries, veins and nerves of thorax	Pericardium, Heart, Large arteries, veins and nerves of thorax	Theoretical lecture using Data Show	Daily Theory Quiz
25+26	2	Defining *Bones of the Shoulder (Pectoral girdle) girdles *Bones of the Upper extremities	*Bones of the Shoulder (Pectoral girdle) girdles *Bones of the Upper extremities	Theoretical lecture using Data Show	Daily Theory Quiz
27+28	2	Defining *Bones of the Pelvic girdle *Bones of the Lower extremities	*Bones of the Pelvic girdle *Bones of the Lower extremities	Theoretical lecture using Data Show	Daily Theory Quiz
29+30	2	Defining Abdominal cavity and organs	Abdominal cavity and organs	Theoretical lecture using Data Show	Daily Theory Quiz

249. Course Evaluation	
First semester + second semester = 25 degrees	
7.5 marks (practical, attendance and oral questions) + 5 degrees of theoretical daily exams (per semester)	
Mid-year exam score = 15 final exam score = 60 (40 theoretical + 20 practical)	
Grand Total = 100%	
250. Learning & Teaching Resources	
Required textbooks (curricular if any)	–
Main References (sources)	<p>Snell's clinical anatomy 10th edition</p> <p>Netter's head and neck anatomy 3rd edition</p> <p>Gray's anatomy for students 4th edition</p> <p>Atlas of clinical cross anatomy 2nd edition</p>
Recommended Books & References (Scientific Journals, Reports ...)	Read recent research in academic publishing journals
Websites or Electronic References	Google scholar , research gates

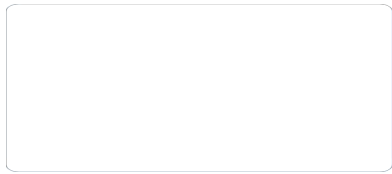

Course Description (1)

1. Course Title	Oral pathology/4 th	
2. Course Code	050406	
3. Semester/Year	Annual	
4. Description Preparation Date	21/9/2025	
5. Available Attendance Form	Lectures & Labs	
6. No. of Hours (Total)	60 hours of Theoretical + 0 hours of practical	
7. No. of Credits (Total)	6	
8. Course Administrator Name	Name: lec.dr. Afrah abdul sahib	
9. E-mail		
10. Course Objectives :		
Knowledge	A1	Enable students to learn about oral diseases
	A2	focus on knowing the management protocols for oral diseases
	A3	their direct relationship in the oral and maxillofacial area and his specialization as a dentist
	A4	Let the student know the scientific of biopsy taking .
Skills	B1	Asking orally questions to students through which the student connect the anatomy material with each other and connect it to student specialty as a dentist.
	B2	Acquirement full knowledge of the oral diseases and their presentation clinical feature
	B3	Motivating the student through thinking and speed of response in understanding to facilitate memorizing the material.
	B4	Depending on the practical side, means of illustration and explanatory videos, and encouraging the student to see as much as possible to be familiar with different oral lesions.
Values	C1	Preparing students practically in terms of developing the knowledge gained in oral pathology in his work as a dentist.
	C2	Thinking about solving problems and how to avoid them. Teaching professional ethics.

	C3	Developing the acquired skills of the student to become a dentist capable of treating patients and solving problems related to the knowledge of oral and maxillofacial pathology .
	C4	Developing the student's ability to deal with multiple means of learning.

11. Teaching and Learning Strategies

1.	Theoretical lectures using slides on screens.	4.	Practical lessons on anatomical models
2.	Educational films and brief explanatory videos.	5.	
3.	Student discussion groups.	6.	



12. The Structure of the Course

Week	Hours	Topic/Subject Name	RLOs	Learning method	Evaluation method
1	2	Biopsy in oral pathology	Biopsy in oral pathology	Theoretical lecture using Data Show	Daily Theory Quiz
2	2	Healing in oral pathology	Healing in oral pathology	Theoretical lecture using Data Show	Daily Theory Quiz
3	2	Dental caries	Dental Caries	Theoretical lecture using Data Show	Daily Theory Quiz
4	2	Pulp pathology	pulpitis	Theoretical lecture using Data Show	Daily Theory Quiz
5	2	Periapical pathology	Periapical lesions	Theoretical lecture using Data Show	Daily Theory Quiz
6	2	Bone infection	osteomyelitis	Theoretical lecture using Data Show	Daily Theory Quiz



7	2	Developmental disorder of teeth	Developmental disorder of teeth	Theoretical lecture using Data Show	Daily Theory Quiz
8	2	Developmental disorder of soft and hard tissue	Developmental disorder of soft and hard tissue	Theoretical lecture using Data Show	Daily Theory Quiz
9	2	Non odontogenic cysts	Non odontogenic cysts	Theoretical lecture using Data Show	Daily Theory Quiz
10	2	Odontogenic cysts	Odontogenic cysts	Theoretical lecture using Data Show	Daily Theory Quiz
11	2	Odontogenic tumors 1	Odontogenic tumors 1	Theoretical lecture using Data Show	Daily Theory Quiz
12	2	Odontogenic tumors 2	Odontogenic tumors 2	Theoretical lecture using Data Show	Daily Theory Quiz
13	2	Benign epithelial lesions	leukoplakia	Theoretical lecture using Data Show	Daily Theory Quiz
14	2	Epithelial Hyperplasia, atrophy and dysplasia	Epithelial Hyperplasia, atrophy and dysplasia	Theoretical lecture using Data Show	Daily Theory Quiz

15	2	Squamous cell carcinoma	Squamous cell carcinoma and other malignancies	Theoretical lecture using Data Show	Daily Theory Quiz
16	2	Fibro osseous lesions, metabolic and genetic conditions	Fibro osseous lesions, metabolic and genetic conditions	Theoretical lecture using data show	Daily Theory Quiz
17	2	Giant cell lesions	Giant cell lesions	Theoretical lecture using Data Show	Daily Theory Quiz
18	2	Benign tumor of the bone	Benign tumor of the bone	Theoretical lecture using Data Show	Daily Theory Quiz
19	2	Malignant tumor of the bone	Malignant tumor of the bone	Theoretical lecture using Data Show	Daily Theory Quiz
20	2	Viral infection	Introducing the students to the causes and types of developing defects of maxillofacial lesions	Theoretical lecture using Data Show	Daily Theory Quiz
21	2	Bacterial and fungal infections	Bacterial and fungal infections	Theoretical lecture using Data Show	Daily Theory Quiz
22	2	Immune mediated disorders 1	Immune mediated disorders 1	Theoretical lecture using Data Show	Daily Theory Quiz



23	2	Immune mediated disorders 2	Immune mediated disorders 2	Theoretical lecture using Data Show	Daily Theory Quiz
24	2	Connective tissue lesions	Connective tissue lesions	Theoretical lecture using Data Show	Daily Theory Quiz
25	2	Connective tissue lesions	Connective tissue lesions	Theoretical lecture using Data Show	Daily Theory Quiz
26	2	Salivary gland disorders	Salivary gland disorders	Theoretical lecture using Data Show	Daily Theory Quiz
27	2	Salivary gland neoplasms	Salivary gland neoplasms	Theoretical lecture using Data Show	Daily Theory Quiz
28	2	Physical and chemical injuries	Physical and chemical injuries	Theoretical lecture using Data Show	Daily Theory Quiz

1. Course Evaluation

Distribution of the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily exams, oral, monthly, written and records.

For first and second semesters 25 degrees (15 practical + 10 theoretical) and mid-year 15 degrees and final examination 60 degrees (40 theoretical + 20 practical)

2. Learning & Teaching Resources

Required textbooks. (curricular if any)	Oral and maxillofacial pathology. Brad Neville, Douglas Damm Carl Allen and Jerry Bouquot. 4 th edition. 2016, Elsevier..
Main References (sources)	Snell's clinical anatomy 10 th edition Netter's head and neck anatomy 3 rd edition Gray's anatomy for students 4 th edition Atlas of clinical cross anatomy 2 nd edition
Recommended Books & References (Scientific Journals, Reports ...)	Make periodic reports and read recent research in reputable journals
Websites or Electronic References	PubMed, Scopus, Elsevier, Google Scholar, Research Gates

251. Course Title	Oral surgery/5th	
252. Course Code	050503	
253. Semester/Year	year	
254. Description Preparation Date	21/9/2025	
255. Available Attendance Form	Theory and clinical	
256. No. of Hours (Total)	30 hours theoretical +180 hours clinical / year	
257. No. of Credits (Total)	8	
258. Course Administrator Name	Dr. Omar Bakr Hazm	
259. E-mail	Omar.bakr@albayan.edu.iq	
260. Course Objectives		
Knowledge	A1	Acquisition of experience and information to aid in identifying diseases and understanding their causes.
	A2	Development of communication skills with patients in a scientific manner enhance patient confidence in the student.
	A3	Conducting a comprehensive oral examination to detect any conditions unknown to the patient and directing them towards the risks of certain conditions.
	A4	Graduate students with knowledge about the multiple treatment options and choosing the best for the patient
Skills	B1	Acquiring skills in conducting necessary clinical examinations for early detection of oral cancer.



	B2	Developing communication skills with patients and managing complications resulting from surgical procedures
	B3	Recognizing methods for managing diseases accompanying surgical patients such as hypertension and diabetes.
	B4	Make the graduates able to deal with surgical complications
Values	C1	Encouraging students through expressive and thoughtful expression, quick communication, and response.
	C2	Encouraging problem-solving and cultivating distinctive thinking.
	C3	Engaging students in interactive lectures and brainstorming sessions.
	C4	Equipping students to examine, diagnose, and treat patients.

261. Teaching and Learning Strategies

1.	Lectures using data show and power point	4.	E-learning
2.	Educational films	5.	Blackboards
3.	Display screens	6.	Student discussion groups.

262. The Structure of the Course					
Week	Hours	Topic/Subject Name	RLOs	Learning Method	Evaluation Method
1	1	Orofacial pain	<ul style="list-style-type: none"> • Classification; somatic and neuropathic • Diagnosis • Somatic pain; odontogenic pain, oral mucous membrane disorders, temporomandibular joint disorders, muscle disorders • Neuropathic pain; trigeminal neuralgia, glossopharyngeal neuralgia, atypical odontalgia, postherpetic neuralgia • Vascular pain; giant cell arteritis and migraine. 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
2	1	Preliminary management of patients with facial fractures	<ul style="list-style-type: none"> • Etiology of maxillofacial trauma • Primary survey and advanced trauma life support (ATLS) Secondary survey. 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
3	1	Fractures of the mandible	<ul style="list-style-type: none"> • Classification • Clinical features • Imaging • Treatment; closed treatment, methods of immobilization, period of treatment, open 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams

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			reduction and internal fixation (ORIF) <ul style="list-style-type: none"> • Teeth in the fracture line • Complications 		
4	1	Fractures of the mandible	Mandibular fractures that require special consideration: <ul style="list-style-type: none"> • Pediatric fractures, • Fractures of edentulous mandible • Condylar fractures • Comminuted fractures 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
5	1	Fractures of the middle third of facial skeleton	<ul style="list-style-type: none"> • Classification, clinical presentation imaging and treatment of: ✓ Le Fort fractures ✓ Zygomatic complex fractures 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
6	1	Fractures of the middle third of facial skeleton	<input type="checkbox"/> Classification, clinical presentation imaging and treatment of: <ul style="list-style-type: none"> <input type="checkbox"/> Orbital floor fractures <input type="checkbox"/> Nasal bone fractures <input type="checkbox"/> Complications of fractures of middle third of facial skeleton 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
7	1	Dentoalveolar and soft tissue injuries	<ul style="list-style-type: none"> • Factors affecting dentoalveolar injuries • Classification 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams

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			<ul style="list-style-type: none"> • Clinical presentation • Radiographic evaluation • Treatment • Splinting techniques • Complications. • Soft tissue injures; classification, treatment and soft tissue injuries of special significance 		
8	1	Preprosthetic surgery	<ul style="list-style-type: none"> • Soft tissue procedures: unsupported hypermobile tissue on the alveolar ridge, inflammatory fibrous hyperplasia (epulis fissuratum), labial frenectomy, lingual frenectomy, ridge extension (vestibuloplasty) • Immediate dentures • Alveolar ridge preservation • Correction of abnormal ridge relationships 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
9	1	Preprosthetic surgery	<ul style="list-style-type: none"> • Soft tissue procedures: unsupported hypermobile tissue on the alveolar ridge, inflammatory fibrous hyperplasia (epulis fissuratum), labial frenectomy, lingual frenectomy, ridge extension (vestibuloplasty) • Immediate dentures • Alveolar ridge preservation 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams

جامعة البتة

			<ul style="list-style-type: none"> • Correction of abnormal ridge relationships 		
10	1	Potentially malignant disorders of the oral mucosa	<ul style="list-style-type: none"> • Classification and terminology • Risk factors, • Diagnostic methods and diagnostic aids <p>Potentially malignant disorders: leukoplakia, erythroplakia, palatal changes associated with reverse smoking, oral submucous fibrosis, actinic cheilitis and lichen planus</p>	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
11	1	Odontogenic diseases of the maxillary sinus	<ul style="list-style-type: none"> • Overview of the maxillary sinus • Clinical and radiographic examination • Non-odontogenic infections of the maxillary sinus • Odontogenic infections of the maxillary sinus • Oroantral communications and fistulae • Treatment 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
12	1	Benign cystic lesions of the oral cavity	<ul style="list-style-type: none"> • Definition • Classification of cysts (according to the WHO classification 2017) • Odontogenic cysts of inflammatory origin 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams

جامعة البتاني

			<ul style="list-style-type: none"> • Odontogenic and non-odontogenic developmental cysts • Clinical features • Radiographic features • Surgical management of cystic lesions • Enucleation: indications, advantages and disadvantages • Adjunctive treatment <ul style="list-style-type: none"> ✓ Peripheral ostectomy and curettage ✓ Cryotherapy ✓ Chemical treatment ✓ Topical 5-fluorouracil ✓ Marsupialization 		
13	1	Odontogenic tumors	<ul style="list-style-type: none"> • Definition • Classification of Odontogenic Tumors (according to the WHO classification of odontogenic cysts, tumors and maxillofacial bone tumors 2017) <ul style="list-style-type: none"> ✓ Epithelial odontogenic tumors ✓ Mixed epithelial and mesenchymal odontogenic tumors ✓ Mesenchymal odontogenic tumors. • Clinical features • Radiographic features • Ameloblastoma <ul style="list-style-type: none"> ✓ Ameloblastoma ✓ Unicystic ameloblastoma 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams

جامعة البتة

			<ul style="list-style-type: none"> ✓ Peripheral/extraosseous) <ul style="list-style-type: none"> • Odontoma ✓ Compound type ✓ Complex type • Surgical treatment of odontogenic tumors • Enucleation and/or curettage, adjunctive treatment • Resection 		
14	1		<p>Non-odontogenic tumors and fibro-osseous lesions of the jaw</p> <ul style="list-style-type: none"> <input type="checkbox"/> Classification (according to the WHO classification of odontogenic and maxillofacial bone tumors 4th edition 2017) <input type="checkbox"/> Giant cell lesions <input type="checkbox"/> Central giant cell granuloma <input type="checkbox"/> Brown tumor of hyperparathyroidism <input type="checkbox"/> Cherubism <input type="checkbox"/> Aneurysmal bone cyst <input type="checkbox"/> Fibro-osseous lesions <input type="checkbox"/> Fibrous dysplasia <input type="checkbox"/> Ossifying fibroma <input type="checkbox"/> Cemento-osseous dysplasia 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams

جامعة البتة

			<input type="checkbox"/> Osteoma <input type="checkbox"/> Osteosarcoma		
15	1	Oral cancer	<ul style="list-style-type: none"> • Natural history of squamous cell carcinoma • Etiology • Site distribution • Clinical presentation • Staging (using the 8th edition of the cancer staging manual) and grading • Radiographic assessment • Surgical treatment, access to the oral cavity 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
16	1	Oral cancer	<ul style="list-style-type: none"> • Management of the neck • Postoperative follow up • Radiotherapy, radiotherapy techniques and fractionation • Chemotherapy, agents and scheduling • Palliative treatment and terminal care 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
17	1	Implant Treatment: Advanced Concepts	<ul style="list-style-type: none"> • Immediate post-extraction implants • Immediate loading versus delayed loading • Bone grafts and graft substitutes • Sinus lift procedure 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams

18	1	Implant Treatment: Advanced Concepts	<ul style="list-style-type: none"> • Inferior alveolar nerve lateralization • Narrow and short implants • Image-guided implantology • Computer-Assisted Implant Surgery • Special implants (zygomatic and extra-oral implants) 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
19	1	Salivary gland diseases	<ul style="list-style-type: none"> <input type="checkbox"/> Overview of major and minor salivary glands <input type="checkbox"/> Clinical assessment <input type="checkbox"/> Imaging <input type="checkbox"/> Classification: <input type="checkbox"/> Developmental <input type="checkbox"/> Inflammatory <input type="checkbox"/> Obstructive and traumatic lesion <input type="checkbox"/> Functional <input type="checkbox"/> Autoimmune conditions <input type="checkbox"/> Neoplastic lesions <input type="checkbox"/> Inflammatory conditions (sialadenitis): Viral 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams

جامعة البتة

			<p>sialadenitis and Bacterial sialadenitis ,</p> <ul style="list-style-type: none"> <input type="checkbox"/> Obstructive conditions <input type="checkbox"/> Functional conditions: Xerostomia, Sialorrhea <input type="checkbox"/> Conditions of possible traumatic origin: Mucocele, Ranula 		
20	1	Salivary gland diseases	<ul style="list-style-type: none"> • Autoimmune conditions: Sjögren syndrome, Immunoglobulin G4-related salivary gland disease • Other salivary gland conditions: Salivary duct cyst (Mucus retention cyst), Necrotizing sialometaplasia, Sarcoidosis, Sialadenosis (sialosis), Radioactive iodine sialadenitis • Neoplasms: benign and malignant (according to 4th edition of the WHO classification 2017). • Principles and complications of salivary gland surgery 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
21	1	Temporomandibular joint (TMJ) disorders	<ul style="list-style-type: none"> • TMJ anatomy • Evaluation and Radiographic examination of the TMJ • Disorders of the TMJ: • Structural (internal derangement) 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams

جامعة البتاني

			<ul style="list-style-type: none"> • Wilkes classification of internal derangement • Functional (myofascial pain) • Management: non-surgical, minimally invasive (arthocentesis and arthroscopy) and surgery 		
22	1	Temporomandibular joint (TMJ) disorders	<ul style="list-style-type: none"> • Hypermobility of TMJ • Hypomobility of TMJ: • Classification of TMJ ankyloses • Treatment 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
23	1	Orthognathic surgery	<ul style="list-style-type: none"> • Definition • Treatment objectives • Clinical examination (facial evaluation in frontal and profile views) • Radiographic evaluation (Lateral cephalometric analysis) • Pre-surgical Orthodontic Considerations • Treatment Timing 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
24	1	Orthognathic surgery	<ul style="list-style-type: none"> • Mock surgery and fabrication of splints • Surgical treatment phase (mandibular excess, mandibular deficiency, maxillary excess, Maxillary and Midface Deficiency) • Distraction osteogenesis 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams

جامعة البتة

25	1	Cleft lip and palate	<input type="checkbox"/> Epidemiology <input type="checkbox"/> Etiology <input type="checkbox"/> Classification <input type="checkbox"/> Prenatal diagnosis <input type="checkbox"/> Clinical manifestations <input type="checkbox"/> Management; presurgical orthopedics, primary operative management, treatment planning and timing, surgical procedures of cleft lip	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
26	1	Cleft lip and palate	<ul style="list-style-type: none"> • Management; Surgical procedures of cleft palate, complications • Secondary operative management; alveolar bone grafting, goals and timing, procedure, source of bone graft, complications. 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
27	1	Laser and Cryosurgery in oral and maxillofacial surgery	<ul style="list-style-type: none"> • Laser • Classification of laser according to power: low- energy and high-energy • The advantages of laser • Hazards and precautions required when using laser • Cryosurgery • Cryosurgery techniques 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams

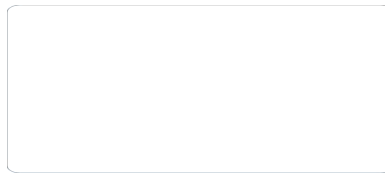
			<ul style="list-style-type: none"> • Uses of cryosurgery • The advantages of using cryosurgery • The disadvantages of using cryosurgery 		
28	1	Vascular anomalies	<ul style="list-style-type: none"> • Classification (according to ISSVA 2018) <ul style="list-style-type: none"> ➤ Hemangioma • Clinical presentation and staging • Investigations • Treatment <ul style="list-style-type: none"> ✓ In the proliferative phase ✓ In the involutive phase ✓ Residual lesions ➤ Vascular malformations • Classification according to the vessel type and whether high or low flow • Clinical presentation with emphasis on the intraosseous venous malformation • Investigations • Treatment 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams
29	1	Principles of reconstructive surgery of defects of the jaws	<ul style="list-style-type: none"> <input type="checkbox"/> Goals of reconstruction <input type="checkbox"/> Biologic basis of bone reconstruction <input type="checkbox"/> Types of grafts (autogenous, allogeneic, 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams

جامعة البتة

			<p>xenogeneic)</p> <ul style="list-style-type: none"> <input type="checkbox"/> Osteoinduction, Osteoconduction and Osteogenesis <input type="checkbox"/> Assessment of patient in need for reconstruction <input type="checkbox"/> Goals of mandibular reconstruction <input type="checkbox"/> Defect types and localizations <input type="checkbox"/> Mandibular reconstruction <input type="checkbox"/> Surgical principles of maxillofacial bone grafting procedures 		
30	1	Principles of reconstructive surgery of defects of the jaws	<ul style="list-style-type: none"> • Maxillary reconstruction • Goals of maxillary reconstructive surgery • Computer-assisted surgical planning • Flaps for maxillofacial reconstruction • Definition • Classifications • Examples of flaps in maxilla-mandibular reconstruction (palatal flap, tongue flap, buccal fat pad flap, Facial Artery Musculomucosal Flap, Temporalis muscle flap, 	Theoretical lecture using PowerPoint	The short, midterm, semester, and final exams

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			Submental Flap, Vascularized Iliac Crest Grafts		
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263. Course Evaluation

Distribution of the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily exams, oral, monthly, written and records.

Theory %10 Clinical %15	1 st semester + 2ed semester
Theory %15	Mid year exam
Theory %40 Clinical %20	Final exam
Theory %65 Clinical %35	100%

264. Learning & Teaching Resources

Required textbooks
(curricular if any)

- Contemporary Oral and Maxillofacial Surgery
7th Edition - September 27, 2018
Authors: James R. Hupp, Myron R. Tucker, Edward Ellis
- Misch's Contemporary Implant Dentistry
4th Edition - October 1, 2019
Author: Randolph Resnik

Main References
(sources)

Recommended Books & References (Scientific Journals, Reports ...)	
Websites or Electronic References	