MINISTRY OF HIGHER EDUCATION AND SCIENTIFIC RESEARCH

2025-2026

Academic Program and Course Description

University Name: The National University of Science and Technology
Faculty/Institute: College of Dentistry / Thi Qar
Academic or Professional Program Name: Bachelor's in Oral and Dental Surgery
Final Certificate Name: B. D. S
Academic System: Annually
Description Preparation Date: 3/11/2025
File Completion Date:1/12/2025

The document has been audited by the Quality Assurance and Academic Accreditation Unit, College of Dentistry."

Dean's Endorsement

1. Program Vision

Creating and supporting areas of scientific research to find appropriate solutions to oral and dental health problems and providing distinct treatment areas for patients in various oral and dental specialties, including dental implants, using modern technologies in the fields of treatment and diagnosis, and providing medical and clinical consultations to the various sectors of the country.

2. Program Mission

The mission of the College of Dentistry is to achieve excellence in the art and Science of dentistry through teaching, research, services, and the pursuit of:
1-Generations of distinguished dentists have graduated with commitment, safety, And a deep moral character, coupled with clinical knowledge to serve all segments Of society.
2- Provide and promote excellent patient service and community care.
3- Disseminating and applying knowledge and science in the field of oral health.
4 - Creating a healthy environment that encourages communication, cultural Diversity, and communication with international universities to ensure that the College is more consistent with its vision and mission.
5- Based on the need to provide nationally qualified dentists and in awareness of The pioneering role that the college must play in serving the community, the College has been keen to occupy a distinguished position in the field of dental Sciences.
Its mission should be as follows: Developing scientific research, developing the Academic level of faculty members, and increasing absorptive capacity.

3. Program Objectives

1- Graduating competitive students locally and globally and expanding admission to preliminary studies on modern foundations in a way that ensures maintaining the academic level and achieving global accreditation.
2- Providing therapeutic services in all areas of oral and dental medicine, including: diagnostic and radiology services, maxillofacial surgery, dental prosthetics, dental prevention, children's dental treatment, orthodontics, dental conservative and restoration, dental root fillings, treatment of gum and periodontal diseases, early detection for diseases.
3- Developing studies curricula in accordance with quality standards and academic accreditation.
4- Supporting and encouraging excellence and innovation in scientific research by publishing scientific products within high impact journals.
5- Maximizing the university's financial resources by diversifying its funding sources.
6- Activating international relations and cooperation with local and international universities and institutions.

4. Program Accreditation

Does the program have program accreditation? And from which agency? None

5. Other external influences

Educational laboratories, clinics within the college, and scientific research projects

6. Program Structure

Program Structure	Number of courses	Credit hours	Percentage	Reviews*
Institution Requirements	45	221	100%	
College Requirements				
Department Requirements	None			
Summer Training	2 course		100%	

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			Theoretical	Practical
First-year	101AN	General Anatomy تشريح عام	1	2
	102MT	المصطلحات الطبية Medical Terminology	1	0
	109 AL	اللغة العربيه Arabic	1	0
	103CS	علوم الحاسبات Computer Sciences	2	2
	104DA	تشريح الاسنان Dental Anatomy	2	2
	105HRAD	حقوق الانسان Human Rights	1	0
	106CH	الكيمياء الطبية Medical Chemistry	2	2
	107PS	الفيزياء الطبية Medical Physics	2	2
	108BL	الاحياء Biology	2	2
	209DM	المادة السنية Dental Material	1	2
	210PR	صناعة الاسنان Prosthodontics	1	4
	211EL	Oral histology and Embryology	2	2

		انسجة فم و أجنة		
Second-year	212BC	الكيمياء الحياتية Biochemistry	2	2
	213GH	انسجة عامة General Histology	2	2
	214PH	فسلجة عامة General Physiology	2	2
	215 CB	جرائم البعث Criminal of Bath	1	0
	201AN	التشريح البشري General Anatomy	1	2
Third-year	316MB	الاحياء المجهرية Microbiology	2	2
	317PC	علم الادوية Pharmacology	2	2
	318CM	طب المجتمع Community Dentistry	1	2
	319CV	معالجة اسنان Conservative dentistry	1	2
	312 BC	تيجان وجسور	1	2
	320RL	اشعة الاسنان Dental Radiology	1	2
	321PA	امراض عامة General Pathology	2	2
	322OS	جراحة الفم Oral Surgery	1	2
	310PR	صناعة اسنان Prosthodontics	1	4
	311DE	Dental ethics اخلاقيات مهنه	1	0
Fourth-year	423GM	الطب العام General Medicine	1	0
	424GS	الجراحة العامة General Surgery	1	0
	422OS	جراحة الفم Oral Surgery	1	4
	419CV	معالجة الاسنان Conservative Dentistry	1	6
	425OP	امراض الفم Oral Pathology	1	4
	426OD	تقويم الاسنان Orthodontic	1	4
	427PE	طب اسنان الاطفال Pedodontic	1	2
	428PT	امراض اللثة Periodontics	1	3
	410PR	صناعة اسنان	1	3

		Prosthodontics		
Fifth-year	519CV	معالجة اسنان Conservative Dentistry	1	6
	529OM	طب الفم Oral Medicine	1	4
	522OS	جراحة الفم Oral Surgery	1	6
	530PAPD	طب اطفال الاسنان Pedodontics	1	3
	531PD	طب الاسنان الوقائي Prevention	1	3
	510PR	صناعة اسنان Prosthodontics	1	6
	526OD	تقويم الاسنان Orthodontics	1	4
	528PT	امراض اللثة Periodontics	1	3
		مشروع تخرج Research project	2	0

8. Expected learning outcomes of the program

Knowledge

Learning Outcomes 1

Transferred general and rehabilitative skills

Upon completion of the program, the graduate should be able to:

1- Recognition of the importance of biomedical sciences which form the basis for Understanding human growth, development, and health.
2- Describe the basic concepts of human physiology and anatomy.
3- Understanding the concepts of oral biology, including knowledge of the form and Function of teeth and associated structures in health and disease.
4- Explain the interrelationship between different systems of the human body.
5- Understanding the etiology, pathophysiology, diagnosis, prevention, and Management of oral diseases.
6- Awareness of Theoretical basis and knowledge of current developments in the The practice of dentistry.
7- Demonstrate principles of proper dental practice and management.
8-Thorough knowledge of basic and advanced care and management skills in clinical Dentistry.
9- Know and understand the basic knowledge and application of behavioral science And communication skills.
10-point out the methods of preventing and management of medical emergencies.
11- Understanding of the medico-legal and ethical considerations affecting the roles of dental and related health care personnel and their responsibilities in respect of Health and safety legislation.
12- Awareness of oral health needs in society.
13- Understanding of the principles of scientific research and how to evaluate the Scientific evidence to apply the evidence-based dental practice.
14- Current terminology used in dentistry and related subjects.
15- Point out the basis and significance of oral health promotion, nutritional education, and prevention of oral diseases in a population-based approach.
16- Identify the properties, limitations, and parameters by which the performance of dental materials is assessed.
17- Describe the scientific principles of sterilization and disinfection in the dental clinic and lab, to prevent cross-infection and provide personal and environmental safety

Skills

- Employing appropriate new methods.
- Employing new means that serve the information that the student has acquired to help him in his life.
- The flexibility of the curriculum made it subject to change.
- Employing the necessary skills for the educational process and the necessary techniques to obtain the necessary information.
- Ability through the personality of the instructor and the extent of his influence on the student.

Ethics

Developing students' abilities to share ideas

9. Teaching and Learning Strategies

1-interactive lectures.
2- Scientific research carried out by students in cooperation with the teacher.
3- Small group teaching.
4- E-learning through virtual classes and Google education
5- Problem-solving learning application by presenting pathological conditions and Discussing possible diagnostic and treatment methods.
6- Critical thinking.
7- Self-assessment.
8- Demonstration.
9- Collaboration between students.

10. Evaluation methods

The process of evaluating students is done through the quarterly, half-yearly and end of-year examinations where the college follows the electronic correction system

Multiple-choice questions and this system is characterized by giving accurate statistical
Results on the students' answers are presented to the College Council to perform Corrective procedures according to the results, the faculty member will be able to know
The student's response to the scientific subject.

11. Faculty

Faculty Members

Academic Rank		Specialization	Special Requirements/Skills (if applicable)		Number of the teaching staff	
					Staff	Lecturer
لمياء عبد الخالق محمد سعيد خلف	دكتوراه	فلسفة في طب الاسنان المجتمع			ملاك	
فلاح حسن حنون عياده	دكتوراه	علوم فيزياء			اعاره	
ايناس طه ابراهيم درويش	دكتوراه	طب الفم و الاسنان			ملاك	
سعدي عبد العزيز كزار	دكتوراه	جراحة انف واذن وحنجرة			ملاك	
محمد مهدي ياسين حسين الخفاجي	دكتوراه	اللغه العربية وادابها			اعاره	
غفران محمد مطيع قواس	دكتوراه	كيمياء تحليلية			ملاك	
ضحى جهاد محمد جهاد	دكتوراه	علوم الحياة			ملاك	
نازنين امان الله نصرة الله جباري	دكتوراه	علم الاحياء			ملاك	
ياسين حسين عويد وسمى	دكتوراه	علوم الحياة			ملاك	
ديار خالد بكر ايوب	دكتوراه	طب الاسنان			ملاك	
نرمين محمد منير يوسف	دكتوراه	علوم حياة			ملاك	
عماد محمود حسان	دكتوراه	طب اسنان			ملاك	
جاسم محمد احمد حيدر	دكتوراه	فسلجه			ملاك	
عباس مطرود باشي موسى	دكتوراه	كيمياء فيزيائية			ملاك	
عبد الجبار عباس علي عبد	دكتوراه	علوم الكيمياء			ملاك	
محسن عبد علي عبد الصاحب الحمامي	دكتوراه	السايتولاثلوجي			ملاك	
سعد محمد حسن فتحي	دكتوراه	التشريح			ملاك	
شيماء ناهي نعيم دفار	دكتوراه	فسلجة				محاضر
عبد الحسن مهدي صالح على	دكتوراه	الطب والجراحة العامة				محاضر
مرتضى محمد باقر عيسى	دكتوراه	طب الاسنان			ملاك	
بسام كريم حمد امين	دكتوراه	طب الاسنان			ملاك	

محاضر					ماجستير	احمد صاحب فيصل عناد
	ملاك				ماجستير	تقى علي عمير نشمي
	ملاك				ماجستير	رزكار رحمن غفور محيي الدين
	ملاك				ماجستير	اديان احمد حسن هليل
	ملاك				ماجستير	حيدر راضي سعود محمد
	ملاك				ماجستير	محمد علي مونس حمزة
	ملاك				ماجستير	حيدر اسعد فرهود محي
	ملاك				ماجستير	محمد نجم عبد البوشهاب
محاضر					ماجستير	جيلان ضاحي حسن سويف
	ملاك				ماجستير	ناهد محمود احمد جمعه
	ملاك				ماجستير	زهراء صاحب مزعل علي
	ملاك				ماجستير	حسام شلمان حمادي عبد الله
محاضر					ماجستير	مظفر فاضل جدوع ضيدان
	ملاك				ماجستير	صادق مجيد حميد
محاضر					دكتوراه	احمد كريم كاظم فنجان
	ملاك				ماجستير	هند ماجد خلف ساجت
	ملاك				ماجستير	سعد عبد العالي عباس صويف
	ملاك				ماجستير	نور علاء ناصر حسين
	ملاك				ماجستير	حارث احمد عبد الحسين حياوي
	ملاك				ماجستير	هدى علاء ناصر حسين
	ملاك				ماجستير	سراب سلمان كاظم جواد
	ملاك				ماجستير	ابتهال عطيه حبيب كاطع

12 Professional Development

Mentoring new faculty members

1- Holding training courses on teaching methods
2- courses and workshops on scientific research skills

Professional development of faculty members

1- Participation in conferences
2- - Courses and workshops on scientific research skills

13- The most important sources of information about the program

1- College and university website.
2- Student guide.
3- College registration.

Acceptance criterion

Central admission / according to the requirements of the Ministry of Higher Education and Scientific Research.

Program development plan

Forming a curriculum development committee consisting of experts in the subjects, educational specialists, and clinical practitioners to design a comprehensive, evidence-based curriculum.

Defining learning outcomes, competencies, and goals aligned with national or international standards for dental education.
Employing experienced and qualified faculty members with expertise in various dental medical specialties, clinical practice, education, and research.
Providing professional development opportunities for faculty members through workshops and resources to enhance teaching skills, curriculum design, assessment methods, and research productivity.
Establishing orientation programs and support systems for faculty members to enhance collaboration, innovation, and continuous improvement in teaching and learning.
Evaluating and securing the necessary infrastructure, facilities, equipment, and resources to support the BDS program, including lecture halls, laboratories, dental clinics, simulation centers, libraries, and information technology infrastructure.
Investing in high-tech dental equipment, tools, materials, and technology to provide practical training for students and clinical experience in both simulated environments and real-life settings.

Curriculum Skills Outline																		
Please check the boxes corresponding to the individual learning outcomes from the program being evaluated																		
Learning outcomes required from the program																		
Transferred general and qualification skills (other skills related to employability and personal development				Emotional and value goals				Program specific objectives				Cognitive goals				Essential or optional?	Course Name	Course Code	year/level
د4	د3	د2	د1	ج4	ج3	ج2	ج1	ب4	ب3	ب2	ب1	ا4	ا3	ا2	ا1				
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√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√		Dental Anatomy		
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Community Dentistry	Oral surgery	Operative	Prosthodontics	Biochemistry	Physiology	oral histology and Embryology	Prosthetics	Dental material	General anatomy	General Histology	Baath Party crimes in Iraq
Third stage					**Second stage**						

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Oral medicine	Orthodontics	Periodontology	Oral surgery	Restorative	Prosthodontics	Dental Radiology	Dental Ethics	Microbiology	General pathology	Pharmacology
Fourth stage										

	Fifth stage											
Research	Preventive dentistry	Orthodontics	endodontics	periodontology	General medicine	Oral surgery	Restorative	Prosthodontics	Endodontics	General surgery	General medicine
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The First Stage

Medical Chemistry

Course Description

1. **Course Name**	
Medical Chemistry	
2. **Course Code**	
106CH	
3. **Semester / Year**	
First year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
60 Theoretical and 60 practical	
7. **Course administrator's name**	
Name: **ا.د عباس مطرود باشي** **م.م. احمد صاحب فيصل**	
8. **Course Objectives**	
Course objective	**Course objectives** ○ Introduction to biochemistry. ○ Understand the functions and variables that occur in them, the irregularity in their levels, their life and disease implications, and ways to measure their levels **Cognitive objectives** ○ Enabling students to obtain knowledge, intellectual and skill understanding of the types of solutions ○ Enabling students to obtain knowledge and intellectual and skill understanding to know and understand the variables that occur when the concentration of subjects changes on the health of the body ○ Teaching the student, the relationship of general and inorganic chemistry to humans. ○ Enabling students to obtain knowledge, intellectual understanding and skills to learn about the acid-base relationship on blood and its effects on the functions of organs. ○ Enabling students to obtain knowledge, intellectual and skill understanding of PFR solutions and its system. ○ Enabling students to obtain knowledge, intellectual and skill understanding of radiochemistry and the effects of radiation on human health

9. **Teaching and Learning Strategies**	
Strategy	○ Giving scientific and theoretical lectures through screens, PowerPoint, slides, and experiments ○ the process in the educational laboratories of the college.

10. **Course Structure**					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**2**	**Acid, Base and Salt**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**2**	**salts, preparation of salts**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**2**	**Fluid and electrolyte**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**2**	**Buffer-pH and Acid-Base Balance**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**2**	**acid-base balance and blood pH**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**2**	**Colloids and colloidal dispersions**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**2**	**Chirality in Biological Systems**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**2**	**concentration, preparation of solutions**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

9	**2**	**Pollution**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**2**	**Radiochemistry**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**2**	**Alkanes and Cycloalkanes**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**2**	**Alkenes and Alkynes**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**2**	**Aromatic compounds**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**2**	**Aromatic compounds in Nature**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**2**	**Stereoisomers of Carbon**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**2**	Diastereomers Classifying and Naming Alcohols	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**2**	**Alcohols, Phenols, Ethers and Thiols (preparation, reactions**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**2**	**Carboxylic Acids And Their Derivatives , part 1**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

19	**2**	**Carboxylic Acids And Their Derivatives , part 2**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**2**	**Aldehydes and ketones**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**2**	**Carbohydrates**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**2**	**Monosaccharide's**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**2**	**Disaccharides Carbohydrates and oral health**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**2**	Lipids **Classification**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**2**	Derived lipids **The role of lipids in teeth diseases**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**2**	**Proteins**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**2**	**Amino acids Effects of protein on oral health**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**2**	**Nucleic Acids**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

29	**2**	**Nucleosides, Nucleotides**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**2**	**Dioxy and ribo Nucliec acids**	**Medical chemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions/activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ The Chemical Basis of Life. **George H. Schmid** ○ The Chemistry of Medical and Dental Materials. **Nicholson .W .J**

Dental Anatomy

Course Description

1. **Course Name**	
Dental anatomy	
2. **Course Code**	
104DA	
3. **Semester / Year**	
First year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
60 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: م.م. جيلان ضاحي حسن	
8. **Course Objectives**	
Course objective	**Course objectives** ○ Giving students an integrated practical program by training them to carve teeth on wax molds. **Cognitive goals** ○ Formulating and programming information in a way that enables the student to absorb it and increase knowledge regarding the theoretical and practical aspects. ○ Introducing the student to the anatomical model of the teeth. **Skill objectives for the course** ○ Training students on the process of carving teeth on wax molds, depending on the measurements of each tooth.
9. **Teaching and Learning Strategies**	
Strategy	○ Giving scientific and theoretical lectures through displays, PowerPoint, and slides, and practical experiments in the educational laboratories of the college.

10.Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**2**	**Introduction**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**2**	**Numbering system**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**2**	**Practical demonstration of Carving a Cube (1cm*1cm*1cm)**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**2**	**-Introduction to Anatomical landmarks on Teeth models. -Carving of a cube**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**2**	**Description &Carving of the Labial Aspect of P. Max. Right Central Incisor.**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**2**	**Description &Carving of the Mesial aspect of P. Max. Right Central Incisor**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**2**	**Description ,Carving & Finishing of the Incisal Aspect of Permanent Max. Right Central Incisor.**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**2**	**Practical Training of Carving of P. Max. Right Central Incisor**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**2**	**Permanent Maxillary Lateral IncisorPractical Exam. Of Carving of P. Max. Right Central Incisor**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

10	**2**	**Description &Carving of the Labial & Mesial Aspects of P. Max. Right Canine**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**2**	**Permanent Mandibular Incisors Description ,Carving & Finishing of the Incisal Aspect of P Max. Right Canine.**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**2**	**Practical Training of Carving of P. Max. Right Canine.**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**2**	**Practical Exam. of Carving of P. Max. Right Canine.**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**2**	**Mid Year Practical Examination of Tooth Carving.**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**2**	**Description &Carving of the Buccal & Mesial Aspects of P.Max. Right 1 st Premolar**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**2**	**Description, Carving & Finishing of the Occlusal Aspect of P.Max. Right 1 st Premolar.**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**2**	**Practical Training of Carving of P. Max. Right 1 st Premola**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**2**	**Practical Exam. Of Carving of P. Max. Right 1 st Premolar**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**2**	**Description &Carving of the Buccal & Mesial Aspects of P.Mand. Right 1 st Premolar**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

20	**2**	**Description, Carving & Finishing of the Occlusal Aspect of P.Mand. Right 1 st Premolar.**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**2**	**Practical Training of Carving of P. Mand. Right 1 st Premolar**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**2**	Practical Exam. Of Carving of P. Mand. Right 1 st Premolar	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**2**	**Description &Carving of the Buccal & Mesial Aspects of PMax.Right 1 st Molar**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**2**	**Description, Carving & Finishing of the Occlusal Aspect of P. Max. Right 1 st Molar**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**2**	**Practical Training of Carving of P. Max. Right 1 st molar**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**2**	**Practical Exam. of Carving of P. Max. Right 1 st molar.**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**2**	**Description &Carving of the Buccal & Mesial Aspects of P. Mand. Right 1 st Molar**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**2**	**Description ,Carving & Finishing of the Occlusal aspect of P.Mand 1st Molar/Practical Training of Carving p.Mand 1st molar.**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

29	**2**	**Practical Examination of Carving of P. Mand. Right 1st molar**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**2**	**Final Oral & Practical Examination of Tooth carving**	**Dental anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam grades
- Semester exams
- Weekly reports of practical experiments
- Daily attendance and participation in scientific questions/activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizes the important topics.
Main references	○ Woelfel's Dental Anatomy It's Relevance to Dentistry. ○ Wheeler's Atlas of Tooth Form

General Anatomy

Course Description

1. **Course Name**	
General anatomy	
2. **Course Code**	
103CS	
3. **Semester / Year**	
First year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical + 60 practical	
7. **Course administrator's name**	
Name **ا.م.د سعد محمد حسن** **م.د. سعدي عبد العزيز كزار**	
8. **Course Objectives**	
Course objective	**Course objectives** ○ Scientific preparation of the student with regard to human anatomy, especially with regard to the anatomy of the head and neck and its relationship to his exact specialization as a dentist. **Cognitive goals** ○ Gain knowledge of human anatomy. ○ Focusing on the anatomy of the head and neck and its relationship to his specialty as a dentist **The skills objectives of the course** ○ The relationship of human anatomy to the student's work as a human dentist. ○ Gain full knowledge of the organs of the human body.
9. **Teaching and Learning Strategies**	
Strategy	○ Giving lectures through displays, PowerPoint and slides. ○ Preparing seminars by students under the supervision of professors. ○ Educational films. ○ Practical laboratory on anatomical models

10.**Course Structure**					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Introduction to human anatomy**	General **anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**Basic structures part 1 (Skin, Fasciae, Muscle, Joints, Ligament, Bursae)**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**2**	**Basic structures part 2 (bone, Cartilage, BloodVessels, Lymphatic System)**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	**Basic structures part 3(Nervous System, Mucous Membranes, Serous Membranes)**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**2**	**Skeletal system of the body: Skull :Cranial Bones**	General **anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**2**	**Skeletal system of the body: Skull : Facial Bones**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**2**	**External Views of the Skull**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**2**	**• The Cranial Cavity • Major Foramina and Fissures locations and structures pass through • Neonatal Skull**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**2**	**□ Skeleton of the Orbital Region, Openings into the Orbital Cavity □ Skeleton of the External Nose, nasal**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		cavity, Paranasal Sinuses **□ Auditory ossicles** **Hyoid bone**			
10	**2**	**The Vertebral Column**	General **Anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**2** **4**	**□ Structure of the Thoracic Wall** **□ Joints of the Chest Wall 2** **□ Suprapleural Membrane** **□ Diaphragm** **□ Surface Anatomy**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**2**	**Thoracic cavity: Mediastinum, Pleurae, Trachea, Bronchi, Lungs**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**3**	**Pericardium, Heart, Large arteries, veins and nerves of Thorax**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**2**	**□ Bones of the Shoulder (Pectoral girdle) girdles** **□ Bones of the Upper extremities**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**2**	**□ Bones of the Pelvic girdle** **□ Bones of the Lower extremities**	General **anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**2**	**Abdominal cavity and organs**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Snell's Clinical Anatomy by Regions, 10th edition. Wolters Kluwer 2019 ○ Netter's Head and Neck Anatomy for Dentistry, 3rd edition. Elsevier 2017 ○ Gray's Atlas of Anatomy, 3rd edition. Elsevier2021

Biology

Course Description

1. **Course Name**	
Biology	
2. **Course Code**	
108BL	
3. **Semester / Year**	
First year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
60 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: م.د. نرمين محمدمنير	
8. **Course Objectives**	
Course objective	**Course objectives** ○ An introduction to the life sciences and an understanding of its various branches such as parasites, cytology, histology and genetic. **Cognitive goals** ○ Formulating and programming information in a way that enables the student to absorb it and increase knowledge regarding the theoretical and practical aspects. ○ Teaching the student, the relationship of life sciences to humans and their impact on the health of his body. • The relationship of parasitology and cytology to human diseases. • The relationship of genetics to human health. • The relationship of histology to humans. • The relationship of cytology to blood. **Curriculum-Specific Skills Objectives** ○ According to the teaching method used, such as discussion, lecture, questioning. ○ Use laboratories and scientific experiments to increase student understanding and see this in practice. ○ The method of sudden exams and kozas.

9. **Teaching and Learning Strategies**	
Strategy	○ Giving scientific and theoretical lectures through displays, PowerPoint, and slides, and practical experiments in the educational laboratories of the college

10.**Course Structure**					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**2**	**Introduction to Medical and Oral Biology**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**2**	**Prokaryotes and Eukaryotes**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**2**	**General and oral immunity**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**2**	**Bacteria and oral disease**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**2**	**Genetic and its role to oral disease.**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**2**	**Simple epithelial tissue (tongue)**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**2**	**Stratified epithelial tissue**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**2**	**Glandular epithelial tissue (salivary gland)**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**2**	**General connective tissue (blood)**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

10	**2**	**Muscular tissue**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**2**	**Nerve Tissue**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**2**	**Cell structure oral mucous membrane**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**2**	**Plasma membrane structure**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**2**	**Passage of materials a cross cell membrane**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**2**	**Cell Cycle**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**2**	**Mitosis and meiosis**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**2**	**Cell energy**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**2**	**Nucleic Acid DNA and RNA**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**2**	**Introduction to parasitology**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**2**	**Types of parasites and host**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**2**	**General and oral protozoa**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

22	**2**	**Human *amoebas,E. histolytica, E.coli, E.gingivalis***	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**2**	**Flagellates, *Giardia lamblia, Trichomonas tenax, T.hominas, T.vaginalis***	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**2**	***Leishmania* , cutaneous and vesiral**	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**2**	**Sporozoa, *Plasmodium spp.***	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**2**	***Toxoplasma gondii***	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**2**	**Nemathelminthes, *Ascaris lumbricoides,***	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**2**	***Ancylostoma duodenale, Entrobius vermicularis***	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**2**	**Platyhelminthes, *Fasciola hepatica***	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**2**	***Schistosoma spp.***	**Biology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. **Course evaluation**

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. **Learning and Teaching Resources**	
Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Human biology,8 edition Inderbir Singh ○ Cell Biology,3 edition.2017. Thomas ,D; William ,C; Jennefer , L and Graham, T

Medical Physics

Course Description

1. **Course Name**	
Medical Physics	
2. **Course Code**	
107PS	
3. **Semester / Year**	
First year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
60 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name:	**ا.د. فلاح حسن حنون** **م.م. محمد نجم عبد**
8. **Course Objectives**	
Course objective	**Course objectives** ○ Enabling the student to know the physical ideas related to the human body from two aspects: the physical functions of the organs of the human body and medical applications in diagnosis and treatment, description and application. **Cognitive goals** ○ Formulating and programming information in a way that enables the student to absorb it and increase knowledge regarding the theoretical and practical aspects. ○ Teaching the student the relationship of physics to humans and their physical impact on the human body ○ Teaching the student the physical applications of the human body in diagnosis and treatment. ○ Improving the performance of the human body by physical means. **Curriculum-Specific Skills Objectives** ○ According to the teaching method used, such as discussion, lecture, questioning. ○ Use laboratories and scientific experiments to increase student understanding and see it in action .

9. **Teaching and Learning Strategies**	
Strategy	○ Giving scientific and theoretical lectures through displays and PowerPoint and practical experiments in the educational laboratories of the college.

10.**Course Structure**					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1-2	**2** **2**	**Terminology** Terms: Medical Physics, physical medicine, Physical therapy, Health Physics, Radiological Physics, clinical physics. **Modeling, Accuracy, Precision, False Positive, False Negative**	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3- 4	**2** **2**	***Force on &in body:*** Static forces :(type of levers with medical examples). **Dynamic forces (Centrifuge).**	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5-6	**2**	***Physics of the skeleton:*** Bones:(Function of bones, Composition of bone, bone remodeling, compact and trabecular bone) Stress-strain curve :(compressive and tensile stress, young modulus). **Bone joints :(Synovial fluid, coefficient of a joint)..**	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

7-8	**2** **2**	***Heat and cold in medicine:*** Physical basis of heat and temperature, Temperature scales, Converting Temperatures, Temperature in Dentistry, Thermal. expansion, (Linear, Area, Volume Thermal Expansion), Thermometry, Heat therapy, Thermography, Cold in medicine and cryosurgery. Thermal conductivity	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9-10	**2** **2**	***Energy, work and power of the body:*** First law of thermodynamic. Energy change in the body (Met, Basal metabolic rate (BMR). **Work and power. Efficiency heat losses from the body. Anaerobic phase and aerobic phase. Hypothalamus (body's thermostat).Heat lost by (radiation, convection, evaporation of sweat and respiration).**	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11-12	**2**	***Pressure:*** Definition, absolute pressure, gauge pressure, negative pressure, unit of	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

	2	pressure. Measurement of pressure in the body (Manometer).Pressure inside the skull. Eye pressure. Pressure in the skeleton. Pressure in the urinary bladder.Boyle's law: (pressure while diving).HOT (hyperbaric oxygen therapy).			
13-14	**2**	***Electricity within the body:*** Electrical potential of nerves (resting potential, action potential in myelinated and unmyelinated nerves) Electromyogram (EMG). Electrical potential in the heart (electrocardiogram ECG). **Electroencephalogram (EEG).**	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15-16	**2** **2**	***Sound in medicine:*** Properties of sound. **Stethoscope (including heart sound).mechanism of hearing**	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17-18	**2** **2**	. ***Ultrasound*** (A-scan, B-scan, M-scan and Doppler effect). **Physiological effect of ultrasound in therapy**	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

19-20	**2** **2**	***Light in medicine:*** **Light nature, Planck Equation, (Reflection, Refraction and.**	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21-22	**2** **2**	**Absorption of Light, Properties of light), Diffuse reflection, Specular reflection, Phototherapy, Application of ultraviolet and infrared light in medicine, Tanning and Skin Cancer**	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23-24	**2**	***Laser in medicine***. What is laser? Application of laser in medicine Atomic Transitions, Population inversion, Laser Typical Characteristics, General Applications of Laser, Laser Dental **Applications, Reshape gum tissue, Laser aided teeth whitening, Laser Drill..**	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25-26	**2** **2**	***Physics of eye and vision:*** Focusing element of the eye (cornea, lens). **Element of the eye (pupil, aqueous humor, vitreous humor, sclera).Visual acuity, Snellen chart, optical density**	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

27-28	**2** **2**	***Physics of diagnostic X-ray:*** **Properties of X-ray, production of X-ray. Absorption of X-ray, contrast media-ray image (penumbra, grid, and intensifying screens).Radiation to patients from X-ray (filters).**	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**2**	***Physics of nuclear medicine:*** **Radioactivity decay, half-life, units. Basic instrumentation and its medical application (GM-tube, Photomultiplier tube, scintillation detector, solid state detector).Therapy with radioactivity. Radiation doses in nuclear medicine.**	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**2**	***Physics of radiation therapy:*** The dose units (Rad and Gray).Principles of radiation therapy. **Brach therapy, quality factor (QF).**	**Medical Physics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. **Course evaluation**

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. **Learning and Teaching Resources**	
Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Medical Physics John Cameron ○ Physics of the Human Body Irving Herman

Computer

Course Description

1. **Course Name**	
Computer	
2. **Course Code**	
103CS	
3. **Semester / Year**	
First year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: **م.م. احمد كريم كاظم**	
8. **Course Objectives**	
Course objective	**Course objectives** ○ Introduction to computer science and teaches the student the performance of computers and approved methods and programs and the use of computers in the medical field. ○ Teaching the student how to use the computer **Cognitive objectives** ○ Teaching the student how to use the computer ○ How to use the software ○ The skills objectives of the course **The skills objectives of the course** ○ Teaching the student the functions of using a computer ○ The use of computers in the medical field
9. **Teaching and Learning Strategies**	
Strategy	○ Teaching aids computers ○ Theoretical lectures and practical laboratories

10.Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Introduction about computer /Hardware and Software/computer structure/`Floppy magnetic disks**	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**E-learning**	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**Introduction to E-learning Google Classroom Platform Google drive**	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	**Google forms**	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	**Online conferencing**	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**1**	**Introduction about Windows /A look at Windows 10/Stating Windows 10/Working with a windows Program**	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**1**	**Working with files and folders/ Using My computer**	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**1**	**Working with Taskbar and Desktop**	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**1**	**Using Windows Accessories**	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

10	**1**	A look at Control Panel	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**1**	Widows Explorer	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**1**	Libraries	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	Introduction about Microsoft Word 2016	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	A look at Microsoft Word /	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**1**	Formatting paragraphs	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	Proofing documents	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	Adding Tables	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**1**	Inserting Graphic Elements	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**1**	Controlling page Appearance	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**1**	20 Introduction about Excels /A Look at Microsoft Excel	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**1**	Modifying A Worksheet /performing Calculation	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

22	**1**	Formatting a worksheet/ Developing a work book	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**1**	Printing Workbook Contents/Customizing Layout	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**1**	Introduction about Microsoft Access/ A look at Microsoft Access	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**1**	Creating Data tables /properties of the fields	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**1**	Querying the database/Designing Forms/Producing reports	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**1**	Introduction about Microsoft Power point/starting power point2016	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**1**	Formatting text/Using graphics and Text	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**1**	Manipulating the slides/Using Multimedia Elements	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**1**	Power point Management	**Computer**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.

Main references	○ E-learning concepts and Techniques. Mousa Afane. Vince Basile, Justin. Bennett, Pamela. Berman, Michael Bond ○ Computer application in Dr. P. S. Aithal management. William ,C; Jennefer , L and Graham, T.

Medical Terminology

Course Description

1. **Course Name**	
Medical Terminology	
2. **Course Code**	
102MT	
3. **Semester / Year**	
First year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical	
7. **Course administrator's name (mention all, if more than one name)**	
Name **م.د. رياض عيدان عبد**	
8. **Course Objectives**	
Course objective	○ Using visual cues to remember complex terms ○ Deciphering terms by learning basic latin component (root, suffix, prefix) ○ Bulk learing using self-made acronyms ○ Using engaging guides and workbooks
9. **Teaching and Learning Strategies**	
Strategy	○ Giving scientific and theoretical lectures through displays, PowerPoint, and slides, and practical experiments in the educational laboratories of the college

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Dental Terminology part (1)**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**Dental Terminology part 2**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**Dental Terminology part 3**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	**Small Talk**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	**Common Mistakes**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**1**	**Passive Voice**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**1**	**Direct and Indirect Speech**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**1**	**Synonyms in English**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**1**	**Adjectives**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**1**	**Integrating a quotation into assay**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**1**	**Preposition in English Grammar with examples**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

12	**1**	**Idioms and Phrases**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	**Writing Assignment**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	**Pronunciation**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**1**	**Tenses**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	**Synonyms and Ant**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	**Paraphrasing**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**1**	**Essay writing**	**Dental Terminology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Dental Terminology 3rd Edition. Dofka Charline M. ○ A dictionary of Medical Dental ,Terminology

Human Rights

Course Description

1. **Course Name**	
Human Rights	
2. **Course Code**	
105HRAD	
3. **Semester / Year**	
First year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: **م.م. هند ماجد خلف**	
8. **Course Objectives**	
Course objective	**Course objectives** ○ The program provides a sure opportunity and a first step for the student in introducing his rights as well as the objective commitment to his duties. The course also seeks to spread a culture of human rights education in order to build a cohesive society in which justice, freedom and equality prevail. **Cognitive objectives** ○ Introduce the student to his/her rights ○ Introduce the student to his/her duties towards society ○ The skills objectives of the course ○ Introduce the student to his/her rights
9. **Teaching and Learning Strategies**	
Strategy	○ Giving lectures through display screens and PowerPoint

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**المقدمة /الباب الأول في - حقوق الإنسان** **الفصل الأول /حقوق الإنسان في الحضارات القديمة** **المبحث الأول /حقوق الإنسان في الحضارات اليونانية والمصرية المطلب الأول /حقوق الإنسان في الحضارة اليونانية** **المطلب الثاني /حقوق الإنسان قي الحضارة المصرية القديمة المبحث الثاني /حقوق الإنسان في الحضارات القديمة** -	**Human Rights**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**الفصل الثاني /حقوق الإنسان في الشرائع والأديان السماوية المبحث الأول /حقوق الإنسان في الديانات المسيحية واليهودية** **المبحث الثاني /حقوق الإنسان في الإسلام** **المطلب الأول /الإعلان العالمي لحقوق الإنسان**	**Human Rights**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**الفصل الثالث /مصادر حقوق الإنسان المبحث الأول /المصادر الدولية** **المطلب الأول /الإعلان العالمي لحقوق الإنسان**	**Human Rights**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	**المطلب الثاني /العهدان الدوليان الخاصان بحقوق الإنسان**	**Human Rights**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

5	1	المبحث الثاني / المصادر الوطنية المطلب الأول /إعلان حقوق الإنسان والمواطن ((1789 اب 26الفرنسي)	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
6	1	المطلب الثاني /الدساتير و ألإعلانات الفرنسية التي تلت 1789إعلان الحقوق لسنه	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
7	1	المطلب الثالث /دستور 2005جمهورية العراق لسنه	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
8	1	الفصل الرابع /ضمانات حقوق الإنسان المبحث الأول /ضمانات حقوق الإنسان على الصعيد الداخلي المطلب الأول /الضمانات الدستورية	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
9	1	المطلب الثاني /الضمانات القضائية	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
10	1	المبحث الثاني /ضمانات حقوق الإنسان في الإسلام المطلب الاول /إقرار مبدأ ثنائية المسؤولية في المجتمع الإسلامي المطلب الثاني /الصفة الدينية للقانون الإسلامي	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
11	1	المطلب الثالث /بعض الأنظمة الإسلامية لمصلحة الفرد والجماعة والسلطات الحاكمه	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
12	1	المبحث الثالث /ضمانات حقوق الإنسان على الصعيد الدولي المطلب الأول /ميثاق الأمم المتحدة المطلب الثاني /الجمعية العامة للأمم المتحدة	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
13	1	الطلب الثالث /المجلس الاقتصادي والاجتماعي المطلب الرابع /مجلس حقوق الإنسان	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams

14	1	المبحث الرابع /دور المنظمات الإقليمية في حماية حقوق الإنسان المطلب الأول /الاتفاقية الأوربية لحقوق الإنسان	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
15	1	المطلب الثاني /الاتفاقية الأمريكية لحقوق الإنسان المطلب الثالث /الميثاق الإفريقي لحقوق الإنسان والشعوب المطلب الرابع /الميثاق العربي لحقوق الإنسان الفصل الخامس /مستقبل حقوق الإنسان المبحث الأول /التقدم التكنولوجي وأثره على الحقوق و الحريات حقوق الإنسان والحريات العامة	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
16	1	المطلب الأول /الأحزاب السياسية وحقوق الإنسان المطلب الثاني /دور الإعلام والتنشئة	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
17	1	المبحث الثاني /العولمة وحقوق الإنسان المطلب الأول /الخصوصية وحقوق الإنسان المطلب الثاني /الهيمنة وحقوق الإنسان	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
18	1	الفصل الأول /مفهوم الديمقراطية, تطوره تعريفه وإبعاده المبحث الأول /جذور مفهوم الديمقراطية و تطورها	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
19	1	المبحث الثاني /تعريف الديمقراطية	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
20	1	المبحث الثالث /الديمقراطية بين العالمية والخصوصية	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
21	1	الفصل الثاني /إشكال الديمقراطية البحث الأول /الديمقراطية المباشرة المطلب الأول /مضمون الديمقراطية المباشرة المطلب الثاني /تطبيقات الديمقراطية	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams

		المباشرة المطلب الثالث /تقدير نظام الديمقراطية المباشرة			
22	1	المبحث الثاني /الديمقراطية شبه المباشرة المطلب الأول /مفهوم الديمقراطية شبه المباشرة مطلي الثاني /مظاهر الديمقراطية شبه المباشرة	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
23	1	المطلب الثالث /تقدير نظام الديمقراطية شبه المباشرة المبحث الثالث /الديمقراطية التمثيلية	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
24	1	المطلب الاول /مفهوم النظام التمثيلي وطبيعته القانونية المطلب الثاني /أركان النظام التمثيلي	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
25	1	المطلب الثالث /إشكال النظام التمثيلي النيابي	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
26	1	المبحث الرابع / المجلس النيابي المطلب الأول / نظام المجلس النيابي الواحد ونظام المجلسين المطلب الثاني التنظيم الداخلي للمجلس النيابي	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
27	1	الفصل الثالث /أليه النظام التمثيلي النيابي :الانتخاب المبحث الأول /مفهوم الانتخاب وتكيفه القانوني المطلب واحد /مفهوم الانتخاب المطلب الثاني /التكيف القانوني للانتخاب المبحث الثاني /هيئة الناخبين المطلب الأول /مفهوم هيئة الناخبين المطلب الثاني /تكوين هيئة الناخبين	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams
28	1	المطلب الثالث /المرشحون لانتخاب المبحث الثالث /تنظيم عملية الانتخاب المطلب الأول /تحديد الدوائر الانتخابية المطلب الثاني /الدوائر الانتخابية المطلب الثالث /المرشحون	Human Rights	A theoretical lecture using power point	Short, semester, half-year and final exams

29	**1**	**المطلب الرابع /الحملة الانتخابية المطلب الخامس /التصويت المبحث الرابع / تنظيم الانتخابات المطلب الثاني /الانتخاب الفردي والانتخاب بالقائمة الامريكية) اسيان**	**Human Rights**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**1**	**المطلب الثالث /نظام الأغلبية ونظام التمثيل النسبي المطلب الرابع /نظام تمثيل المصالح المطلب الخامس /نظام التصويت الاختيار والتصويت الاجباري المطلب السادس /نظام التصويت السري والتصويت العلني**	**Human Rights**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. **Course evaluation**	
○ Daily exam scores ○ Semester Exams ○ Weekly reports of practical experiences ○ Daily attendance and participation in scientific questions / activity	
12. **Learning and Teaching Resources**	
Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ أ.د. حافظ علوان الدليمي كتاب (حقوق الانسان) ،جامعة بغداد،كلية العلوم السياسية ،. 2009 ○ أ.د .رياض عزيز هادي كتاب حقوق الانسان (تطورها ومضامينها حمايتها)،.

Arabic Language -:

13. **Course Name**	
Arabic Language	
14. **Course Code**	
109AL	
15. **Semester / Year**	
First year	
16. **Description Preparation Date**	
2025	
17. **Available Attendance Forms**	
Theoretical	
18. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical	
19. **Course administrator's name (mention all, if more than one name)**	
Name: **م.م. يسر حميد حنون**	
20. **Course Objectives**	
Course objective	**Course objectives** ○ . introducing the student to the rules of the Arabic language ○ Introducing the student to the poems of poets across different eras
21. **Teaching and Learning Strategies**	
Strategy	○ Delivering the lecture using the lecture-based (oral presentation) method.”

1. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	1	الموضوعات الادبيه المتنبي حياة الشاعر مع قصيدة بالإضافة الى التعليق النقدي	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
2	1	(بدر شاكر السياب) حياة الشاعر مع قصيدة بالاضافه الى التعليق النقدي	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
3	1	(نازك الملائكه) حياة الشاعر مع قصيدة بالاضافه الى التعليق النقدي	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
4	1	(الجواهري) حياة الشاعر مع قصيدة بالاضافة الى التعليق النقدي	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
5	1	الموضوعات النحوية الجملة االاسمية	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
6	1	الجملة الفعلية	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
7	1	المبتدأ	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
8	1	الخبر	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
9	1	النواسخ	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
10	1	العلامات الاصلية والفرعية في الاسم والفعل المضارع	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
11	1	العلامات الفرعية في الاسم والفعل المضارع	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams

12	**1**	**علامات النصب الفرعية**	**Arabic Language**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	**عالمات الجر الفرعية**	**Arabic Language**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	**علامات الجزم الفرعية**	**Arabic Language**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**1**	**الموضوعات الصرفية**	**Arabic Language**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	المشتقات	**Arabic Language**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	**جمع التكسير**	**Arabic Language**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**1**	**اسم الفاعل**	**Arabic Language**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**1**	**صيغ المبالغة**	**Arabic Language**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**1**	**اسم المفعول**	**Arabic Language**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**1**	**الفعل المجرد والمزيد**	**Arabic Language**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**1**	**المذكر والمؤنث وعلامات التأنيث**	**Arabic Language**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**1**	**الاسم الناقص**	**Arabic Language**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

24	1	جمع الاسم المنقوص	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
25	1	الاسم الممدود	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
26	1	جمع الاسم الممدود	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
27	1	. لموضوعات الاملائية الحذف والزيادة الحروف التي تحذف الحروف التي تزاد	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
28	1	االالف المقصورة والالف الممدوة التاء المربوطة والتاء المفتوحة الضاد والظاد	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
29	1	الهمزه واحكامها	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams
30	1	علامات الترقيم	Arabic Language	A theoretical lecture using power point	Short, semester, half-year and final exams

The Second Stage

General anatomy

Course Description

1. **Course Name**	
General anatomy	
2. **Course Code**	
201AN	
3. **Semester / Year**	
Second year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: **م.د. سعدي عبد العزيز** **كزار**	
8. **Course Objectives**	
Course objective	○ Scientific preparation of the student with regard to human anatomy, especially with regard to the anatomy of the head and neck and its relationship to his exact specialization as a dentist.
9. **Teaching and Learning Strategies**	
Strategy	○ Giving scientific and theoretical lectures through displays, PowerPoint, and slides, and practical experiments in the educational laboratories of the college

10. **Course Structure**					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**2**	**Scalp** Layers of the scalp Muscles of the scalp Sensory Nerve Supply of the Scalp Arterial Supply of the Scalp Venous Drainage of the Scalp Lymph Drainage of the Scalp **Clinical Notes**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**2**	**The orbital region** Eyelids Movements of the Eyelids Lacrimal Apparatus Openings into the Orbital Cavity Nerves of the Orbit Blood and Lymph Vessels of the Orbit Structure of the Eye **Clinical Notes**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**The Nasal region** The Nose External Nose Nerve Supply of the External Nose Blood Supply and Venous Drainage of the External Nose Nasal Cavity Mucous Membrane of the Nasal Cavity Nerve Supply of the Nasal Cavity Blood Supply to the Nasal Cavity Venous Drainage of the Nasal Cavity Lymph Drainage of the Nasal Cavity The Paranasal	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Sinuses Drainage of Mucus and Functions of Paranasal Sinuses Clinical Notes			
4	**1**	**Mandibular nerve** • Introduction • Branches of the Mandibular Nerve • Optic Ganglion **Clinical Notes**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**2**	**Face** • 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**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**2**	**Oral cavity** The Lips The oral Cavity vestibule and Proper Sensory innervation of the Mouth Hard Palate & Soft palate Muscles of the Soft Palate **Palatoglossal Arch & Palatopharyngeal**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Arch			
7	**1**	**Tongue** • Mucous Membrane of the Tongue • Muscles of the Tongue **Movements of the Tongue**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**1**	**Temporal region** • The temporal fossa anatomy • The infratemporal fossa • Communications **Muscles of mastication**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**2**	**Parotid gland** • Parotid Region (Boundaries) • Parotid Gland • Parotid Duct • Innervation of Parotid Gland and Related Structures • Arterial Supply • Venous Drainage • Lymph Drainage • The Buccal Pad of Fat **Clinical Notes**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**1**	• The Pterygopalatine fossa • Boundaries, Communications and openings • Maxillary nerve • Branches from the pterygopalatine ganglion • THE PTERYGOPALATINE GANGLION THE VEINS OF THE	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		PTERYGOPALATINE FOSSA			
11	**2**	**Temporomandibular joint** • Introduction • The Articular Disk • Retrodiscal Tissue • Capsule • Synovial Membrane • Ligaments • Nerve Supply • Vascular Supply • Movements **Important Relations of the Temporomandibular Joint Clinical Notes**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**2**	**The neck** • Overview • Skin of the Neck • Fasciae of the Neck • Superficial Cervical Fascia • Deep Cervical Fascia • Cervical Ligaments • Muscles of the Neck • Cervical Plexus • Bones of Neck • Blood Supply **Key Neck Muscles**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

13	**2**	**Triangles of the neck** • ANTERIOR TRIANGLE • SUBMENTAL TRIANGLE • SUBMANDIBULAR TRIANGLE • CAROTID TRIANGLE • MUSCULAR TRIANGLE • Posterior Triangle • Thyroid Gland • blood supply & venous drainage **nerve supply**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	**Submandibular region** MUSCLES OF THE SUBMANDIBULAR REGION The submandibular gland **Sublingual Gland**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**2**	**Root of the neck** • Muscles of the Root of the Neck • The Thoracic Duct • Main Nerves of the Neck • Cervical Plexus & Brachial Plexus • Lymph Drainage of the Head and Neck **Veins of the Head and Neck**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

16	**2**	**Arteries of the neck** • Common Carotid Artery • Carotid Sinus • Carotid Body • External Carotid Artery • Internal Carotid Artery • Subclavian Arteries (3 parts) **Circle of Willis**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	**Brain** • Nervous System • Gross Anatomy of the Brain • Parts of the Brain • Ventricular System of the Brain • The Venous Blood Sinuses (Dural Sinuses) • Blood Supply of the Brain • Cranial Meninges • Dural Nerve Supply Dural Arterial Supply Dural Venous Drainage **Clinical Focus**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**1**	**Cranial nerves** • Introduction • Functional Components	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Summary of cranial nerves			
19	**1**	**Pharynx** • Muscles of the Pharynx • Pharynx divisions • Palatine Tonsils **Waldeyer's Ring of Lymphoid Tissue**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**1**	**Larynx** • Cartilages of the Larynx • Membranes and Ligaments of the Larynx • Inlet of the Larynx • Laryngeal Folds • Muscles of the Larynx **Nerve & blood Supply of the Larynx**	**General anatomy**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. **Course evaluation**	
○ Daily exam scores ○ Semester Exams ○ Weekly reports of practical experiences ○ Daily attendance and participation in scientific questions / activity	
12. **Learning and Teaching Resources**	
Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ nell's Clinical Anatomy by Regions, 10th edition. Wolters Kluwer 2019. ○ Netter's Head and Neck Anatomy for

	Dentistry, 3rd edition. Elsevier 2017. ○ Gray's Atlas of Anatomy, 3rd edition. Elsevier. 2021

Biochemistry

Course Description

1. **Course Name**	
Biochemistry	
2. **Course Code**	
212BC	
3. **Semester / Year**	
Second year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
60 theoretical + 60 practical	
7. **Course administrator's name**	
Name:	**م.د. عبد الجبار عباس علي** **م.م. احمد صاحب فيصل**
8. **Course Objectives**	
Course objective	**Course objectives** ○ An introduction to biochemistry, an understanding of its functions, the variables that occur in it, and the lack of waiting for its levels, its life and pathological implications, and ways to measure its levels. **Cognitive goals** ○ Teaching the student the relationship of general and inorganic chemistry to humans ○ Understand the variables that occur when the concentrations of substances change on the health of the body ○ The relationship of acidity and alkalinity on the blood and its effects on the functions of the organs ○ Radiochemistry and the effects of radiation on human health **The skills objectives of the course** ○ According to the method of teaching used such as discussion, questioning ○ Use laboratories and practical experiments to increase student understanding and see it in action
9. **Teaching and Learning Strategies**	

Strategy	○ The method of teaching changes according to the student's perception and interaction with the lectures. It may be the method of discussion, the method of interrogation, or the method of conclusion, and all methods may be at the same time, in addition to the use of laboratories and practical experiments to increase the student's understanding and awareness.

10.Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**2**	**Enzymes: Definition ,Terminology , and Classification**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**2**	**Mechanism of enzyme action**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**2**	**Clinical significance of enzyme assays**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**2**	**Vitamins, definition, classification**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**2**	**Digestion and absorption of carbohydrates, lipids ,and proteins**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**2**	**Chemistry of carbohydrates**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**2**	**Metabolism of Carbohydrates: part 1**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**2**	**Metabolism of Carbohydrates: part 2**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**2**	**Carbohydrates metabolism regulation =**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

10	**2**	**Chemistry of Proteins and amino acids**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**2**	**Metabolism of Proteins and amino acids**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**2**	**Metabolism of Protein and amino acid regulation**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**2**	**Metabolism of Protein and amino acid inherited disorder =**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**2**	**Exam**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**2**	**Lipid :definition, classification =**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**2**	**Metabolism of Lipid: oxidation of Fatty Acids**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**2**	**Biosynthesis of Fatty Acids**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**2**	**Integration of metabolism of carbohydrates, lipid ,and Proteins**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**2**	**Metabolism of Purines and pyrimidines**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**2**	**Metabolism of Purines and pyrimidines disorder**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**2**	Nucleic Acids Definition and Protein synthesis	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

22	**2**	Hormone definition, classification	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**2**	Hormone disorder	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**2**	Acid-base balance	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**2**	Trace elements disorder	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**2**	Salivary secretion(saliva), Pancreatic juice	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**2**	Electrolytes	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**2**	Liver Function Test	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**2**	Kidney Function Test	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**2**	EXAM	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. **Course evaluation**

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. **Learning and Teaching Resources**	
Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Tietz Fundamentals of Burtis and Ashwod. Clinical Chemistry ○ Richared Harvey And Denise Ferrier. Lippincott's Illustrated. Biochemistry ,Reviews

General Physiology

Course Description

1. **Course Name**	
General Physiology	
2. **Course Code**	
214PH	
3. **Semester / Year**	
Second year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
60 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: **م.د. شيماء ناهي نعيم**	
8. **Course Objectives**	
Course objective	**Course objectives** ○ Introduction to physiology and teaching the student how to perform the functions of the various organs of the body. **Cognitive and skill goals** ○ Teaching the student the functions of the body's organs ○ The student's knowledge of the functions of the body's organs
9. **Teaching and Learning Strategies**	
Strategy	○ Giving lectures through display screens and PowerPoint

10. **Course Structure**					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**2**	**Introduction (Function organization of the human body, Cell physiology, Cell membrane , Cell components , Cell Junction)**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**2**	**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, Measurement of body fluid volume, Dehydration, Types of dehydration, Classification, **Causes, Signs and Symptoms of Dehydrations)**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**2**	**Homeostasis and Transport across cell membrane (Diffusion (passive), Carrier-mediated transport (passive or active), Vesicular transport**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**2**	**ORAL CAVITY and Salivary Glands** (Functions of Mouth, Salivary Glands (Structure,	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		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)**			
5	**2**	**Salivary functions and Regulation of Salivary Secretion** (Composition of Saliva, Saliva Components, Properties of Saliva, Functions of Saliva, Effect of Drugs and Chemicals on Salivary Secretion, Maintenance of Tooth Integrity, The Diagnostic Applications of Saliva and forensic uses of saliva, **Disadvantages/Limitations of Saliva)**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**2**	**BLOOD (Composition of blood , Hematocrit, Plasma , Functions of blood), Red blood cells (Genesis of R.B.C, polycythemia, Anemia, Destruction of R.B.C.s)**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**2**	**White Blood Cells (Types of W.B.C. , Genesis of the leukocytes, Life span of the W.B.C, Phagocytosis, Inflammation,**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Leukemia's, Leukopenia			
8	**2**	**Hemoglobin (Formation of Hemoglobin , Iron Metabolism , Hb Compounds , Destruction of Hb , The common causes of jaundice)**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**2**	**Blood groups** (Agglutination, Agglutinins, The Rh Group, **Formation of Anti-Rh, agglutinins, Erythrobastosis Fetalis , Effect of the Mother's Antibodies on the Fetus, Transfusion Reactions resulting from mismatched Blood Types , Nature of Antibodies)**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**2**	**Hemostasis and blood coagulation** (Vascular Spasm , Formation of a Platelet Plug , Mechanism of the Platelet Plug , Mechanism of Blood Coagulation , Prevention of Clotting in the Normal Vascular System , Prevention of Blood **Coagulation outside the Body , Blood Disease)**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**2**	**Cardiovascular system: Blood vessels (Heart: Layers, Valves, Actions of heart, Blood Vessels, Division of circulation, Properties**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		of Cardiac Muscle, Action Potential and Ionic Basis, Conductive system of Human Heart)			
12	**2**	**Cardiovascular system: Blood pressure** (Cardiac Cycle, Heart Sounds, Cardiac Output, Heart Rate and Regulation, Arterial Blood Pressure and Regulation of ABP Venous **Pressure and Capillary Pressure, Arterial Pulse and Venous Pulse, Regional Circulation)**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**2**	**Cardiovascular system (Electrocardiogram, Hemorrhage, Circulatory Shock and Heart Failure, Cardiovascular Adjustments during Exercise)**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**2**	**Respiratory system** (Types of Respiration, Stages of **Respiration, Respiratory tract, Non respiratory functions of respiratory tract, Mechanics of Pulmonary Ventilation, Types of Respiratory pressures, Factors causing and preventing collapsing tendency of lungs)**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**2**	**Respiratory system: Lung volumes and capacities (Compliance, Variation in**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		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)			
16	**2**	**Half-year Break**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**2**	**SPECIAL SENSATION: Vision, Hearing, taste & smell (**Structure of Eye, Visual Process and Field of Vision, Visual Pathway Pupillary Reflexes, Color Vision, and Errors of Refraction. Structure of Ear and Auditory Pathway ,Mechanism of Hearing and **Auditory Defects, Sensation of Taste and Smell**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**2**	**Physiological Variations of body temperature, Heat Balance, Heat gain or heat production in the body, Heat loss from the body, Insulator System of the Body, Blood flow to the skin from the body core provides heat transfer, Regulation of body temperature, Mechanisms to decrease or increase**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		body temperature, Sympathetic "Chemical" Excitation of heat production)			
19	**2**	**Urinary system (Parts of Renal system, The Kidney, Functions of kidneys, Components of kidney, Parenchyma of kidney, Nephron and Juxtaglomerular Apparatus, Renal corpuscle, Structure of renal corpuscle, Tubular portion of nephron, Collecting duct)**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**2**	**Urinary system: Urine formation (Mechanism of urine formation, Glomerular Filtration, Pressure determining filtration, Tubular Reabsorption, Tubular secretion**	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**2**	**Endocrine System (**Introduction**,** Endocrine glands**,** Hormones, Nature of Hormones, Classification of hormones**,** Hormone Secretors, Hormonal action Hormone receptors, Synthesis and storage of hormones, Mechanism of hormonal function, Measurement of Hormone Concentrations in the Blood)	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

22	**2**	**Major Endocrine Glands** (Oral manifestations of endocrine dysfunction, Control Systems Involving Hypothalamus and Pituitary glands, The pituitary gland, Thyroid gland, Pancreas gland, Adrenal glands)	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**2**	**Digestive system** (The Functions of the digestive, Structural layers of digestive, Stomach, Secretions of the Stomach , Regulation of Stomach Secretion , Mixing of Stomach Contents, Stomach Emptying	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**2**	**Digestive system** (small intestine , Secretions of the Small Intestine, Movement in the Small Intestine, Liver, Functions of the Liver, Pancreatic Secretions, Regulation of Pancreatic Secretion, Large Intestine, Movment in the Large Intestine Digestion, Absorption, and Transport)	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**2**	**Muscular system: Muscle structure (**Types, Structure, Microscopic Structure, Muscle Physiology,	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Properties, Contraction and contractile elements, Tone, Electrical and Molecular Changes during Muscular Contraction)			
26	**2**	**Muscular system: Tone , contraction** (Molecular Changes During Muscular Contraction, Neuromuscular Junction- Neuromuscular Transmission and Blockers, Nutrition and Metabolism (Energy Requirements))	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**2**	**Nervous System: Nerve impulse, synapses** **(**Nervous System Division, Cranial nerves , Neuron and Neuroglia, Receptors, Nerve impulse, Synapse and Neurotransmitters)	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**2**	**Nervous System** **(**Reflex Activity, Somatosensory System and Somatomotor System, Physiology of Pain)	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**2**	**Reproductive system: Aging & reproductive system** (Male Reproductive System Female Reproductive System, Meiosis, Aging and	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Reproductive system			
30	**2**	**Aviation and Deep physiology** (Body Response in high altitudes, physiological Changes in the Sea deep). **Nutrition and metabolism** (daily energy requirement, obesity and fitness)	General **Physiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. **Course evaluation**	
○ Daily exam scores ○ Semester Exams ○ Weekly reports of practical experiences ○ Daily attendance and participation in scientific questions / activity	
12. **Learning and Teaching Resources**	
Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Guyton and Hall Medical Physiology 12th edition. Hall & C . John E ○ Essentials of Physiology for Dental students. K Sembulingam Prema & Guyton.

Oral histology and Embryology

Course Description

1. **Course Name**
Oral histology and Embryology
2. **Course Code**
211EL
3. **Semester / Year**
Second year
4. **Description Preparation Date**
2025
5. **Available Attendance Forms**
Theoretical and practical
6. **Number of Credit Hours (Total) / Number of Units (Total)**
60 theoretical + 90 practical
7. **Course administrator's name**
Name: **م.م.ابتهال عطية حبيب**
8. **Course Objectives**

Course objective	**Course objectives** ○ Rehabilitation of dentists who are able to know the types of oral and dental tissues and know the method of cutting oral and dental tissues in the laboratory and how to use the optical microscope and tissue cutting devices and knowledge of the types of dyes used to dye different oral tissue. ○ Introducing the student to the stages of formation and development of the fetus and knowing the congenital anomalies accompanying this development. ○ Enable the student to use the optical microscope and cut the tissues of the mouth and teeth **Cognitive goals** ○ Enabling the student to know the types of normal oral tissues by giving sufficient information about the types of microscopes used to study the different oral tissues and knowing the types of tissue layers ○ The stages of fetal development. ○ Abnormalities that occur during the development of the fetus. ○ Modern methods of diagnosing abnormalities. **The skills objectives of the course** ○ Informing the student of his rights ○ Introduce the student to his duties towards society

	○ The ability to dissect laboratory animals (extracting embryos from them ○ Make slides with special slides for the fetus.

9. Teaching and Learning Strategies

Strategy	○ Knowing the different types of normal oral tissues by reading the slides ○ Use of optical microscopes ○ How to cut the various tissues of the mouth and teeth

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	**2**	**Embryogenesis: first week, ovulation, fertilization and implantation**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**2**	**2nd week,Bilaminar germ layer**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**2**	**3rd week trilaminar germ layer: gastrulation and neurulation**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**2**	**Development of head and neck(pharyngeal arch,pouch & cleft**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**2**	**Development of face and anomalies**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**2**	**Development of tongue and anomalies**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**2**	**Development of palate and anomalies**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**2**	**Slide preparation**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

9	**2**	**Tooth development and growth**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**2**	**Dentinogenesis and dentin structure**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**2**	**Amelogenesis, Enamel structures**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**2**	**Clinical consideration for dentin and enamel**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**2**	**Dental Pulp**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**2**	**Cementum and clinical consideration**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**2**	**Root formation& Cementogenesis**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**2**	**Periodontal ligaments**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**2**	**Principles fiber of pdl and gingival fibers**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**2**	**Alveolar bone**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**2**	**Bone formation and resorption**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**2**	**Proteins involve in mineralization of bone and dentin**	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

21	**2**	Oral mucosa and their types	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**2**	Gingiva and dentogingival junction	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**2**	Eruption of teeth	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**2**	Shedding of teeth	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**2**	Salivary gland	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**2**	Salivary proteins	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**2**	TMJ	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**2**	Maxillary sinus	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**2**	Histochemistry	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**2**	Age changes of soft and hard tissues	Oral histology **and Embryology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. **Course evaluation**

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. **Learning and Teaching Resources**	
Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Ten cate's oral histology development, structures and function. Antonio Nanci. 9th edition. 2017, Elsevier. ○ Orban's oral histology and embryology. Kumar. 14th edition. 2015, Elsevier.

Dental Material

Course Description

1. **Course Name**	
Dental Material	
2. **Course Code**	
209DM	
3. **Semester / Year**	
Second year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: م.د. محمد يحيى محمد	
8. **Course Objectives**	
Course objective	**Course objectives** ○ Learn the physical, chemical and mechanical properties of materials used in dentistry and learn the skills necessary for the correct handling and adaptation of these materials. **Cognitive goals** ○ Introducing the student to the different types of materials involved in dentistry ○ Giving the necessary information to deal with these materials. ○ Giving instructions and following up the process of using materials from mixing and following up the interactions that the materials go through to reach the end of the interaction. **The skills objectives of the course** ○ Describe the tools used to prepare all materials ○ Teaching the student how to use it and follow it during work
9. **Teaching and Learning Strategies**	
Strategy	○ Giving scientific and theoretical lectures through display screens and PowerPoint. ○ Live explanation and dealing with all types of materials mentioned within the scheduled curriculum in front of the students after dividing them into groups

	according to the number of days of the week.

10. **Course Structure**					
Week	Hours	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Introduction and physical properties of dental material** • **Introduction to dental materials** **Physical, chemical and biological properties of dental materials**	**Dental Material**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**Mechanical properties**	**Dental Material**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**Gypsum materials** • **Definition, requirement, types,** • **gypsum bonded investment** • **phosphate bonded investment** **ethyl silicate bonded**	**Dental Material**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	**Gypsum materials**	**Dental Material**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	**Impression materials** • **Definition** • **Ideal properties of impression materials** • **Classification of impression materials** ✓ **Non elastic impression materials**	**Dental Material**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		➢ Impression plaster ➢ Impression compound ➢ Zinc oxide - eugenol Elastomeric impression material			
6	1	Impression materials	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams
7	1	Impression materials	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams
8	1	Impression materials	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams
9	1	Impression materials	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams
10	1	Waxes • Definition, • Requirements, • classification of wax according to origin & melting point, classification of wax according to uses, properties of dental waxes.	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams
11	1	Waxes	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams

12	**1**	**Polymers** • **Polymers and polymerization** • **Definition of polymer, co-polymer, cross-link polymer and Degree of polymerization** • **Factors which control structure and properties of polymer** • **Types of polymerization** • **Heat activated acrylic** ✓ **Compositio n** ✓ **Properties** • **Chemically activated resin** ✓ **Compositio n** ✓ **Properties** • **Light activated resin** ✓ **Compositio n** **Properties**	**Dental Material**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	**Polymers** • **Chemically activated resin compared to heat activated resins** • **Polymers used in dentistry** **Processing errors**	**Dental Material**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	**Investment materials factors affecting setting time, setting expansion, strength, storage and**	**Dental Material**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		manipulation of gypsum products, and hygroscopic expansion			
15	**1**	**Cement materials** • **Classification of dental cements** • **Definition** **Requirements**	**Dental Material**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	**Temporary filling** **Definition** • **indication** • **Types** **Requirements.**	**Dental Material**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	**Metal and metal alloy** **Metallic denture base materials** ✓ **Types of metal and metal alloys** ✓ **Definition of alloy** ✓ **Requirement of casting alloy** ✓ **Application of dental alloy**	**Dental Material**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**1**	**Metal and metal alloy** ✓ **classification of metal** ✓ **classification of dental alloy** ✓ **gold foil (advantage, disadvantages)** ✓ **gold alloys** ➢ **Composition** **Properties**	**Dental Material**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

19	**1**	**Metal and metal alloy** **Alternative of gold alloys** ✓ **Metal ceramic alloys** ➢ **Require ment** ➢ **Types** ✓ **Removable denture base alloys** ➢ **Require ments** ➢ **Types** ✓ **Co-Cr alloy** ➢ **Applicati on** ➢ **Composi tion** ➢ **propertie s,** ➢ **Advanta ges** **Disadvantages**	**Dental Material**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**1**	**Metal and metal alloy** ✓ **Titanium and Titanium alloys** ➢ **Applicati ons** ➢ **Properti es** ✓ **Ni/Cr alloys** ➢ **Composi tion**	**Dental Material**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		➢ Indications ✓ Wrought stainless steel allo			
21	1	Filling materials	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams
22	1	Direct filling material ✓ Definition Factors causing loss of tooth substance ✓ Requirement of an ideal filling material. ✓ Classification of filling material ➢ Anterior filling materials Disadvantages Composite filling materials composition and structure Types of composite ➢ Posterior filling materials Dental amalgam	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams

		▪ Classification of amalgam alloys ▪ Properties of set amalgam ▪ Shaping and finishing Mercury			
23	1	Filling materials	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams
24	1	Filling materials	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams
25	1	Filling materials	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams
26	1	Preventive materials	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams
27	1	Root canal filling materials (obturating materials) Root canal filling materials (obturating materials	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams
28	1	Finishing and polishing material	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams
29	1	Relining material • Definition • Types • Requirements • Indication • Soft liners	Dental Material	A theoretical lecture using power point	Short, semester, half-year and final exams

		✓ **Types** ✓ **Requirements** ✓ **Indication** **Properties**			
30	**1**	**Implant materials**	**Biochemistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. **Course evaluation**	
○ Daily exam scores ○ Semester Exams ○ Weekly reports of practical experiences ○ Daily attendance and participation in scientific questions / activity	
12. **Learning and Teaching Resources**	
Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Philips scince of dental materials 2012. edition 12 ○ Craig's Restirative dental materials. 2018 edition 14

General Histology

Course Description

1. **Course Name**	
General Histology	
2. **Course Code**	
213GH	
3. **Semester / Year**	
Second year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
60 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name:	
م.د. نرمين محمد منير	**ا.د. محسن عبد علي عبد الصاحب**
8. **Course Objectives**	
Course objective	**Course objectives** ○ Teaching students the practical and theoretical applications of the various general body tissues and all parts of the body **Cognitive goals** ○ Explanation of the structures of the different tissues and organs of the body ○ Use and draw simple diagrams on the board ○ Using a display screen to display the different sections of the tissues of the body's organs in several sections and directions **The skills objectives of the course** ○ Preparation of tissue sections for different sections of the body ○ The use of optical microscopes to examine and distinguish different tissues and organs of the body.
9. **Teaching and Learning Strategies**	
Strategy	○ Giving scientific and theoretical lectures through display screens and PowerPoint. ○ Live explanation and dealing with all kinds of materials mentioned within the curriculum in front of the students after dividing them into groups according to the number of days of the week.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**2**	**Cells, Basic Tissue**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**2**	**Epithelial Tissue**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**2**	**Connective Tissue**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**2**	**Respiratory System: conducting portion**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**2**	**Respiratory System: respiratory portion**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**2**	**Urinary System: kidney nephrons, collecting tubules and ducts**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**2**	**Urinary System: ureter, urinary bladder, and male and female urethra.**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**2**	**Integumentary System: Skin: epidermis, dermis**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**2**	**Integumentary System: skin glands, hair, and nails.**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**2**	**Hemopoiesis: bone marrow**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**2**	**Hemopoiesis: blood cells**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

12	**2**	**Circulatory System**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**2**	**Circulatory System**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**2**	**Lymphoid System**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**2**	**Lymphoid System**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**2**	**Nervous System**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**2**	**Nervous System**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**2**	**Endocrine System**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**2**	**Endocrine System**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**2**	**Endocrine System**	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**2**	Endocrine System	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**2**	Endocrine System.	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**2**	Endocrine System	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

24	**2**	Endocrine System	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**2**	Male Reproductive System	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**2**	Male Reproductive System.	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**2**	Female Reproductive System	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**2**	Female Reproductive System	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**2**	Special Sense Organs: eye	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**2**	Special Sense Organs: ear	**General Histology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. **Course evaluation**	
○ Daily exam scores ○ Semester Exams ○ Weekly reports of practical experiences ○ Daily attendance and participation in scientific questions / activity	
12. **Learning and Teaching Resources**	
Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Junqueira's Basic Histology TEXT & ATLAS. Anthony L MESCHER ○ Illustrated Dental Histology Embryology and Anatomy. Margaret J, Fehrenbach and Tracy Popowics.

Prosthodontics

Course Description

1. **Course Name**	
Prosthodontics	
2. **Course Code**	
210PR	
3. **Semester / Year**	
Second year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical + 120 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: م.د محمد يحيى محمد	
8. **Course Objectives**	
Course objective	**Course objectives** ○ Introducing the dental industry in general as it is one of the most important subjects that the student will continue to study for the next four years ○ Defining the terms that will be used in explaining the course so that the student can understand them correctly ○ Practical laboratory steps for the manufacture of the complete kit and practical training inside the laboratory **Cognitive goals** ○ Giving the necessary information to deal with the materials involved in the dental industry process and the manufacture of the complete denture in particular ○ Make the student familiar with and able to master all laboratory steps to make the complete kit **The skills objectives of the course** ○ Describe the tools, devices and materials for the subject of making the kit ○ Teach the student how to use it and follow it during work step by step
9. **Teaching and Learning Strategies**	

Strategy	○ Giving practical and theoretical lectures through display screens and PowerPoint ○ Live explanation and dealing with all kinds of materials mentioned within the curriculum in front of the students after dividing them into groups on the number of days of the week and explaining all the steps with a detailed explanation.

10. **Course Structure**					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	Introduction Complete denture ✓ Objective of complete denture ✓ General consideration in complete denture construction **Complete denture component parts**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	Anatomical landmarks ✓ Maxillary arch anatomical landmarks ➢ Supporting structures ➢ Limiting structures **Relief areas**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	Anatomical landmarks ✓ Mandibular arch anatomical landmarks ➢ Supporting structures ➢ Limiting structures **Relief areas**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	Complete Denture Impression • Impression tray - Definition • Parts of the impression tray	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		• Types of tray • Stock tray – Definition • Types of stock trays **Factors effect in selection of stock tray**			
5	**1**	Special tray ✓ Advantages of special tray ✓ Materials used for construction of special tray **Types of special tray**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**1**	• Dental impression - Definition • Complete denture impression - Definition • Objective of impression making • Primary impression - Definition • Materials used for making primary impression • Primary cast - Definition • Production of study cast • Secondary impression - Definition • Master cast- Definition • Materials used for final impression • Technique used for making final impression • Boxing an impression and making the casts	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		• Advantages of boxing **Common fault in impression**			
7	**1**	• Record base - Definition • Requirements of record base **Types of materials used in construction of record base**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**1**	• Occlusion rims - Definition • Requirements of occlusion rim • Materials used in construction of occlusion rim • Measurements of maxillary occlusion rim • Measurements of mandibular occlusion rim • Uses of occlusion rim • Occlusal plane **Fox – bite**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**1**	Anatomy And Physiology Of Temporomandibular **Joint**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**1**	Anatomy And Physiology Of Temporomandibular Joint • Mandibular axes and mandibular movements • Knowledge of mandibular movements **Mandibular movements**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11	**1**	Maxillo Mandibular relation Types of jaw relation ✓ Vertical jaw relation ➢ Rest position ➢ Inter – occlusal distance ➢ Importance of vertical dimension ➢ Increased vertical dimension **Decreased vertical dimension**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**1**	Methods Of Recording Vertical Relation • Method of recording rest vertical dimension • Method of recording occlusal vertical dimension • Pre – extraction records **Methods without pre – extraction record**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	Horizontal Jaw Relation Centric jaw relation ✓ Importance of centric jaw relation ✓ Methods of recording jaw relation ✓ Factors that complicates centric jaw relation **Methods of recording**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	Dental Articulators (Classification & Digital computerized articulator	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		programming) ✓ Requirements of articulator **Types of articulator**			
15	**1**	Face – Bow✓ Definition ✓ Parts of face – bow ✓ Types of face – bow **Important of the face – bow**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	Mounting ✓ Definition ✓ Preparation of articulator ✓ Preparation of the casts and mounting the upper cast on CL II articulator ✓ Mounting the lower cast **Errors occurred during mounting**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	Selection Of Artificial Teeth 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**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**1**	Selection Of Posterior Teeth ✓ Shade ✓ Bucco-lingual width	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		✓ Mesio-distal length ✓ Occluso-gingival height ✓ Occlusal form ✓ Advantages of casp form teeth **Advantages of non-cusp form teeth**			
19	**1**	**Arrangement Of Artificial Teeth**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**1**	Arrangement Of Posterior Teeth • Curve of Spee • Compensatory curves • Arrangement of lower posterior teeth • Arrangement of upper posterior teeth **Common errors in arrangement of teeth**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**1**	Waxing And Carving Waxing ✓ Definition ✓ Requirements of waxing the polish surfaces ✓ The procedure of waxing ✓ Establishing the posterior palatal seal area ✓ Procedure for carving of posterior palatal seal area ✓ Advantages of posterior palatal seal □ Esthetic	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		consideration in complete denture			
22	**1**	Complete Denture Occlusion Occlusion ✓Occlusion of complete denture ✓Centric occlusion Centric relation	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**1**	Complete Denture Occlusion ✓Eccentric occlusion ✓Concepts of complete denture occlusion Try-in appointment	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**1**	Processing Of The Denture (Flasking Flasking of the denture ✓ Flasking techniques	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**1**	Occlusal Correction • Causes of errors in occlusion • Selective grinding • Correction of occlusal errors • Disadvantages of intra – oral correction Advantages of extra – oral correction	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**1**	Finishing And Polishing Of Complete Denture Procedure of finishing Grinding and cutting instruments Polishing of complete denture Principles of	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		polishing Procedures of polishing			
27	**1**	Repair Of Complete Denture Types of material used in repair Causes of denture fracture Types of repair Laboratory procedure for repairing fractured denture base	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**1**	Repair Of Complete Denture Replacement of broken or missing tooth Replacement of missing or lost part Requirement of repair	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**1**	Relining And Rebasing	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**1**	Relining And Rebasing Laboratory procedures for relining Rebasing The chair – side reline technique	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. **Course evaluation**	
○ Daily exam scores ○ Semester Exams ○ Weekly reports of practical experiences ○ Daily attendance and participation in scientific questions / activity	
12. **Learning and Teaching Resources**	
Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Textbook of complete denture 6th edition updated 2009. ○ Dental laboratory technology for removable prosthodontics.

Baath Party crimes in Iraq

Course Description

1. **Course Name**	
Baath Party crimes in Iraq	
2. **Course Code**	
215 BC	
3. **Semester / Year**	
Second year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: **م.م. صادق مجيد حميد**	
8. **Course Objectives**	
Course objective	○ Giving an idea for the students of the Baath Party crimes, as they were born post Baath Party decline, in political, economic, social, and all other aspects in Iraq.
9. **Teaching and Learning Strategies**	
Strategy	○ The method of teaching changes according to the student's perception and interaction with the lectures. It may be the method of discussion, the method of interrogation, or the method of conclusion, and all methods may be at the same time, in addition to the use of laboratories and practical experiments to increase the student's understanding and awareness.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1 & 2	2	نبذة وصفية عن الأنظمة السياسية التي حكمت العراق	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams
3 & 4	2	انتهاكات تمس الحقوق الاجتماعية والسياسية والثقافية وتمس القانون الدولي	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams
5 & 6	2	اثر سلوكيات النظام البعثي في المجتمع	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams
7 & 8	2	حصر السلطات الثلاث بيد النظام البعثي	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams
9 & 10	2	الاستبداد في افساد الاخلاق ومحاربة العلماء	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams
11 & 12	2	الآليات النفسية والاجتماعية التي استعملها نظام الحكم السابق	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams
13 & 14	2	امتحان نصف الفصل	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams
15 & 16	2	الميدان الاجتماعي	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams
17 & 18	2	الدين والدولة	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams

19 & 20	2	الثقافة والاعلام وعسكرة المجتمع	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams
21 & 22	2	اثر القمع والحروب على البيئة والسكان	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams
23 & 24	2	سياسة الارض المحروقة	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams
25 & 26	2	تجفيف الاهوار والهجرة القشية	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams
27 & 28	2	تدمي البيئة الزراعية والحيوانية والتلوث الاشعاعي	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams
29 & 30	2	الامتحان النهائي	Baath Party crimes in Iraq	A theoretical lecture using power point	Short, semester, half-year and final exams

11. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Old constitution Iraq (before 2003). ○ Post-Saddam History of Iraq.

The Third Stage

Prosthodontics

Course Description

1. **Course Name**	
Prosthodontics	
2. **Course Code**	
310PR	
3. **Semester / Year**	
Third year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical + 120 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: **ا.م.د. ايناس طه ابراهيم**	
8. **Course Objectives**	
Course objective	**Course objectives** ○ Training the student on how to examine patients and diagnose the patient's pathological condition by modern and currently approved diagnostic methods, then prepare a treatment plan and then start treatment in a correct scientific manner ○ Using modern materials and methods in the manufacture of the complete set by giving theoretical lectures with practice in clinics **-Cognitive goals** ○ Giving the necessary information to deal with the materials involved in the dental industry and the manufacture of partial dentures ○ Training the student on how to examine and diagnose disease states ○ Giving important information and treatment steps **The skills objectives of the course** ○ Describe the tools used to treat patients who need partial dentures ○ Follow-up of the student during his training in clinics
9. **Teaching and Learning Strategies**	

Strategy	○ Giving practical and theoretical lectures through display screens and PowerPoint ○ Live explanation and dealing with all kinds of materials mentioned within the curriculum in front of the students after dividing them into groups on the number of days of the week and explaining all the steps with a detailed explanation ○ Summer Internship ○ Group educational workshops ○ Seminars

10. **Course Structure**					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Introduction Of RPD** • 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 refinishing	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**Classification of Partially Edentulous Arches** • Need for classification. • Requirements of an acceptable method of classification • Removable partial dentures may be classified according to the type of support • Removable partial dentures may be	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		classified according to the type of material • Removable partial dentures may be classified according to the type of treatment • Classification based on arch configuration • Kennedy – Applegate – Fiset classification system. • Applegate's rules governing the application of the Kennedy classification method			
3	**1**	**Surveying** • The ideal requirements for successful removable partial denture • Purposes (Objective) of Surveying the Diagnostic Cast • Advantages of single path of placement (insertion) • Guiding planes • Dentalsurveyor • Types of dentalsurveyors • Parts of dental surveyor (Ney type surveyor)	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	**Surveying (continue)** • Principles ofsurveying • Types of undercuts established by surveying • Factors that determine and affect the path of placement (insertion) and removal of the RPD • Rules ofsurveying	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

5	**1**	Component Parts of a Removable Partial Denture • Main components of RPD • Major connectors • Requirements of major connectors • Guidelines for design and location of major connectors • Characteristics of major connectors	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**1**	**Maxillary Major Connectors** • Special Structural Requirements for Maxillary Major Connectors • Types of Maxillary Major Connector • Single palatal bar • Single palatalstrap • Anterior-posterior palatal bars • Combination anterior and posterior palatal strap– type connector • Palatal plate-type connector • U-shaped palatal connector	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**1**	**Mandibular Major Connector** • Special structural requirements • Types of mandibular major connectors ⎪ Lingual bar ¬ Methods that may be used to determine the relative height of the floor of the mouth ⎪ Lingual plate (linguoplate) ¬ The indications	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**1**	**Minor Connectors** • Definition • Functions • Form & location	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		• Basic types of minor connectors • Tissue stops • Finishing lines • Reaction of Tissue to Metallic Coverage			
9	**1**	**Rests and Rest Seats** • The purposes of the rest in general • Occlusal Rest • Extended Occlusal Rest • Interproximal Occlusal Rest • Internal Occlusal Rests • Occlusal Rest Seat Preparation • Occlusal Rests on Amalgam Restorations • Occlusal Rest on Crowns • Lingual Rests (Cingulum Rest) • Incisal Rests and Rest Seats • Implants as a Rest	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**1**	**Retention And RPD Retainer** • Direct retainers • Indirect retainers • The extra coronal retainer 1 68 (Clasp type) • Component parts, Function, and position of clasp assembly parts • Factors affecting the magnitude of retention • The basic principles of clasp design	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**1**	Extra Coronal Direct Retainers **(Types of clasp assemblies) • Clasps designed without movement accommodation. •**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Circumferential (Circle or Akers) clasp • Ring-type clasp • Embrasure (double Akers) clasp • Back action clasp • Multiple clasps • Half-and-half Clasp • Reverse-action clasp (Hairpin) • Disadvantages of circumferential clasps in summary • Clasps designed to accommodate distal extension functional movement • RPI clasp • Bar-type clasp assembly			
12	**1**	**Intracranial Direct Retainers Internal Attachments, Precision Attachments** • Internal attachments • Precision Attachments 丨Some indications for precision attachments 丨Some of the contraindications for precision attachments 丨The main types of precision attachments	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	**Stress-Breakers (Stress Equalizers)** • Stress breakers 丨Types ofstress breakers	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	**Indirect Retainers** • The main factors influencing the effectiveness of an indirect retainer • The auxiliary	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		functions of indirect retainers • Forms of Indirect Retainers			
15	**1**	**Indirect Retainers (continue)** • Auxiliary occlusal rest • Lingualrest • Incisal rest • Canine extensions from occlusal rests • Cingulum bars (continuous bars) and linguo-plates • Modification areas • Rugae support	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	Laboratory procedures in RPD **construction: Block out and Relief** • Blockout and relief • Cast preparation • Types of blockout of master cast ⏐ Parallel blockout ⏐ Shaped blockout ⏐ Arbitrary blockout • Relieving the master cast • Purpose of relief • Sites • Tissue Stops	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	Laboratory procedures in RPD construction: Duplication and Refractory Cast Construction • Duplicating a stone cast • Duplicating material and flask • Impression • Refractory cast	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**1**	Laboratory procedures in RPD construction: Wax Pattern • Waxing the framework • Spruing	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		• General rules for spruing • Investing the sprued pattern • Purpose of investment • Burnout			
19	**1**	Laboratory procedures in RPD construction: Casting and Finishing • Casting • Casting recovery • Finishing the framework • Sprue removal	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**1**	**Denture Base in RPD** • The primary function of denture base • Types of denture base according to support • Types of the denture base according to materials • Advantages of metal denture base • Disadvantages of metal denture base • Design consideration of denture base • Periodontal consideration of denture base design • Types of artificial teeth	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**1**	Record Bases Occlusion Rims Mounting and Arrangement of Teeth • Record bases • Types of record bases according to materials	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		constructed from it • Occlusion rims • 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**	Biomechanics of Removable Partial Dentures • Biomechanical considerations • Possible movements of partial dentures • Tooth-tissue–supported prosthesis	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**1**	Biomechanics of Removable Partial Dentures (continue) • Tooth-supported partial denture • Occlusal Rest Seat Preparation and Denture Movement • Impact of	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Implants on Movements of Partial Dentures			
24	**1**	**Principles of Removable Partial Denture Design** • Difference in Prosthesis Support and Influence on Design • Differentiation Between Two Main Types of Removable Partial Dentures	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**1**	**Principles of Removable Partial Denture Design (continue**) • Components of Partial Denture Design • Implant Considerations in Design	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**1**	Clinical Phases of Removable Partial Denture Construction. □ 1st Phase: Education of Patien • 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:	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Establishment and Verification of Occlusal Relations and Tooth Arrangements • 5th Phase: Initial Placement Procedures • 6th phase: Periodic Recall			
27	**1**	Acrylic Removable Partial Dentures • Acrylic removable partial dentures • Appearance • Maintenance of space • Reestablishment of occlusal relationships • Conditioning of teeth and residual ridges • Interim restoration during treatment • Conditioning the patient for wearing a prosthesis • Clinical procedure for placement	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**1**	Flexible Removable Partial Dentures • Flexible removable partial dentures • Type of material used for the flexible denture • Support • Retention	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

29	**1**	**Repairs and Additions to Removable Partial Dentures** • 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	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**1**	**Digitally Designed & Fabrication Process of RPD Framework Using CAD/CAM System** • Components of CAD/CAM system • Types of Digital Scanner • Digital RPD Framework Design (step by step) • Digital Fabrication Process	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. **Course evaluation**	
○ Theoretical and practical exams, in addition to the treatment requirements, which are a number of cases that the student must treat in a correct, accurate and complete manner in order to calculate them from the requirements of the annual quest as well as the graduation project ○ Monthly, semi-annual and annual exams ○ Daily attendance and participation in scientific questions / activity	
12. **Learning and Teaching Resources**	
Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ McCracken's Removable Partial Prosthodontics13th Edition - November 3, 2015

	○ Robert, W. L. (2018) Removable Partial Denture Manual. Dalhousie University

General Pathology

Course Description

1. **Course Name**	
General Pathology	
2. **Course Code**	
321PA	
3. **Semester / Year**	
Third year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: **ا.د. محسن عبد علي عبد صاحب** **م.د. شيماء ناهي نعيم**	
8. **Course Objectives**	
Course objective	**Course objectives** ○ Rehabilitation of dentists who are able to know the 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. **Cognitive goals** ○ Formulating and programming information in a way that enables the student to absorb it and increase knowledge regarding the theoretical and practical aspects. ○ The ability to distinguish between different diseases. ○ How to use dyes. ○ Learn how to cut tissue **The skills objectives of the course** ○ According to the teaching method used, such as discussion, lecture, questioning, to enable the student to know how to use dyes. ○ Enabling the student to know how to cut tissue. ○ The use of laboratories and scientific experiments to increase the student's understanding and see this in practice to enable him to know and distinguish between various diseases.

9. **Teaching and Learning Strategies**	
Strategy	○ Giving scientific and theoretical lectures through screens, PowerPoint, and slides, and practical experiments in the educational laboratories of the college.

10.**Course Structure**					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**2**	Introduction to pathology Clinical pathology Molecular pathology **Cell damage reversible cell injury**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**2**	Irreversible cell injury Deposits and pigmentation **External and internal pigmentation**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**2**	**Inflammation Acute inflammation Chronic pathology Chemical mediators**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**2**	Healing and repair Healing of skin wound **Healing of bone**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**2**	**Hemodynamic Disorders, Thromboembolic Disease, and Shock**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**2**	**Genetic**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**2**	Diseases of the Immune System Hypersensitivity Autoimmune	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and**

		diseases **Transplantation**			**final exams**
8	**2**	Neoplasia bengin and malignant tumors **molecular basis of tumors**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**2**	Infections **Bacterial and viral infection**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**2**	**Environmental and Nutritional Diseases**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**2**	**Blood Vessels**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**2**	**The Heart**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**2**	**Red Blood Cell and Bleeding Disorders**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**2**	**Diseases of White Blood Cells**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**2**	**Diseases of G.I.T**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**2**	**Diseases of liver,**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

17	**2**	**pancreas and gall bladder**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**2**	**Diseases of respiratory system**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**2**	**Bone diseases**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**2**	**Kidney**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**2**	**Urinary system**	**General Pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Theoretical and practical exams, in addition to the treatment requirements, which are a number of cases that the student must treat in a correct, accurate and complete manner in order to calculate them from the requirements of the annual quest as well as the graduation project
- Monthly, semi-annual and annual exams
- Daily attendance and participation in scientific questions / activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Oral and maxillofacial pathology. Brad Neville,Douglas Damm Carl Allen and Jerry Bouquot. 4th edition. 2016, Elsevier. ○ Robinson, Max, Keith Hunter, Michael Pemberton, and Philip Sloan. Soames'& Southam's Oral Pathology. 2018, Oxford University Press.

Pharmacology

Course Description

1. **Course Name**	
Pharmacology	
2. **Course Code**	
317PC	
3. **Semester / Year**	
Third year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
60 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: **ا.م.د. طارق محمد السوداني**	
8. **Course Objectives**	
Course objective	**Course objectives** ○ Preparing a student at a high level of scientific and accuracy in dealing with medicines that are related to his exact specialization as a dentist and other specialties (medicine in general) so that no kind of interference occurs. **Cognitive goals** ○ Learn medicine. ○ Learn its effects. ○ Giving medicine lectures. ○ Contraindications to the use of medicines. **The skills objectives of the course** ○ Dealing with medicines. ○ Dealing with laboratory animals.
9. **Teaching and Learning Strategies**	
Strategy	○ Giving scientific and theoretical lectures through display screens and PowerPoint.

10.**Course Structure**					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**2**	**General Pharmacology**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**2**	**Pharmacokinetics and pharmacodynamics**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**2**	Autonomic nervous system from a pharmacological **perspective (including cholinergic agonist and antagonist)**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**2**	Adrenegic drugs **(agonist)**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**2**	Adrenegic drugs **(antagonist)**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**2**	**Antihypertensive drugs**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**2**	**Management of angina and Heart failure**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**2**	**Management of arrhythmias**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**2**	**Anticoagulants, antiplatelet and anti-hyperlipidemic**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		drugs			
10	**2**	**Local Hemostatic Agents in Dentistry**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**2**	Introduction the pharmacology of CNS drugs, sedative, hypnotics and **antiseizures drugs**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**2**	**Antipsychotic and antidepressant drugs**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**2**	**Local and General anesthetics**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**2**	**Drug of abuse and opioid analgesics**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**2**	**Managements of diabetes mellitus**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**2**	**Drugs affecting GIT**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**2**	**Drugs acting on respiratory system (antihistamines and corticosteroids 3**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**2**	**Non-steroidal anti-inflammatory drugs (NSAIDs)**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		part 1			
19	**2**	**Non-steroidal anti-inflammatory drugs (NSAIDs) part2 and Steriods in Den istry 2**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**2**	**(Chemotherapeu tic drugs (Principles of antimicrobial therapy**	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**2**	Cell wall inhibitors (part 1	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**2**	Cell wall inhibitors (part2	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**2**	Protein synthesis inhibitors 2	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**2**	Quinolones, Folic acid antagonists and antimycobacterial	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**2**	Antifungal, antiviral and antiprotozoal drugs 2	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**2**	Sex hormone and contraceptive 2	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**2**	Thyroid hormones and anti-thyroid drugs 2	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and**

					final exams
28	**2**	Anticancer drugs 1	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**2**	Dental Pharmacology: drugs and chemicals used in dental clini	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**2**	Anticaries and drugs used in prevention of dental plaque	**Pharmacology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions/activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Pharmacology (Lippincott Karen Whalen Illustrated Reviews Series) 7th Edition (2019)

Oral Surgery

Course Description

1. **Course Name**	
Oral Surgery	
2. **Course Code**	
322OS	
3. **Semester / Year**	
Third year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: **م.د. مرتضى محمد باقر**	
8. **Course Objectives**	
Course objective	**Course objectives** ○ The microbiology lesson aims to identify the principles of microbiology and epidemic diseases, and this course aims to know the characteristics of microorganisms in general and the special characteristics of pathogenic microorganisms such as bacteria, fungi and viruses, the mechanics of the latest diseases by these organisms, their diagnosis and how to differentiate between each of these pathogens and the examinations that reveal This course also aims to study immunity, the mechanisms of body defenses, the immune response to diseases, and sterilization methods. **Cognitive goals** ○ Identifying beneficial microorganisms for humans ○ Identify pathogenic microorganisms ○ Methods of transmission diagnosed in the laboratory ○ Identifying the body's immunity and its types ○ The relationship between the human body and microorganisms ○ Learn about sterilization methods **The skills objectives of the course** ○ Learn modern methods for diagnosing pathological microorganisms ○ Identifying the microorganisms that cause new epidemics ○ Multiple causes of different diseases

9. **Teaching and Learning Strategies**	
Strategy	○ Giving practical and theoretical lectures through display screens and PowerPoint and watching educational films.

10.**Course Structure**					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Diagnosis in oral surgery** □ History taking □ Demographic data □ Chief complaint □ History of present complaint □ Past dental and medical history □ **Social and family history**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**Diagnosis in oral surgery** □ Examination □ Extra-oral examination □ Intra-oral examination □ Differential diagnosis □ Diagnosis of pain, lump, and ulcer □ **Consent**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**Infection Control in Surgical Practice** □ Communicable pathogenic organisms □ Aseptic techniques □ Terminology □ Concepts □ Techniques of Instrument Sterilization; Sterilization with Heat; Sterilization with Gas □ **Techniques of Instrument**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Disinfection			
4	**1**	**Infection Control in Surgical Practice** □ Maintenance of Sterility □ Surgical Field Maintenance □ Operatory Disinfection □ Surgical Staff Preparation □ **Postsurgical Asepsis**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	**Extraction of teeth and Contra indications of extraction** □ Extraction of teeth (exodontia). □ Definition. □ Methods of extraction. □ Indications of teeth extraction. Severe caries. □ Severe periodontal disease. □ Pulp pathology. □ Apical pathology. □ Orthodontic reasons. □ Prosthetic considerations. □ Impacted teeth. □ Supernumerary teeth. □ Tooth in the line of fracture of the jaws. □ Teeth in relation with pathological conditions. □ Retained roots. □ Prior to irradiation. □ Focal sepsis. □ **Aesthetic**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

6	**1**	**Extraction of teeth and Contra indications of extraction** □ Contra-indications of teeth extraction. □ Local contra-indications. □ Systemic contra-indications. □ Pre-extraction evaluation. □ Clinical preoperative evaluation. □ General evaluation. □ Local evaluation. □ Radiological evaluation. □ **Objectives and benefits**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**1**	**General arrangement for extraction and Dental forceps types** □ Light. □ Position of the operator. □ Position of the patient. □ Height of the dental chair. □ Parts of dental forceps. □ Forceps for the maxillary teeth. □ Forceps of upper anterior teeth. □ Forceps of upper premolars. □ Forceps of upper molars. □ **Bayonet of upper posterior teeth.**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**1**	**General arrangement for extraction and Dental forceps types** □ Forceps for the mandibular teeth. □ Forceps of lower	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		anterior teeth. □ Forceps of lower premolars. □ Forceps of lower molars. □ Bayonet of lower posterior teeth. □ Mechanical principle of forceps (traditional) extraction □ Physic forceps. □ Parts. □ **Mechanical principle and technique**			
9	**1**	**Techniques of forceps extraction and post-operative instructions** □ 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**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**1**	**Elevators** □ Line of withdrawal. □ Point of application. □ Parts of dental elevators. □ Mechanical principles of using dental elevators. □ Wheel and axil. □ Fulcrum. □ Wedging. □ **Combination of mechanical principles.**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11	**1**	**Elevators** □ 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.**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**1**	**Complications of dental extraction** □ 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 tempro-mandibular joint (T.M.J.). □ Displacement of a root into the soft tissue and tissue spaces **and the maxillary antrum.**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	**Complications of dental extraction** □ Excessive bleeding after extraction. □ Damage to the surrounding soft tissues. □ Post -operative pain. □ Post-operative swelling. □ Creation of an oro-anrtal communication. **□ Trismus.**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

14	**1**	**Basic surgical instruments** □ 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. □ 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**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

15	**1**	**Introduction to local anesthesia** □ Neurophysiology □ Mode and site of action of local anesthetic □ **Active forms of local anesthetics**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	**Pharmacology of local anesthesia** □ Pharmacokinetics of local anesthetics □ Metabolism □ **Systemic actions of local anesthetics**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	**Pharmacology of local anesthesia** □ Vasoconstrictors □ Mode of action □ Dilutions of vasoconstrictors □ **Specific agents**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**1**	**Surgical anatomy in local anesthesia** □ Trigeminal nerve: □ Ophthalmic branch □ Maxillary branch □ **Mandibular branch**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**1**	**Surgical anatomy in local anesthesia** □ Osteology of the maxilla □ **Osteology of the mandible**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**1**	**Instruments of local anesthesia** □ The Syringe □ The Needle □ The Cartridge □ Additional Armamentarium □ **Preparation of the Armamentarium**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**1**	**Techniques of local anesthesia** □ Basic injection techniques □ Techniques of maxillary anesthesia □ Local infiltration.	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		□ 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			
22	**1**	**Techniques of local anesthesia** □ Techniques of local anesthesia □ 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 □ Incisive nerve block	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**1**	**Techniques of local anesthesia** □ Supplemental injection techniques □ Intraosseous injection □ Periodontal ligament injection □ Intraseptal injection □ Intrapulpal injection	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**1**	**Complications of local anesthesia** □ Local Complications □ Needle breakage □ Prolonged anesthesia (paresthesia) □ Facial nerve	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		paralysis □ Ocular complications □ Trismus □ Soft tissue injury □ Hematoma			
25	**1**	**Complications of local anesthesia** □ Pain on injection □ Burning on injection □ Infection □ Edema □ Sloughing of tissues □ Postanesthetic intraoral lesions	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**1**	**Complications of local anesthesia** □ Systemic complications □ Overdose □ Allergy	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**1**	**Advances in local anesthesia** □ Computer controlled local anesthetic delivery □ Articaine hydrochloride □ Local anesthesia reversal □ Buffering of local anesthetic solution □ Nasal local anesthetic mist for maxillary nonmolar teeth	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**1**	**Conscious sedation** □ Sedation techniques: Oral, sublingual, transdermal, intranasal, intramuscular, intravenous and inhalational □ Nitrous oxide □ Complications and medicolegal considerations	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

29	**1**	**Fundamentals of general anesthesia** □ Types of general anesthesia used in dentistry □ Advantages □ Disadvantages □ Indications □ Contraindications	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**1**	**Medical emergencies during dental treatment** □ Overview of medical emergencies □ Basic measures, equipment and drugs □ Common emergencies □ Collapse □ Anaphylaxis □ Cardiac arrest □ Diabetic collapse due to hypoglycemia □ Fits and convulsions □ Adrenal crisis □ Acute severe asthma □ Chest pain	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Daily attendance and participation in scientific questions/activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Hand book of local anesthesia 7th edition Stanely F. Malamed , Elsevier.2019 ○ Contemporary oral and maxillofacial surgery 7th edition 2019 (Elsevier)

Dental Radiology

Course Description

1. **Course Name**	
Dental Radiology	
2. **Course Code**	
320RL	
3. **Semester / Year**	
Third year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: ا.م.د. سعد محمد حسن م.د. عماد حسان محمود	
8. **Course Objectives**	
Course objective	**Course objectives** ○ Rehabilitation of dentists who are able to read and diagnose radiological images, how to work on radiological devices correctly, and how to deal with radiation risks. **Cognitive goals** ○ Enabling the student to use x-rays in the correct manner. ○ Explain the importance of protection and protection from radiation and its risks. ○ Enabling the student to read and diagnose radiographs of all kinds. ○ Giving sufficient information about the latest types of devices and diagnostic methods in the field of oral and maxillofacial radiology **The skills objectives of the course** ○ Read radiographs. ○ Use of equipment. ○ Possibility of protection from radiation hazards.
9. **Teaching and Learning Strategies**	

Strategy	○ Giving Giving scientific and theoretical lectures through screens, PowerPoint, and slides, and practical experiments in the educational laboratories of the college.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	Physics of radioation(introduction and definitions of nature of **radiation, type of radiation)**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**Production& interaction of X-ray**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	Film imaging (types of x-ray films, processing cycle,dark room, **intensifying screen**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	**Factors controlling x-ray beam , dosimetry and invers square low**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	**Projection jeometry (sharpness, distortion, image characterstic and artifacts)**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**1**	Biological effects of radiatin (direct & indirect effects, determistic and **stochastic effect)**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**1**	Safety and Protection (source of exposure , dose limits , exposure and **risk and reducing dental exposure)**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**1**	**Intraoral projection (periapical, bitwing, and occlusal radiography)**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and**

					final exams
9	**1**	Digital radiography (strength , limitations , comparing with **conventional radiography and indications**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**1**	**Patient's management**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**1**	**Cephalometric imaging**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**1**	**Panoramic radiography**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	**Craniofacial imaging**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	**CBCT (principles, components, strength and limitations).**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**1**	CBCT (clinical applications in maxillofacial region, anatomy and **interpretations).**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	Radiographic anatomy part1 (teeth, supporting dentoalv structures, **maxilla and mid facial bones)**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	**Radiographic anatomy part 2**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

18	**1**	**Advanced imaging modalities(CT, MRI AND ULTRASOUND)**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**1**	**Radiography &Implantology(modalities, indications)**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**1**	Infection control(infection control in radiography clinic, protection of **pt., protection of workers)**	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**1**	Prescibing diagnostic imaging(radiologic examination and guide lines for ordering imaging)	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**1**	Radiographical interpretations of common diseases(interpretation of	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**1**	Cysts of the jaw(odontogenic and non odontogenic cysts)	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**1**	Inflammatory conditions of the jaws(periapical inf disease,	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**1**	osteomylitis, pericoronitis)	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**1**	Trauma(dento alveolar trauma , dental fructures and bone fructues	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**1**	TMJ abnormalities(anatomy of TMJ, application)	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

28	**1**	Salivary gland disease (imaging modalities, interpretation)	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**1**	Craniofacial anomalies (Cleft lip and palat)	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**1**	Computed tomography(indications ,strength, limitations)	**Dental Radiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ White and Pharoah's Oral radiology principles and interpretation. Sanjay Mallya and Ernest Lam. 8th edition. 2019, Elsevier. ○ Ghom, Anil Govindrao. Textbook of oral radiology-E-Book. 2016, Elsevier Health Sciences.

Preclinical Operative Dentistry

Course Description

1. **Course Name**	
Preclinical Operative Dentistry	
2. **Course Code**	
319CV	
3. **Semester / Year**	
Third year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: **م.م. زهراء صاحب مزعل**	
8. **Course Objectives**	
Course objective	**Course objectives** ○ Training the student on how to examine patients and diagnose the condition with the approved modern diagnostic methods, then prepare the treatment plan, then start treating the disease in a correct scientific way and use modern materials and methods in the treatment of root canals by giving theoretical lectures while working in clinics. Students are also trained on root fillings on Teeth extracted to prepare them for clinical work on patients **Cognitive goals** ○ Training the student on how to examine and diagnose disease states. ○ Give important information and treatment steps. ○ Giving instructions and following up root filling operations **The skills objectives of the course** ○ Describe the tools used to prepare the canals for root fillings. ○ Teaching the student how to use it and follow it during work.
9. **Teaching and Learning Strategies**	
Strategy	○ Giving practical and theoretical lectures through display screens and PowerPoint ○ Live explanation and dealing with all kinds of materials mentioned within the curriculum in front of the students after dividing them into groups on the

	number of days of the week and explaining all the steps with a detailed explanation o Summer Internship o Group educational workshops o Seminars

1. Course Structure					
Part 1: Preclinical Operative Dentistry					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	1	**Introduction to Operative Dentistry**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	1	**Dental caries, types, and classifications**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	1	**Instruments and general instrumentation for cavity preparation**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	1	**Principle of cavity preparation + classification of cavities**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	1	**Factors that affect cavity preparation**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	1	**Cavity preparations for Cl I**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	1	**Cavity preparations for Cl II**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

8	1	**Cavity preparations for Cl III & Cl IV**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	1	**Cavity preparations for Cl V**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	1	**Tooth colored restorations (Classification and types)**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	1	**Dental composite resins**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	1	**Adhesives systems**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	1	**Rubber Dam types and application procedures**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	1	**Direct composite resin restoration of CL I, III, IV, and V cavities**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	1	**Direct composite resin restoration of CL II cavity**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

1. Course Structure Part 2: Preclinical Operative Dentistry					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	1	**Complex composite restoration (principles of preparation)**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**Complex composite restoration (restorative procedures)**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**Direct composite veneers (indications and principles)**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	**Direct composite veneers (restorative procedures)**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	**Color Matching and Composite Shade Selection**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	1	**Light Curing of Restorative Materials**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	1	**Glass Ionomer restorations**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	1	**Failures in composite restoration (repair and replacement)**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	1	**Re mineralization and resin infiltration techniques**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	1	**Amalgam Restorations: Clinical Relevance, Longevity, and Failure Patterns"**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11	1	**Removal of amalgam restorations and mercury hazards**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	1	**Pulp protection**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	1	**Liners and base materials**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	1	**Sterilization of operative instruments Part I**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	1	**Sterilization of operative instruments, part II**	**Preclinical Operative Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

Preclinical Fixed prosthodontics :-

Course Structure					
Preclinical Fixed prosthodontics					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	1	**Definitions**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	1	**Definitions**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	1	**Definitions**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	1	**Biomechanical principles of tooth preparation:**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

5	1	**Biomechanical principles of tooth preparation:**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	1	**Biomechanical principles of tooth preparation**:	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	1	**Full metal crown**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	1	**Full metal crown**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	1	**Porcelain fused to metal crown**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	1	**Porcelain fused to metal crown**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	1	**Complete ceramic crown (Porcelain Jacket Crown)**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	1	**Complete ceramic crown (Porcelain Jacket Crown)**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	1	**Partial veneer crown (three-quarter crown)**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	1	**Partial veneer crown (three-quarter crown)**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	1	**Post crown**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

16	1	**Post crown**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	1	**Impression for crown and bridge work**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	1	**Impression for crown and bridge work**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	1	**Provisional restoration**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	1	**Provisional restoration**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	1	**Working cast and dies**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	1	**Working cast and dies**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	1	**Waxing, investing, casting**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	1	**Waxing, investing, casting**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	1	**Finishing of the casting and clinical try-in**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	1	**Finishing of the casting and clinical try-in**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	1	**Cementation**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

28	**1**	**Cementation**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**1**	**CAD /CAM Technology for crown construction**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**1**	**CAD /CAM Technology for crown construction**	**Preclinical Fixed prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

10. Course evaluation

- Daily exam scores
- Semester Exams

11. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Summitt's fundamentals of operative dentistry: A contemporary approach. 4th edition. ○ Contemporary Fixed Prosthodontics, 2016 Elsevier. ROSENSTIEL, S. F., LAND, M. F. & FUJIMOTO, J. ○ Sturdevant's Art and Science of Operative Dentistry, 7th edition.

Microbiology

Course Description

1. **Course Name**	
Microbiology	
2. **Course Code**	
316MB	
3. **Semester / Year**	
Third year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
60 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: **م.د. نرمين محمد منير**	**ا.د. ياسين حسين عويد**
8. **Course Objectives**	
Course objective	**Course objectives** ○ Training the student on how to examine patients and diagnose the patient's pathological condition by modern and currently approved diagnostic methods, then prepare a treatment plan and then start treatment in a correct scientific manner ○ Using modern materials and methods in the manufacture of the complete set by giving theoretical lectures with practice in clinics **Cognitive goals** ○ Giving the necessary information to deal with the materials involved in the dental industry and the manufacture of partial dentures ○ Training the student on how to examine and diagnose disease states ○ Giving important information and treatment steps **The skills objectives of the course** ○ Describe the tools used to treat patients who need partial dentures ○ Follow-up of the student during his training in clinics
9. **Teaching and Learning Strategies**	

Strategy	○ Giving practical and theoretical lectures through display screens and PowerPoint ○ Live explanation and dealing with all kinds of materials mentioned within the curriculum in front of the students after dividing them into groups on the number of days of the week and explaining all the steps with a detailed explanation ○ Summer Internship ○ Group educational workshops ○ Seminars

10.**Course Structure**					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**2**	Morphology, Ultra structures, physiology and metabolism of microorganisms-: -Eukaryotic & Prokaryotic cells -Cell structure of prokaryotes **-Comparison between G+ve & G-ve cell wall**	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**2**	-Microbial growth, growth curve -Metabolism of microorganisms **Molecular biology & bacterial genetics**	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**2**	Sterilization and Disinfection	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**2**	Antibiotic and chemotherapy:- -Antibiotic, sources -Mode of action of antibiotic -Anti-microbial sensitivity tests -Bacterial resistance **-Prophylactic use**	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**2**	Introduction to general immunology and oral immunology -Non-specific and specific immunity	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		-Antigen -Immunoglobulin **- Humeral and Cellular Immunity**			
6	**2**	Cells and organs of the immune system -Complement system -Human leukocyte antigen **- Role of complement and HLA in oral disease**	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**2**	-Oral and mucosal immunity **- Autoimmunity and immune tolerance**	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**2**	**- Hypersensitivity reactions- Antimicrobial and immunological defenses of saliva and gingival crevicular fluid components**	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**2**	Host-parasite relationship & Nosocomial infection -Symbiosis, Commensalism, Amphibiosis, Antagonistic -Sources of infection in hospital and -nosocomial infections **-Post-operative wound infection, burns infections**	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**2**	- Streptococci Pyogenic Streptococci -Lancefield group -Pathogenesis of streptococc -Epidemiology, treatment and prevention -Viridans streptococci **-Pneumococci**	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11	**2**	Staphylococci -Virulence factors - and pathogenesis -Epidemiology, treatment and prevention	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**2**	G- negative diplococcic , Vellionella and Moraxella Neisseria gonorrhea, N. meningitidis	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**2**	Lactobacilli, Actinomyces and Corynebacterium diphtheriae& Diphtheroids	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**2**	**Bacillus: B. subtilis, B. anthracis and B.ceres**	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**2**	Clostridium : C. perfringenis , C. tetani, C. botulinum, and **Difficile**	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**2**	Enterobacteriaceae **-E.coli, Salmonella, Shigella**	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**2**	Enterobacter, Klebsiella, proteus, Yersinia	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**2**	Mycobacteruim **-Tuberculosis & Leprae**	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**2**	**Brucella, Haemophilus, Vibirio**	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

20	**2**	**- Aggregatibacter, porphyromonas, prevotella, Bacteroids**	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**2**	Fusiforms and Spirochaetes -Fusobacterium, leptotichia	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**2**	Treponema and oral Treponema	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**2**	Mycoplasma, Chlamydia and Rickittsiae	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**2**	Ecology of oral flora -Indigenous flora -Supplemental flora -Transient flora -Sources of oral bacteria -Factors modulating growth of bacteria in the oral cavity	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**2**	Microbiology of dental caries -Dental plaque & plaque metabolism -plaque homeostasis -cariogenic microorganisms -Mutans Streptococci -Lactobacilli and Actinomyces-	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**2**	Microbial colonizationCaries preventionAntibacterial factors in saliva- -Vaccination against dental caries	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

27	**2**	Microbiology of periodontal disease and Endodontics -Subgingival microbial complex -specific , non-specific and Ecological plaque hypothesis -Porphyromonas, prevotella, Aggregatibacter virulence factors of periodontal pathogens endodontic microbiota and Routes of root canal infection -ecology of endodontic microbiology	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**2**	Virology general structure of viruses -classification	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**2**	viral replication -Isolation & diagnosis -Oral virology	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**2**	-Oral mycology and Oral parasitology -Introduction, epidemiology, transmission -E.histolotica, E.gingivalis, T.tenax -Fungal cells -classification -Candida	**Microbiology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Monthly exams
- Daily attendance and participation in scientific questions / activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ - Kuby Immunology Eighth Edition ©2019 Jenni Punt; Sharon Stanford; Patricia Jones; Judy Owen

Community dentistry

Course Description

1. **Course Name**	
Community dentistry	
2. **Course Code**	
318CM	
3. **Semester / Year**	
Third year	
4. **Description Preparation Date**	
2025	
5. **Available Attendance Forms**	
Theoretical and practical	
6. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical + 60 practical	
7. **Course administrator's name (mention all, if more than one name)**	
Name: ا.م.د. لمياء عبد الخالق محمد سعيد	
8. **Course Objectives**	
Course objective	**Course objectives** ○ Gives information to students about identifying and measuring oral diseases in the community to achieve the goal of controlling and preventing diseases in the community through preventive programs **Cognitive goals** ○ Formulating information in a way that enables students to understand and perceive ○ Increasing students' knowledge of dental examination methods in terms of caries and gingivitis ○ Giving instructions and advice for the correct position of the doctor during his treatment with the patient and the correct way to position the patient during examination and treatment while sitting on the dental chair **The skills objectives of the course** ○ Gaining experience and information that help him identify the disease and know its causes ○ Identifying the dental chair and the correct sitting position for the patient and the doctor ○ Methods of examining tooth decay, gingivitis, calcifications and bacterial plate that help him to be a successful dentist in dealing with patients and treating them

9. **Teaching and Learning Strategies**	
Strategy	○ Giving lectures through displays, PowerPoint and slides. ○ Preparing seminars by students under the supervision of professors.

10.**Course Structure**					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	Procedural steps in 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.	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**-Dental public care** - Steps in planning dental care for the patient - Steps in planning dental care for the community - Similarities between personal and community health care: - Differences between private dental practice and public health	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**Introduction to epidemiology** - Objectives of epidemiology. - Components of epidemiological study.	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		- Essential steps in an epidemiological study. - Hypothesis. - Population at risk. - Morbidity. - Measurements of disease frequency. Epidemiological approach. - Measurement tools in epidemiology.			
4	**1**	Epidemiological studies Types of Epidemiological studies: 1-Observational studies Types of observational studies - Descriptive studies. -Analytical studies. Case control studies Cohort studies Ecological studies	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	Experimental studies -Intervention **Types of experimental studies**	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**1**	Epidemiology of dental caries -Definition of dental caries -Epidemiology -Etiological factors of dental caries -Types of dental caries according to their anatomical (location) site. **- Factors affecting epidemiology of dental caries**	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

7	**1**	Epidemiology of Periodontal Disease -Periodontal Diseases definition -Structure of the periodontal tissues -Epidemiology **-Etiology of periodontal disease**	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**1**	Epidemiology of Oral Cancer -Types of cancers -Etiology of oral cancer -Constituents of tobacco smoke -Potentially malignant lesions -Levels of prevention for oral cancer **- Rehabilitation after Oral Cancer**	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**1**	Dental indices -Index -Uses of dental index **- Classification of indices**	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**1**	**Indices used for assessment of dental caries** -DMF index -Principles in recording DMF index -Calculation of DMFT/DMFS	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		-Dental caries severity index **- dmf index**			
11	**1**	Indices used for assessment of periodontal disease -Oral Hygiene Indices: -Gingival inflammation indices **- Periodontal indices**	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**1**	Dental fluorosis **Indices for assessment of dental fluorosis**	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	Biostatistics -Data -Types of data -Methods of Data Collection -Sampling Technique **-Types of sample design**	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	Data presentation -Methods of data presentation **-The tabulation of data.**	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**1**	Measures of central tendency & dispersion -Measures of central tendency **-Measures of dispersion.**	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	Fluoridation as a public health measure -History: -Sources of Fluoride	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		-Water fluoridation **-Types of fluoride**			
17	**1**	Fluoridation Mechanism and Effects Mechanism of action -Anti-caries effects of fluoride. Metabolism of fluoride-. -Dental Fluorosis **-Side effects of fluoride**	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
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**	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**1**	Environment and health -Environment -Physical environment: -Biological	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		environment: -Psychological environment **- Environmental indicators**			
20	**1**	Effects of air pollution on health -Prevention and control of air pollution -Effects of radiation **-Noise pollution**	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final 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	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**1**	Treatment need and demand -Need -categories of need -Demand - Factors affecting dental demands	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**1**	-Dental manpower - Manpower definition Dental health manpower planning -Steps in dental health manpower planning	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

24	**1**	Ethics in dentistry -Definition of ethics -Dentistry as a profession - Ethical principles	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**1**	Oral health care for special populations -Elderly people: -The main oral effects of aging -Pregnant women -Special Care Dentistry - Patients with special health care needs	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**1**	Forensic dentistry -Introduction -Application of forensic dentistry. -Bit marks -Person identification. -Dental identification.	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**1**	Dental auxiliary personal -Introduction. -Dental auxiliary classification. *Non operatory auxiliary. *Operatory auxiliary. -Four handed relationship	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final 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.	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final 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).	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**1**	Dental health education -Introduction. -Aims of health education. -Objective of health education. -Objective of dental health education.	**Community dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		-Principle of health education. -Planning a health education programs.			

11. Course evaluation

- Clinical examination
- Daily exam scores
- Monthly exams
- Mid-year exams
- Final Exam

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Preventive and Community Dentistry Public Health Dentistry Third Edition. - A Textbook of Public Health Dentistry, CM Marya, JAYPEE BROTHERS MEDICAL PUBLISHERS (P) LTD,2011

Dental Ethics:-

13. **Course Name**	
Dental Ethics	
14. **Course Code**	
15. **Semester / Year**	
Third year	
16. **Description Preparation Date**	
2025	
17. **Available Attendance Forms**	
Theoretical and practical	
18. **Number of Credit Hours (Total) / Number of Units (Total)**	
30 theoretical + 60 practical	
19. **Course administrator's name (mention all, if more than one name)**	
Name: ا.م.د. لمياء عبد الخالق محمد سعيد	
20. **Course Objectives**	
Course objective	**Course objectives** ○ Gives information to students about identifying and measuring oral diseases in the community to achieve the goal of controlling and preventing diseases in the community through preventive programs **Cognitive goals** ○ Formulating information in a way that enables students to understand and perceive ○ Increasing students' knowledge of dental examination methods in terms of caries and gingivitis ○ Giving instructions and advice for the correct position of the doctor during his treatment with the patient and the correct way to position the patient during examination and treatment while sitting on the dental chair **The skills objectives of the course** ○ Gaining experience and information that help him identify the disease and know its causes ○ Identifying the dental chair and the correct sitting position for the patient and the doctor ○ Methods of examining tooth decay, gingivitis, calcifications and bacterial plate that help him to be a successful dentist in dealing with patients and treating them
21. **Teaching and Learning Strategies**	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	**1**	**Professional Ethics Review** What is meant by "ethics? Why are ethics important? Evolution and philosophy of ethics The terms moral and ethical, obligation and principle	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**Professional Ethics Review** Dental ethics, professionalism, Human Rights and Law What is a "profession?" What is a "professional?" What is "professionalism?" Dentistry as a Profession Dentistry: The Commercial Picture Dentistry: The Normative Picture The Content of Professional Obligations	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**Professional Ethics Review** What do the "best interests" of our patients mean? What is "paternalism?" Is good risk management good ethics? What about compromising quality?	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	**Professional Ethics Review** What are codes of ethics? Should I care more about being legal or being ethical? Do we really have obligations to patients? Can dentistry be both a business and a profession?	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	**Principal Features of Dental Ethics** What is special about Dentistry? What is special about dental ethics? Who decides what is ethical? Does dental ethics change? Does dental ethics differ from one country to another?	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

6	**1**	**Principal Features of Dental Ethics** The role of the FDI How does the FDI decide what is ethical? How do individuals decide what is ethical? How do individuals decide what is ethical?	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7 -8	**2**	Ethical Law and ethical Theories H History and basic ethical theory History of medical ethics Hammurabi's code of law ippocratic oath Basic grounding of Ethics Humanities (universal standards) Religious& nonreligious: Political& dogmatic strategies of the state Other groundings of Ethics (theories of ethics): 1- Action theory: 2- Consequentiality theory: 3- Value theory (why theory): Ethics and the law Sources of Ethical Views and Convictions	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9-10	**2**	Fundamental Principles of dental ethics 1- Patient autonomy 2- Non-maleficence **3-** Beneficence **4-** Justice **5-** 5- Veracity	Dental Ethics	A theoretical lecture using power point	Short, semester, half-year and final exams
11-12	**2**	Duties and obligation of dentists Duties and obligation of dentists In general	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13-14	**2**	Duties and obligation of dentists The Ideal Relationship between Dentist and Patient Duties and obligation of dentists Toward their patients THE DENTIST-PATIENT RELATIONSHIP FOUR MODELS OF THE DENTIST-PATIENT RELATIONSHIP The Guild Model The Agent Model The Commercial	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Model The Interactive Model			
15	**1**	Duties and obligation of dentists Duties and obligation of dentists Toward the public and the paramedical profession The Relationship between Dentistry and the Larger Community	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	Duties and obligation of dentists Duties of dentalsurgeons and specialists in consultations	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	Duties and obligation of dentists Responsibilities of dentalsurgeons to one another IdealRelationships between Coprofessionals	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18-19	**2**	Ethical issues and challenges in dental practice Ethical Issues in Dental Practice Ethical Questions and Legal Questions Choosing to Re Ethical Published Codes of Conduct and Ethics Committees Examples of ethical issues and Challenges 1- Access to dental care 2- Abuse of prescriptions by patients 3- Advertising 4- Emergency care 5- Financial arrangements 6- Disclosure and misrepresentation 7- Child abuse	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**1**	Ethical issues and challenges in dental practice 8- Competence and judgment 9- Confidentiality 10- Dating patients 11- Delegation of duties 12- Digital communication and social media 13- Harassment	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		14- Consent			
21	**1**	Ethical issues and challenges in dental practice Patients with Compromised Capacity Treatment Decisions for Patients with Compromised Capacity The Role of Parents and Legal Guardians The Capacity for Autonomous Decision Making Dealing with Patients with Partially	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**1**	The impact of business on dentistry - Conflict of interest - Personal interest versus patient interest - Public versus patient interest - Third-party interests - Professional versus business ethics	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23-24	**2**	Ethics and dental research - Importance of Dental Research - Research in Dental Practice - Ethical Requirements - Ethics Review Committee Approval	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25-26	**2**	Ethics and dental research - Scientific Merit - Social Value - Risks and Benefits - Informed Consent - Confidentiality - Conflict of Roles - Honest Reporting of Results:	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27		The standard of care - Who determines how a dentist should behave? -A local or a global standard of care? -Transparency of care, guidelines, and protocols. -Shared decision-making, evidence informed decision-making, and evidence-guided decision-making. - Individualization and the standard of care based on	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		a long-term goal for dental treatment.			
28	**1**	Ethical Decision Making and Conflicting Obligations Difficult Professional-Ethical Judgments A Model of Professional-Ethical Decision Making Conflicting Professional Obligations Conflicts Between Professional and Other Obligations Conscientious Disobedience of Professional Obligation	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**1**	Studying a Profession's Central Values The Central Values of Dental Practice The Patient's Life and General Health The Patient's Oral Health The Patient's Autonomy The Dentist's Preferred Patterns of Practice Aesthetic Values Efficiency in the Use of Resources Ranking Dentistry's Central Values Thinking about the Case	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**1**	The duty to treat -Does the duty to treat depend on a prior relationship between dentist and patient? -The duty to treat: Patients of record versus prior unknown patients. -Requested treatment and the duty to treat -Duty to treat and the characteristics of the patient who seeks help -Is a dentist obliged to accept a patient as a patient of record? -Terminating the relationship with a patient of record	**Dental Ethics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

The Fourth stage

Oral Surgery

Course Description

1. Course Name	
Oral Surgery	
2. Course Code	
422OS	
3. Semester / Year	
Fourth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical and practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 theoretical + 120 practical	
7. Course administrator's name (mention all, if more than one name)	
Name: **م.د. مرتضى محمد باقر**	
8. Course Objectives	
Course objective	**Course objectives** ○ Preparing the student at a high level of science with regard to oral surgery and learning about the dental management of patients with chronic and infectious diseases, in addition to minor surgical interventions for the mouth, infections, and oral and maxillofacial infections. **Cognitive objectives** ○ Acquire basic knowledge of oral surgery. ○ Dental management of patients with chronic and infectious diseases. ○ Basic knowledge of minimally invasive surgical interventions. ○ Dealing with oral and maxillofacial infections **skills objectives of the course** ○ Knowledge of the basics of oral diagnosis. ○ Dealing with infectious and chronic diseases. ○ Tooth extraction training.
9. Teaching and Learning Strategies	
Strategy	○ Giving lectures through displays, PowerPoint and slides. ○ Dental extraction clinics. ○ Preparing seminars by students under the supervision of professors.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Cardiovascular diseases**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	□ Cardiac arrhythmia □ Dental management □ Infective endocarditis □ Dental management □ Rheumatic fever and rheumatic heart Disease □ Dental management □ Congenital heart disease □ Dental management □ **Oral manifestations**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**Bleeding disorders**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	**Endocrinology**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	**Pulmonary diseases**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**1**	**Liver Diseases**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**1**	**Chronic kidney disease and dialysis**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

8	**1**	**Neurologic disorders**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**1**	**Pregnancy**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**1**	**AIDS and HIV infection**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**1**	**Rheumatologic and connective tissue disorders**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**1**	**Allergy**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	**Patients on radiotherapy and chemotherapy**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	**Odontogenic infections and fascial space infections**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**1**	□ Fascial space infections □ Infection of spaces in relation to the lower jaw □ Infections of spaces in relation to the upper jaw □ **Cavernous sinus thrombosis**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	Principles of treatment of odontogenic infections □ Principles for the use of appropriate antibiotics □ Sinus formation	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		□ Necrotizing fasciitis			
17	**1**	Principles of Flaps, suturing and management of difficult extraction □ Flaps in oral cavity □ Incision □ Flap design □ Types of Mucoperiosteal Flaps □ Flap reflection □ Suturing □ Suture Materials □ Needles □ Needle Holder **□ Tissue Forceps**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**1**	□ Management of difficult extraction □ The main indications for surgical extraction of teeth are □ Steps of surgical extraction □ Indications for leaving root fragments □ Multiple Extractions **□ Extraction sequencing**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**1**	**Principles of management of impacted teeth**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**1**	□ Impacted upper third molars □ Surgical extraction □ Complications □ Impacted maxillary canine □ Classification □ Clinical examination □ Radiographic examination and assessment □ Options of treatment □□	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

21	**1**	□ Impacted mandibular canines □ Impacted lower premolars □ Impacted maxillary premolars □ Impacted first and second molars □ Buried deciduous molars □ Supernumerary teeth □ **Dilacerated incisors**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**1**	**Surgical aids to orthodontics**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**1**	**Principles of endodontic surgery**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**1**	□ Surgical procedure □ To perform biopsy or not Determination of success □ **Microsurgical technique**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**1**	Osteomyelitis and osteonecrosis of the jaw □ Osteomyelitis □ Definition. □ Classification □ Etiology and pathogenesis □ Clinical presentation □ Diagnostic imaging □ Microbiology □ Treatment: surgical, antimicrobial and hyperbaric oxygen □ Other types of osteomyelitis: infantile, focal and diffuse sclerosing and **Garre's sclerosing osteomyelitis**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

26	**1**	Radiation induced osteomyelitis and osteoradionecrosis □ Definition □ Etiology □ Stages □ Treatment □ Prevention □ Medication related osteonecrosis of the jaw □ Definition □ Pathophysiology □ Clinical presentation and staging □ Imaging □ Treatment □ **Prevention**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**1**	**Dental Implants: Basic Concepts and Techniques**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**1**	□ Surgical Treatment Planning Considerations □ Final Treatment Planning □ Basic Implant Surgical Procedures □ One-Stage versus Two-Stage Implant Placement Surgery □ Implant Stability □ Complications □ Implant Components □ **Defining implant outcomes**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**1**	**Biopsy in oral and maxillofacial surgery**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**1**	**Diagnostic imaging in oral and maxillofacial surgery**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions/activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Contemporary oral and maxillofacial surgery 7th edition 2019 (Elsevier). ○ Hand book of local anesthesia 7th edition Stanely F. Malamed , Elsevier.2019

General Surgery

Course Description

1. Course Name	
General Surgery	
2. Course Code	
424GS	
3. Semester / Year	
Fourth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 theoretical	
7. Course administrator's name (mention all, if more than one name)	
Name: م.د. عبد الحسن مهدي صالح	
8. Course Objectives	
Course objective	**Course objectives** ○ Preparing the student at a high level of science with regard to general surgery and identifying general surgical cases, methods of their diagnosis and treatment, and their relationship to his exact specialization as a dentist. **Cognitive goals** ○ Gain knowledge of general surgical cases. ○ Methods of diagnosis and treatment. ○ Relationship to his specialty as a dentist. **Skill objectives for the course** ○ Special diagnostic methods. ○ Knowing the types of laboratory and radiological tests related to surgical cases
9. Teaching and Learning Strategies	
Strategy	○ Giving scientific and theoretical lectures through display screens and PowerPoint. ○ Clinical tours in the halls of general surgery.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	2	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**	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	2	Wound healing Introduction Classification of wound Healing Normal sequence of wound Healing Factors affecting healing (local & systemic) **Complications of wound healing**	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	2	**Surgical wound and infections**	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	2	Hemorrhage Introduction Pathophysiology Definitions (Revealed and concealed hemorrhage, Primary, reactionary and secondary hemorrhage Surgical and	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		nonsurgical hemorrhage(Degree and classification Management (Identify hemorrhage, Immediate resuscitative maneuvers, Identify the site of hemorrhage, Hemorrhage control(**Damage control surgery**			
5	2	Shock Introduction Pathophysiology Ischemia–reperfusion syndrome Classification of shock Consequences Unresuscitatable shock Multiple organ failure RESUSCITATION **Fluid therapy**	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	2	Blood transfusion 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**	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	2	Parenteral feeding Introduction Route of delivery Peripheral central venous access Complications of parenteral nutrition **Refeeding syndrome**	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	2	Fluid balance Abnormalities of body water Fluid overload and oedema	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Abnormalities of electrolytes Fluid replacement Acid-base balance **Abnormalities of acid-base balance**			
9	2	Electrolytes balance Introduction Principles of electrolyte balance Normal homeostasis Barriers between compartments, osmolality and electrolyte concentrations **Homeostatic mechanisms**	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	2	Head injury Introduction 2 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**	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	2	Preoperative preparation (History Taking) Introduction to the Patient **History of the presenting Complain**	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	2	Anesthesia & Pain HISTORY GENERAL ANAESTHESIA Management of airway during Anesthesia Complications of intubation Ventilation during	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		anesthesia Monitoring and care during anesthesia Chronic pain management Chronic pain control in benign disease **Pain control in malignant disease**			
13	2	Perioperative care Introduction Factors that predispose patients to a high risk of morbidity and mortality Patient factors Surgical factors Optimize medical management of coexisting diseases and intraoperative considerations Ischemic heart disease Respiratory failure **SPECIFIC Strategies**	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	2	Postoperative care SYSTEM-SPECIFIC POSTOPERATIVE COMPLICATIONS Respiratory complications Cardiovascular complications Renal and urinary complications COMPLICATIONS RELATED TO SPECIFIC SURGICAL SPECIALTIES Paralytic ileus Compartment syndrome Neck surgery **Neurosurgery**	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	2	GENERAL POSTOPERATIVE PROBLEMS AND MANAGEMENT Nausea and vomiting Bleeding	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Deep vein thrombosis Hypothermia and shivering Fever Pressure sores **Drains**			
16	2	Day case surgery Definition SELECTION CRITERIA PREOPERATIVE ASSESSMENT SURGERY **DISCHARGE**	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	2	Surgical ethics and law INTRODUCTION INFORMED CONSENT MATTERS OF LIFE AND DEATH CONFIDENTIALITY **RESEARCH**	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	2	Patient safety INTRODUCTION THE PREVALENCE OF ADVERSE HEALTHCARE EVENTS COMMON CAUSES OF ADVERSE HEALTHCARE EVENTS PATIENT SAFETY AND THE SURGEON **CARING FOR THE SECOND VICTIM**	**General Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam grades
- Semester exams
- Weekly reports of practical experiments
- Daily attendance and participation in scientific questions/activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizes the important topics.

Main references	○ Baily and Love's short practice of surgery 27th edition 2018

General Medicine

Course Description

1. Course Name	
General Medicine	
2. Course Code	
423GM	
3. Semester / Year	
Fourth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 theoretical	
7. Course administrator's name (mention all, if more than one name)	
Name: **ا.د. جاسم محمد احمد** **م.د. عبد الحسن مهدي صالح**	
8. Course Objectives	
Course objective	**Course objectives** ○ Preparing the student at a high level of science with regard to general medicine and identifying diseases, methods of diagnosing and treating them, and their relationship to his exact specialization as a dentist. **Cognitive goals** ○ Acquisition of knowledge about human diseases. ○ Diagnostic and treatment methods. ○ Relationship of diseases to his specialty as a dentist **The skills objectives of the course** ○ Special diagnostic methods. ○ Knowing the types of laboratory tests related to body diseases.
9. Teaching and Learning Strategies	
Strategy	○ Giving scientific and theoretical lectures through display screens and PowerPoint. ○ Clinical tours in the internal medicine halls.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Diabetes Mellitus 1**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**Diabetes Mellitus2**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**White Blood Cells Disorders**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	**White Blood Cells Disorders**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	**Hemostasis and Bleeding Disorders 1**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**1**	**Hemostasis and Bleeding Disorders 2**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**1**	**Adrenal Gland Disorders 1**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**1**	**Adrenal Gland Disorders 2**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**1**	**Gastrointestinal Diseases 1**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

10	**1**	**Peptic Ulcer Disease 1**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**1**	**Peptic Ulcer Disease 2**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**1**	**Intestine**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	**Inflammatory Bowel Disease 1**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	**Inflammatory Bowel Disease 2**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**1**	**Pseudomembranous Colitis 1**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	**Hypertension 1**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	**Infective Endocarditis**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**1**	**Ischemic Heart Disease**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**1**	**Heart Failure**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

20	**1**	**Cardiac Arrhythmias**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**1**	**Thyroid Diseases**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**1**	**Kidney Diseases**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**1**	**Immunologic Diseases**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**1**	**Liver Diseases**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**1**	**Pulmonary Diseases**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**1**	**Red Blood Cells Disorders**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**1**	**Drug and Alcohol Abuse**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**1**	**Psychiatric Disorders 1**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**1**	**Anxiety and Eating Disorders**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

30	**1**	**Neurologic Disorders**	**General Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Dental Management of the Medically Compromised Patient, Ninth Edition, 2018 ○ Essentials of Medicine for Dental Students

Oral Pathology

Course Description

1. Course Name	
Oral pathology	
2. Course Code	
425OP	
3. Semester / Year	
Fourth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical and practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
60 theoretical + 90 practical	
7. Course administrator's name (mention all, if more than one name)	
Name: **م.د. عماد حسان محمود**	
8. Course Objectives	
Course objective	**Course objectives** ○ Rehabilitation of dentists who are able to know the causes of various diseases that affect the mouth and study the diagnosis and methods of dyes to know the distinction between diseases through laboratory diagnosis. **Cognitive goals** ○ The ability to distinguish between different oral diseases ○ How to use dyes ○ Learn to cut tissue **Curriculum-Specific Skills Objectives** ○ The ability to distinguish between different oral diseases ○ How to use dyes ○ Learn to cut tissue
9. Teaching and Learning Strategies	
Strategy	○ Giving scientific and theoretical lectures through display screens and PowerPoint. ○ Seminars

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**2**	**Biopsy in oral pathology**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**2**	**Healing in oral pathology**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**2**	**Dental caries**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**2**	**Pulp pathology**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**2**	**Periapical pathology**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**2**	**Osteomyelitis**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**2**	**Developmental disorder of teeth**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**2**	**Developmental disorder of soft and hard tissue**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**2**	**Non odontogenic cysts**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

10	**2**	**Odontogenic cysts**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**2**	**Odontogenic tumors 1**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**2**	**Odontogenic tumors 2**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**2**	**Benign epithelial lesions, leukoplakia**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**2**	**Epithelial Hyperplasia, atrophy and dysplasia**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**2**	**Squamous cell carcinoma and other malignant epithelial neoplasms**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**2**	**Fibro osseous lesions, metabolic and genetic conditions**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**2**	**Giant cell lesions**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**2**	**Benign tumor of the bone**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**2**	**Malignant tumor of the bone**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

20	**2**	**Viral infection**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**2**	**Bacterial and fungal infection**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**2**	**Immune mediated disorder 1**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**2**	**Immune mediated disorder 2**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**2**	**Connective tissue lesions**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**2**	**Connective tissue lesions**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**2**	**Salivary gland disorders**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**2**	**Salivary gland neoplasms**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**2**	**Physical and chemical injurie**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**2**	**Hematopoietic tumors**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

30	**2**	**Forensic dentistry**	**Oral pathology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ -Oral and maxillofacial pathology. Brad Neville,Douglas ○ Damm Carl Allen and Jerry Bouquot. 4th edition. 2016, Elsevier. ○ Robinson, Max, Keith Hunter, Michael Pemberton, and Philip Sloan. Soames'& Southam's Oral Pathology. 2018, Oxford University Press.Sloan. Soames'& Southam's Oral Pathology. 2018, Oxford University Press.

Orthodontics

Course Description

1. Course Name	
Orthodontics	
2. Course Code	
426OD	
3. Semester / Year	
Fourth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical and practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 theoretical + 120 practical	
7. Course administrator's name (mention all, if more than one name)	
Name: م.م. سعد عبد العالي عباس	
8. Course Objectives	
Course objective	**Course objectives** ○ Preparing the student at a high level of science with regard to orthodontics and identifying the types of pathological conditions and malpositions, the causes that lead to them, and the types of orthodontic devices. **Cognitive goals** ○ Gaining knowledge about the causes of bad dishes ○ Diagnostic and treatment methods ○ Identify the types of orthodontic devices **Curriculum-Specific Skills Objectives** ○ Learning how to make a mobile orthodontic device with its different parts. .
9. Teaching and Learning Strategies	
Strategy	○ Giving scientific and theoretical lectures through displays and PowerPoint and practical experiments in the educational laboratories of the college.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Introduction to orthodontics**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	Six keys of normal - occlusion **- Aims of orthodontic treatment**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	Important - orthodontic definitions 1109 **- Classification of malocclusion**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	**Growth and development**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	Theories of bone growth **- Definitions of growth site, growth center, displacement, and drift**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**1**	Growth curve and maximum growth spurt **- Prenatal and postnatal growth and development of hard tissues**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**1**	Prenatal and postnatal growth and development of soft tissues **- Developmental**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		anomalies			
8	**1**	Jaw rotation **- Compensation and adaptation**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**1**	**Deciduous and permanent dentition**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**1**	**b-Tooth eruption (stages and theories), Sequences and timing of eruption**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**1**	**Development of occlusion**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final 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.**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	**Etiology of malocclusion**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	Classification of - etiological factors a. General factors **i. Skeletal factors**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

15	**1**	**ii. Soft tissue factors**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	**ii. Soft tissue factors**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	b. Local factors (definitions without treatment)	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**1**	Tooth movement a. Tissue changes associated with tooth :movement i. Histology of periodontium ii. Theories of tooth movement b. Accelerated tooth movement.	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**1**	c. Biomechanics i. Force (application, type, magnitude, duration and direction) ii. Center of resistance and rotation, moment of force and moment of .couple iii. Types of tooth movement iv. Rate of tooth movement and factors affecting it	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

20	**1**	d. iatrogenic effect of tooth movement (pain, mobility, pulp effect, root resorption, white spot lesions.(	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**1**	Biomechanics	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**1**	Anchorage (definition, indications, types)	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**1**	Orthodontic appliances :a. Overview i. passive orthodontic appliances (habit breaker, retainer and space (maintainer ii. active orthodontic appliances (removable, fixed, orthopedic and myofunctional, and (combination iii. Other active appliances: space regainer, Invisalign	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**1**	b. Removable Orthodontic :Appliance i. Properties of various components (SS wire, acrylic)	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		:ii. Components active components (1 (springs, screws and (elastics retentive (2 (components (clasps acrylic base plate (3 and bite planes (4anchorage			
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	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**1**	c. Fixed orthodontic :appliance Types, components, advantages, limitation, biomechanics, .banding vs Bonding	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**1**	d. Orthopedic and Myofunctional :appliance Types, components, advantages, limitation, mode of action	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**1**	continue Orthopedic and Myofunctional	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and**

		:appliance Types, components, advantages, limitation, mode of action			**final exams**
29	**1**	f. Retention and retainers Retention (definition, reason, time)	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**1**	Retainers (Hawley, clear overlay, positioners, permanent fixation, precision)	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ An Introduction to Orthodontics 5th Edition Simon J. Littlewood and Laura Mitchell 2019. ○ Orthodontics: Principles and Practice: Principles and Practice 2nd Edition 2017

Prosthodontics

Course Description

1. Course Name	
Prosthodontics	
2. Course Code	
410PR	
3. Semester / Year	
Fourth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical and practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 theoretical + 90 practical	
7. Course administrator's name (mention all, if more than one name)	
Name: ا.م.د. ايناس طه ابراهيم	
8. Course Objectives	
Course objective	**Course objectives** ○ Training the student on how to examine patients and diagnose the patient's pathological condition by modern and currently approved diagnostic methods, then prepare a treatment plan and then start treatment in a correct scientific manner ○ Using modern materials and methods in the manufacture of the complete set by giving theoretical lectures with practice in clinics. **Cognitive objectives** ○ Giving instructions and following up the micro-making process ○ Training the student on how to examine and diagnose disease states ○ Giving important information and treatment steps **The skills objectives of the course** ○ Describe the tools used to treat patients who need partial dentures ○ Follow-up of the student during work
9. Teaching and Learning Strategies	
Strategy	○ Giving practical and theoretical lectures through display screens and PowerPoint ○ Live explanation and dealing with all kinds of materials mentioned within the curriculum in front of the students after dividing them into groups on the

	number of days of the week and explaining all the steps with a detailed explanation o Summer Internship o Group educational workshops o Seminars

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Anatomy and physiology as related to dental prosthesis (osteology)**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**Anatomy and physiology as related to dental prosthesis(Myology)**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**Diagnosis and treatment plan for RPD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	To be continued Diagnosis and **Treatment**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	Preparation of the mouth to **receive an RPD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**1**	Preparation of the mouth to **receive an RPD (Continued)**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**1**	Classification of impression **Technique**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**1**	Classification of impression **technique (To be continue**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

9	**1**	**Designing Support**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**1**	Fitting the removable partial **denture framework**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**1**	Occlusal Relationship for **Removable Partial Denture**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**1**	**Jaw relation in RPD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	**Trial RPD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	Initial placement and adjustment **of RPD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**1**	**Pre- prosthetic surgery**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	Pre-prosthetic Surgical **Considerations (Continued)**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	**Diagnosis and treatment plan CD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**1**	To be continued diagnosis and **treatment plan for CD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

19	**1**	**Impression in CD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**1**	**TMJ and mandibular movement**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**1**	**Digital RPD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**1**	**Vertical jaw relation**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**1**	Horizontal jaw relation (Centric **occlusion)**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**1**	**Try in stage in CD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**1**	**Insertion of CD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**1**	**Adjustments of CD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**1**	**Post insertion complications in CD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**1**	**relining and rebasing of CD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

29	**1**	**Repair of fractured RPD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**1**	**Esthetic denture materials**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ 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

Pediatric Dentistry

Course Description

1. Course Name	
Pediatric Dentistry	
2. Course Code	
427PE	
3. Semester / Year	
Fourth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical and practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 theoretical + 60 practical	
7. Course administrator's name (mention all, if more than one name)	
Name: م.م مظفر فاضل جدوع	
8. Course Objectives	
Course objective	**Course objectives** ○ Understand and assimilate the theoretical and practical methods of treating all cases of children's teeth and identify the scientific methods and methods supported by the means of illustration to know how to identify the deciduous and permanent teeth and the problems related to them. **Cognitive goals** ○ Formulating information in a way that enables students to understand ○ Increasing knowledge regarding the diagnosis and treatment of various cases of dental diseases in children ○ Oral and dental care and awareness of the importance of preserving milk teeth until the eruption of permanent teeth in children **The skills objectives of the course** ○ Training students on pediatric dental conditions ○ Giving instructions on how to deal and interact with children ○ Acquisition of skills for diagnosing primary and permanent teeth in children
9. Teaching and Learning Strategies	

Strategy	○ Giving practical and theoretical lectures through display screens and PowerPoint ○ Summer Internship ○ Group educational workshops ○ Seminars

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Eruption of teeth, normal eruption process**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**Teething and difficult eruption**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	Eruption hematoma, sequestrum, ectopic eruption.	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	Epstein pearls, Bohn nodules, Dental lamina cysts, Shedding of **the primary teeth, Mechanism of resorption and shedding**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	Systemic (disease) Factors which cause late eruption **Deciduous Dentition Period, Ugly Duckling Stage**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**1**	**Morphology of primary teeth**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**1**	Normal morphology of all primary teeth and their clinical **consideration**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

8	**1**	Morphological differences between primary and permanent teeth	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**1**	**Functions of primary teeth**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**1**	**Dental caries; Definition and Classification**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**1**	**Rampant dental caries, Early childhood caries**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**1**	Restorative dentistry for children Isolation & maintenance of **dry field and application of the rubber Dam**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	Morphological consideration ,cavity preparation Cavity **preparation on primary teeth,**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	**Restorative materials used on pediatric dentistry**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**1**	**Matrices & retainers**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	**Chrome steel crowns, ART**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	**Treatment of deep caries**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

18	**1**	**Indirect pulp treatment**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**1**	Vital pulp therapy **pulpotomy**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**1**	**Non vital pulp therapytechnique**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**1**	**Reaction of pulp to various capping material**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**1**	Local anesthesia and pain control for children Type of space maintainer(indication andcontraindication Type of space maintainer(indication andcontraindication Type of space maintainer(indication andcontraindication Type of **space maintainer(indication andcontraindication**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**1**	**Anesthetizing mandibular and maxillary teeth and soft tissue**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**1**	**complications after a local anesthetic**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

25	**1**	**supplemental injection techniques**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**1**	Oral surgery for children, indication and contraindictions for **extraction of primary teeth**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**1**	**technique for extraction of primary teeth**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**1**	**extraction complications**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**1**	postoperative extraction complications, radiographic survey **of teeth extracted**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**1**	**Infections manifestation and management**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Attending lectures
- Short and Quick Daily Exams
- Quarterly, semi-annual and annual exams
- The way to give questions and space for discussion to solve them during the lecture

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ McDONALD AND AVERY'S DENTISTRY for CHILD and ADOLESCENT 2022 by Elsevier ○ Hand book of pediatric dentistry (Cameron) mosby.

Conservative endo:-

Course Description

1. Course Name
Conservative endo
2. Course Code
419CV
3. Semester / Year
Fourth year
4. Description Preparation Date
2025
5. Available Attendance Forms
Theoretical and practical
6. Number of Credit Hours (Total) / Number of Units (Total)
22 theoretical + 90 practical
7. Course administrator's name (mention all, if more than one name)
Name: **ا.م.د. ديار خالد بكر** **م.م. زهراء صاحب مزعل**
8. Course Objectives

Course objective	**Course objectives** ○ Students are clinically trained in the specialty of restorative dentistry (fillings) and laboratory training in root canal fillings. Students are also subjected to clinical training on patients in the dental clinic under the supervision of specialized professors. Students are also trained to identify and deal with the tools used in restorative dentistry and provide them With adequate knowledge of the basic principles of making dental cavities and filling them with different metal and optical fillings, studying the basic principles of making fillings for the roots of the teeth by performing different exercises using real extracted teeth and resin models, and training students to evaluate their mistakes and improve their skills **Cognitive objectives** ○ Training the student on how to examine and diagnose disease states. ○ Focusing on the clinical steps of treating tooth decay and the use of various dental fillings ○ The student acquires adequate knowledge of the steps of root canal fillings ○ Understand how to use root canal tools and regular **The skills objectives of the course** ○ Students acquire the skills of using various dental root restoration tools and fillings

	○ Students' acquisition of training skills on the steps of making root canal fillings using real, extracted teeth
9. Teaching and Learning Strategies	
Strategy	○ Giving scientific and theoretical lectures through display screens and PowerPoint and watching educational films. ○ Educational lessons using extracted teeth ○ Educational lessons using resin models of teeth ○ Practical application to patients

10. Course Structure

Part 1: Operative and Aesthetic Dentistry

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	**1**	Biologic Considerations of Enamel structure and its Clinical Significance **in Practice of Operative Dentistry.**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**Biologic Considerations of Enamel structure and its Clinical Significance in Practice of Operative Dentistry.**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	Biologic Considerations of Dentin structure & its Clinical Significance in **Operative Dentistry**	**Conservative endo**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	Biologic Considerations of Dentin structure & its Clinical Significance in **Operative Dentistry**	**Conservative endo**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	**Patient Evaluation , Diagnosis & Treatment Planning**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final**

					exams
6	**1**	**Caries Management (Diagnosis & treatment strategies)**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**1**	**Cervical Lesions(carious and non carious lesions)**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**1**	**Restorative Dentistry and Pulpal Health**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**1**	**Management of Deep Seated Caries**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**1**	**Inflammatory Conditions of the Pulp**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**1**	Treatment of Deep Seated Caries Simplified anatomical **modeling.**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**1**	**Fluoride – Releasing Materials**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	ndirect aesthetic adhesive restorations Inlays and Onlays (materials ,techniques) **CAD/CAM**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final**

		Technology.			**exams**
14	**1**	**Direct tooth-colored restorations(Composite)**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**1**	**Dental Laser**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	**Application of Laser in Conservative Dentistry**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	**Application of Laser in Conservative Dentistry.**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**1**	**Indirect tooth-colored restoration**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**1**	Techniques of posterior composite Inlay/Onlay restoration system **Laboratory-processed composite inlays and onlays.**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	**1**	**Ceramic veneers, inlays and onlays, clinical procedures**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**1**	**Ceramic veneers, inlays and onlays, clinical procedures.**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year**

					and final exams
22	**1**	**CAD/CAM techniques**	**Conservative endo:-**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

2. Course Structure Part 2: Endodontic					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Topics Covered**	**Operative and esthetic dentistry &endodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**1-Objective of endodontic treatment**	**Operative and esthetic dentistry &endodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**2- Basic Phases of Treatment**	**Operative and esthetic dentistry &endodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	**. 3- Pulp pathologies**	**Operative and esthetic dentistry &endodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

5	**1**	**Classification of periapical diseases**	**Operative and esthetic dentistry &endodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**1**	**Access Opening Preparation**	**Operative and esthetic dentistry &endodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**1**	**Endodontic Instruments**	**Operative and esthetic dentistry &endodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**1**	**Roentgenography in Endodontics and Root canal preparation**	**Operative and esthetic dentistry &endodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

3. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

4. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Clinical Periodontology and Implant 1- Summitt's fundamentals of operative dentistry: A contemporary approach. 4th edition. ○ 2- Dental composite materials for direct ○ restorations. Vesna Miletic Springer, eBook, 2018.

	○ 3- Textbook of operative dentistry. 3rd edition. Nisha Garg, Amit Garg, Endodontic Lect. 1- Cohen's Pathways of the Dental Pulp. 12th ed. Louis H. Berman and Kenneth M. Hargreaves. 2- Textbook of Endodontics. 2nd ed. 2010. Nisha Garg, Amit Garg.

Periodontics

Course Description

1. Course Name	
Periodontics	
2. Course Code	
428PT	
3. Semester / Year	
Fourth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical and practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 theoretical + 90 practica	
7. Course administrator's name (mention all, if more than one name)	
Name **م.م. ابتهال عطيه حبيب**	
8. Course Objectives	
Course objective	**Course objectives** ○ The main objective of the branch is to increase health awareness of oral and dental health among citizens by preparing a health cadre of students who will perform this role after their graduation and serve them in health centers spread throughout Iraq ○ The teaching aspect by giving lectures and holding scientific symposia and performing advanced surgical operations for the purpose of training students on that ○ The therapeutic and preventive aspect, as the branch currently covers all disease cases related to gum disease and around the teeth referred to the college in addition to the preventive aspect of this subject **The skills objectives of the course** ○ Formulating information in a way that enables students to understand and increase knowledge regarding the diagnosis and treatment of various gum diseases ○ Giving students instructions for oral and dental care for patients visiting the College of Dentistry **The skills objectives of the course** ○ Training students to remove plaque from teeth ○ Instructions for oral health care

9. Teaching and Learning Strategies	
Strategy	○ Giving scientific and theoretical lectures through displays, PowerPoint, and slides.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Terms & definitions frequently used in periodontology**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
2	**1**	Anatomyof periodontium: -gingiva -periodontal ligaments -alveolar bone -oral mucosa **-cementum**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
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**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
4	**1**	Anatomy of the periodontium Cementum- o Definition o Function of cementum	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**

		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 i- Normal thickness **ii- Cemental aplasia**			
5	**1**	Anatomy of the periodontium Alveolar process- o Definition o Function of alveolar process o Parts of the alveolar process i- Alveolar bone proper ii- An external plate of cortical bone iii- Cancellous trabeculae or spongy bone o Basal bone o Anatomic division of the alveolar process i- Interproximal bone ii- Inter radicular bone	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**

		iii- Radicular bone o Composition of the bone i- Cellular elements ii- Organic components iii- Inorganic components o Haversian system or Osteon o Periosteum and Endosteum **o Remodeling of alveolar bone**			
6	**1**	Classification of periodontal diseases and conditions (2017) Reasons for - classification Major changes - from previous classification Periodontal health - and gingival diseases and conditions Periodontal health :and gingival health o Clinical gingival health on an intact periodontium o Clinical gingival health on a reduced :periodontium i- Stable periodontitis ii- Non-periodontitis patients The classification of dental biofilm :induced gingivitis o Associated with bacterial dental biofilm only o Mediated by systemic or local risk factors i- Systemic conditions	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**

		ii- Oral factors enhancing plaque accumulation o Drug-influenced gingival enlargements Case definition of :gingivitis o Gingivitis on an intact periodontium **o Gingivitis on a reduced periodontium**			
7	**1**	Classification of periodontal diseases and conditions (2017) Periodontitis- o Periodontitis (Extent, Staging, Grading, Status, Risk factors) o Necrotizing :periodontal diseases i- Necrotizing gingivitis ii- Necrotizing periodontitis iii- Necrotizing (Stomatitis **o Periodontitis as a manifestation of systemic disease**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
8	**1**	Classification of periodontal diseases and conditions (2017) Other conditions affecting the periodontium Periodontal - :abscess o Periodontal abscess in periodontitis patients o Periodontal abscess in non-periodontitis patients Endodontic - :periodontal lesions	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**

		o Endo-periodontal lesions associated with endodontic and periodontal infections o Endo-periodontal lesions associated with trauma and iatrogenic factors Mucogingival - deformity and conditions Traumatic occlusal - force **-Tooth and prosthetic related factors**			
9	**1**	**Etiology of periodontal disease**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
10	**1**	**Etiology of periodontal disease and risk factors**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
11	**1**	**Microbiologic specificity of periodontal diseases**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
12	**1**	**Dental calculus**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
13	**1**	**Dental stain**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
14	**1**	**Etiology of periodontal disease**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
15	**1**	Etiology of periodontal disease **- Molecular biology of host–microbe interactions**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**

16	**1**	Etiology of periodontal disease and risk factors **-Smoking and Periodontal Disease**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
17	**1**	**Impact of periodontal infection on systemic health**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
18	**1**	Impact of periodontal infection on systemic health **-Periodontal disease and asthma**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
19	**1**	**Periodontal indices**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
20	**1**	**The periodontal pocket**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
21	**1**	The periodontal pocket Periodontal - disease activity Pulp changes - associated with periodontal pockets Relationship of - attachment loss and bone loss to pocket depth Area between base - of pocket and alveolar bone Relationship of - pocket to bone Periodontal - abscess **-Lateral periodontal cyst**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
22	**1**	Treatment plan § guidelines Phase 1 (behavior - change, removal of supragingival dental biofilm and **risk factor control:(**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**

23	**1**	Treatment plan guidelines **-Phase 2 (cause-related therapy)**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
24	**1**	Treatment plan guidelines **-Phase 3 (corrective/surgical phase)**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
25	**1**	Treatment plan guidelines **-Phase 4 (maintenance therapy)**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
26	**1**	**Plaque biofilm control for the periodontal patient**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
27	**1**	Plaque biofilm control for the periodontal patient Chemical plaque - biofilm control with oral rinses o Chlorhexidine :digluconate i- Mode of action **ii- Clinical use**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
28	**1**	Periodontal instruments and sharpening **-Types of periodontal instruments**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
29	**1**	**Breath Malodor (Halitosis)**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**
30	**1**	**Systemic anti-infective therapy for periodontal diseases**	**Periodontics**	**A theoretical lecture using power point**	**Short, semester, half year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Daily attendance and participation in scientific questions/activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Clinical Periodontology and Implant Dentistry, Seventh Edition, Niklaus P. Lang and Jan Lindhe, 2022 ○ Newman and Carranza's Clinical Periodontology, Thirteen Edition, 2019

The Fifth Stage

Oral Medicine

Course Description

1. Course Name	
Oral Medicine	
2. Course Code	
529OM	
3. Semester / Year	
Fifth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical and practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
60 theoretical + 120 practical	
7. Course administrator's name (mention all, if more than one name)	
Name: م.د.عماد حسان حمودي	
8. Course Objectives	
Course objective	**Course objective** ○ Qualifying dentists who are able to know the causes of various diseases that affect the mouth and study their clinical diagnosis and treatment methods. **Cognitive goals** ○ The ability to distinguish between different diseases that affect the interior of the mouth. ○ Oral disease treatment methods. ○ Diagnosis and treatment of the temporomandibular joint **The skills objectives of the course** ○ The ability to distinguish between oral diseases. ○ How to use dyes. ○ How to cut tissue.
9. Teaching and Learning Strategies	
Strategy	○ Giving scientific and theoretical lectures through screens, PowerPoint, and slides, and practical experiments in the educational laboratories of the college.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	2	The principles of oral diagnosis **Clinical examinations**	**Oral Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	2	**Laboratory investigations in dentistry**	**Oral Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	2	**orofacial pain**	**Oral Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	2	**T.M.J**	**Oral Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	2	**Oral ulceration and Vesiculo-bullus lesions**	**Oral Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	2	**White & red lesions**	**Oral Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	2	**Oral cancer**	**Oral Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	2	**Pigmented oral lesions**	**Oral Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	2	**Benign, Premalignant and malignant lesions of the oral cavity**	**Oral Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

10	2	Neuromuscular disorder	**Oral Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	2	**Salivary glands diseases**	**Oral Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	2	**Autoimmune diseases**	**Oral Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	2	**Oral manifestation of allergic reaction**	**Oral Medicine**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Burket's oral medicine. Michael Glick, Martin Greenberg, Peter Lockhart and Dtephen Challacombe. 13th edition.2021, Wiley Black well. ○ Bumann, A., & Lotzmann, U. TMJ disorders and orofacial pain. The role of dentistry in a multidisciplinary approach. 2011, Thieme

Orthodontics

Course Description

1. Course Name	
Orthodontics	
2. Course Code	
526OD	
3. Semester / Year	
Fifth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical and practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
60 theoretical + 60 practical	
7. Course administrator's name (mention all, if more than one name)	
Name: م.م. سعد عبد العالي عباس	
8. Course Objectives	
Course objective	**Course objectives** ○ Preparing the student at a high level of science with regard to diagnosing and treating minor cases of malaise using the mobile and functional device. **Cognitive goals** ○ Acquisition of knowledge by diagnosing and treating cases of malocclusion. **The skills objectives of the course** ○ Knowing the types of orthodontic devices related to each case.
9. Teaching and Learning Strategies	
Strategy	○ Giving scientific and theoretical lectures through display screens and PowerPoint. ○ Orthodontic training clinics.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	2	Orthodontic diagnosis and treatment planning	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	2	ii. Face examination in 3 dimensions iii. skeletal examination iv. Soft tissue examination	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	2	v. Occlusion	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	2	vi. Dentition vii. Temporomandibular joint	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	2	d- Diagnostic aids i. Cephalometrics	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	2	ii. Orthopantomography **ii. Other views**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	2	**iv. Study models**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	2	v. Photography **vi. 3D imaging**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	2	Treatment planning	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

10	2	**f- Treatment of Medically compromised patients**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	2	**g- Orthodontic indices**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	2	**Space analysis, Bolton's ratio**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	2	**Teeth extraction in orthodontics**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	2	**Serial extraction**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	2	**Vertical and transverse problems:**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	2	**b. Open bite**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	2	**c. Crossbite and scissors bite**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	2	**Treatment of common local factors:**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	2	**f. Bad oral habits**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

20	2	**Treatment of aberrant position of canines**	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	2	Treatment of general factors:	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	2	Continue class I treatment (method of space creation)	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	2	b. Class II div. 1 treatment	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	2	c. Class II div. 2 treatment	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	2	d. Class III treatment	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	2	a- Periodontal problems Treatment of adults	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	2	b- Orthognathic surgery	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	2	Cleft lip and palate	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	2	Continue cleft lip and palate	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

30	2	Digital orthodontics (digital approach in orthodontic diagnosis and treatment(	**Orthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Short exams

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ An Introduction to Orthodontics 5th Edition Simon J. Littlewood and Laura Mitchell 2019. ○ Orthodontics: Principles and Practice: Principles and Practice 2nd Edition 2017

Prosthodontics

Course Description

1. Course Name	
Prosthodontics	
2. Course Code	
510PR	
3. Semester / Year	
Fifth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical and practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 theoretical + 180 practical	
7. Course administrator's name (mention all, if more than one name)	
Name: ا.م.د. ايناس طه ابراهيم	
8. Course Objectives	
Course objective	**Course objectives** ○ Training the student on how to examine patients and diagnose the patient's pathological condition by modern and currently approved diagnostic methods, then prepare a treatment plan and then start treatment in a correct scientific manner ○ Using modern materials and methods in the manufacture of the complete set by giving theoretical lectures with practice in clinics **Cognitive and skill goals** ○ Giving the necessary information to deal with the materials involved in the dental industry process and the manufacture of the complete set in particular ○ Training the student on how to examine and diagnose disease states ○ Giving important information and treatment steps patient during examination and treatment while sitting on the dental chair **The skills objectives of the course** ○ Describe the tools used to treat patients who need the complete kit ○ Follow-up of the student during his training in clinics.
9. Teaching and Learning Strategies	

Strategy	○ Giving practical and theoretical lectures through display screens and PowerPoint ○ Live explanation and dealing with all kinds of materials mentioned within the curriculum in front of the students after dividing them into groups on the number of days of the week and explaining all the steps with a detailed explanation ○ Summer Internship ○ Group educational workshops ○ Seminars

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	1	**Occlusion in Complete Denture**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	1	Occlusion in Complete Denture **(Continue)**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	1	**Retention, Stability And Support**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	1	Retention, Stability And Support **(Continue)**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	1	**Post Insertion Problems**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	1	**Post Insertion Problems (Continue)**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	1	Complications Of Complete **Denture**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

8	1	Complications Of Complete **Denture(Continue)**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	1	**Immediate Denture**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	1	**Immediate Denture (Continue)**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	1	Classification system for **completely edentulous patients**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	1	Classification system for **completely edentulous patients(Continue)**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	1	**Posterior palatal seal area**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	1	**Single CD**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	1	**Single CD (Continue**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	1	**Geriatric dentistry**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	1	**Maxillofacial Prosthesis**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

18	1	Maxillofacial Prosthesis **(Continue)**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	1	**Residual Ridge resorption**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	1	Residual Ridge resorption **(Continue)**	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	1	Dental implantology	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	1	Dental implantology (Continue)	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	1	Esthetics in CD	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	1	Characteristics Of Ideal Materials For Dental Implant	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	1	Copy denture	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	1	Over Denture	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	1	Over Denture (Continue)	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

28	1	Neutral zone in CD	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	1	Attachments in over denture	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	1	Attachments in over denture (Continue)	**Prosthodontics**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Theoretical and practical exams, in addition to the treatment requirements, which are a number of cases that the student must treat correctly, accurately and completely, to calculate them from the requirements of the annual quest, as well as the graduation project
- Monthly, semi-annual and annual exams

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ - Zarb, Hobkirk, Eckert, Jacob et al. Prosthodontic treatment for edentulous patients: Complete dentures and implant-supported prostheses.13th edition 2013 by Mosby, Elsevier Inc. ○ Golden and Driscoll. Treating the complete denture patient. 1st edition 2020 John Wiley & Sons, Inc

Preventive Dentistry

Course Description

1. Course Name	
Preventive Dentistry	
2. Course Code	
531PD	
3. Semester / Year	
Fifth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical and practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 theoretical + 60 practical	
7. Course administrator's name (mention all, if more than one name)	
Name: **ا.م.د. لمياء عبد الخالق** **محمد سعيد**	
8. Course Objectives	
Course objective	**Course objectives** ○ Introducing the importance of preventive dentistry and its applications for individuals and society, especially for widespread diseases such as tooth decay and gum disease, as well as with regard to nutrition and immune factors against oral and dental diseases. ○ Course outcomes and methods of teaching, learning and assessment **Cognitive goals** ○ Formulating information in a way that enables students to understand and increase knowledge regarding the diagnosis and treatment of various diseases such as caries. ○ Giving instructions for dental care and health awareness to prevent caries and gum disease. ○ Giving special instructions and preventive programs for oral and dental health to the elderly and adults with special needs. **The skills objectives of the course** ○ Training the student to treat tooth decay and remove plaque from the teeth. ○ Training the student on how to use fluoride to prevent cavities. ○ Giving instructions for dental and oral health care.
9. Teaching and Learning Strategies	

Strategy	○ Giving lectures through displays, PowerPoint and slides ○ Preparing seminars by students under the supervision of professors.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Prevention of oral diseases (introduction) • What is preventive dentistry? • Prevention is better than a cure • Is preventive dentistry still needed. • Levels of prevention • Caries prevention: how far it had come in one century!**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	**Dental caries development • Etiology of dental caries • Inorganic and organic components of tooth • Terminology of dental caries • Dynamics Process of De-Demineralization**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**Diagnosis of dental caries Detection systems of caries visual and**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		tactile examinations **□ Radiographic techniques** **□ Electrical current measurement (electronic resistant method)** **□ Fiber Optic Trans illumination (FOTI and DiFOTI) (Enhanced visual techniques)** **□ Fluorescent techniques** **□ Other techniques like Dyes, Ultrasound techniques, Photothermal Radiometry (PTR)**			
4	**1**	**Fluoride in Dentistry** **□ Introduction** **□ Fluoride in Environment** **□ Fluoride Metabolism (Absorption, Distribution and Excretion of Fluoride in the Body).**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	**Fluorides in prevention and controlling dental caries** **□ Mechanism of action** **□ Fluoride's effect on tooth mineral**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Fluoride effect on plaque and bacterial metabolism			
6	**1**	**Topical fluoride therapy Professionally applied fluoride Introduction Advantages and disadvantages of topical fluoride application Fluoride Compounds Classification of Professionally applied fluoride.**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**1**	**Topical fluoride therapy :Self-applied fluoride Requisites for self-applied fluoride agents Fluoride dentifrices and Mechanism of Action Fluoride mouth rinses, Indications and Recommendations.**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**1**	**Safety and toxicity of fluoride • Fluoride Toxicity • Factors influencing acute toxicity • Management of acute toxicity • Recommendations for parents • Chronic Toxicity(**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Dental fluorosis and bone fluorosis)			
9	**1**	**Dentalsealants** **□ definition** **□ History** **□ indication and contraindication** **□ sealant in adult** **□ Idealsealants materials** **□ Requisites for Sealant Retention** **□ Sealant Placement Guidelines** **□ Fluoride-Releasing Sealants** **□ Glass ionomer sealants** **□ Colored Versus Clear Sealants** **□ Sealants for proximal enamel surfaces** **□ Sealing over caries lesions**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	**1**	**New approach in restorative dentistry** **□ Minimally Invasive Treatment Technique** **□ Minimally Invasive Cavity Preparation** **□ Non-machinery Preparation** **□ LASER** **□ Chemo mechanical Caries**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		Removal **□ Preventive Resin Restorations Demineralization Treatment**			
11	**1**	**Microbiology of dental caries** **□ Microbial ecology in the oral cavity** **□ Acquisition of the resident oral microflora** **□ Site distribution of oral bacteria** **□ Ecological factors affecting the growth and metabolism of oral bacteria** **□ Dental biofilms: development, structure, composition and properties** **□ Development of dental biofilms** **□ Pellicle formation** **□ Microbial colonization** **□ Initial microbial colonization** **Microbial succession**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**1**	**Saliva and host defense mechanism** **□ Function of saliva** **1** **155** **□ Composition of**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		saliva **□ Salivary flow rate** **□ Influence of saliva on dental caries** **□ Oral immune system** **□ Non-specific immune factors** **□ Specific immune factors** **□ Immunization of dental caries**			
13	**1**	**Caries risk assessment** **□ Goals of Caries Risk Assesment** **□ Caries Disease Indicators** **□ Caries Risk Factors** **□ Caries Protective Factors** **□ Factors in Low, Moderate and High Caries** **□ Cariogram**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	**infection control** **□ Transmission of infection** **□ Standard precautions** **□ Components of infection control** **□ Treatment room features** **□ Single use disposable instruments** **□ Biomedical waste management**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

15	**1**	**Oral hygiene measures (Mechanical)** **□ Acquired pellicle** **□ Dental plaque** **□ Dental calculus** **□ Mechanical plaque control aids** **□ Toothbrushes** **□ Tooth brushing methods** **□ Powered toothbrush** **□ Objectives of toothbrushing** **□ Interdental Cleaning aids**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	**Oral hygiene measures (Chemical)** **□ Ideal properties of chemical plaque control agents** **□ Modes of action** **□ Chlorhexidine** **□ Triclosan** **□ Essential oil mouthwashes or Listerine** **□ Enzymes**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	**Diet and dental caries** **□ Role of carbohydrates in caries development** **□ Evidences** **□ Factors affecting food cariogenicity** **□ Physical form of food and clearance time** **□ Types of**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		fermentable carbohydrate **□ The basic Stephan curve** **□ Frequency of intake sugar and dental caries**			
18	**1**	**Non- sugar sweeteners** **□ The sweetness of sugars** **□ Non- sugar sweeteners** **□ Bulk sweeteners** **□ Intense sweeteners** **□ Protective factors in food** **□ Fruit and dental caries** **□ Testing food cariogenicity**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**1**	**Dietary counseling in dental practice** **□ Nutritionalstatus assessment** **□Body Mass Index** **□ Assessment of dietary intake** **□ Objectives of dietary assessment** **□ 24-hour recall** **□ Dietary record** **□ Food frequency questionnaires** **□ Evaluation of cariogenic potentiall** **□ Evaluation of nutritive value**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

20	**1**	**Nutrition and dental health** **□ Nutrition dental caries** **□ Systemic effect** **□Morphology of the teeth** **□The quality of the hard tissues** **□ Quality of saliva** **□ Evidences of the effect of some nutrients on dental caries** **□ Nutrition and eruption of teeth**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**1**	**Prevention of periodontal disease and oral cancer by nutrition** **□ Nutrition and periodontal health** **□ The mechanisms by which nutrition may affect periodontal disease** **□ Effect of food texture on periodontal health** **□ Nutrition and oral mucosal disease** **□ Nutrition and oral cancer** **□ Primary prevention** **□ Secondary prevention**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**1**	Probiotics and dental health □ Caries-related mechanisms of probiotic activity □ Probiotics and counts of mutans streptococci □ Probiotics and caries occurrence	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		□ Probiotics and periodontal health			
23	**1**	**Diagnosis and prevention of dental erosion** □ **Prevalence** □ **Early detection** □ **Etiology** □ **Protection against erosion** □ **Prevention of erosion**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**1**	**Prevention of malocclusion** □ **Normal development** □ **Etiology of malocclusion** □ **Interceptive measures** □ **Tooth anomalies** □ **Risk assessmen**	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**1**	preventive measure for population with developmental disabilities □ Disability definition □ Classification of disabling conditions □ The issues regarding the delivery of care to people with disabilities □ Dental management and preventive measures among disabled individuals □ The risk factors for dental caries among disabled individuals □ People with physical (neurological) impairment □ Visual Deficits	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

26	**1**	preventive treatment strategies for medically compromised 1 158 populations □ Introduction □ Eating disorders: Characteristics and preventive treatment strategies □ Depression: Characteristics and preventive treatment strategies □ Diabetes mellitus: Characteristics and preventive treatment strategies	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**1**	Ozone in the prevention of dental diseases □ Definition and physical properties □ Mode of action □ Safety □ Application of ozone in dentistry □ Effects of ozone on oral microorganisms and oral cells □ Ozone for disinfecting dentures □ Ozone instruments designed for dentistry □ Ozone in the management of incipient caries □ Ozone in the management of open caries □ Treating root caries with ozone	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**1**	Geriatric dentistry □ population characteristics □ Physiologic Changes □ Functionalstatus □ common oral manifestation □ preventive measures	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		□ long term care			
29	**1**	Implant care □ Dental implant parts □ Dental implant and biofilm □ Implant Maintenance □Professional care in dental clinic □Home care	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	**1**	Protection of the dentition □ Impact of dental trauma □ Types of traumatic dental injuries to teeth □ Sports dentistry □ Protective mouth-guards □ Evidence of effectiveness □ mouth-guards and oral & systemic infections	Preventive Dentistry	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Weekly reports of practical experiences
- Daily attendance and participation in scientific questions / activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Primary Preventive Dentistry by Harris NO GarciaGodoyF-NatheCN 8th Ed)20014 . ○ Comprehensive preventive dentistry (2012) Edited by Hardy Limeback

Pediatric Dentistry

Course Description

1. Course Name	
Pediatric Dentistry	
2. Course Code	
530PAPD	
3. Semester / Year	
Fifth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical and practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 theoretical + 60 practical	
7. Course administrator's name (mention all, if more than one name)	
Name: م.د. مظفر فاضل جدوع	
8. Course Objectives	
Course objective	**Course objectives** ○ Understand and comprehend the theoretical and practical methods of treating all cases of injury to children's teeth and learn about scientific methods and methods supported by means of illustration to know how to identify primary and permanent teeth and the problems related to them. **Cognitive goals** ○ Formulating information in a way that enables the student to understand. ○ Increasing knowledge regarding the diagnosis and treatment of various cases of dental diseases in children. ○ Oral and dental care and awareness of the importance of preserving milk teeth until permanent teeth erupt in children. **The skills objectives of the course** ○ Training students on the pathological conditions of children's teeth. ○ Giving instructions on how to deal and interact with children. ○ Acquisition of skills for diagnosing primary and permanent teeth in children.
9. Teaching and Learning Strategies	

Strategy	○ Giving scientific and theoretical lectures through display screens and PowerPoint.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	1	**Diagnosis and treatment planning**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	1	**Preliminary medical and dental history**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	1	**Art and science of behavior management**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	1	**Non pharmacologic management of patient behavior**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	1	**Pharmacologic management of patient behavior**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	1	**Sedation in pediatric dentistry**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	1	**management of traumatic injuries to the teeth and supporting tissues of children,**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	1	classification of injuries to the anterior teeth of children classification	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

9	1	**Traumatic injuries of the primary teeth and its effect on permanent teeth**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	1	Treatment of injury of permanent teeth, emergency **treatment, temporary restoration**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	1	Advances in Pediatric :Dentistry Advances in diagnostic ,aids **Advances in cavity preparation methods**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	1	**Advances in endodontics, Advances in local anesthesia**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	1	**Advances in restorative materials, Advances in surgical procedures, miscellaneous**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	1	**Acquired disturbances of oral structures**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	1	**Developmental disturbances of oral structures**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	1	**Gingivitis and periodontal disease in children:**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	1	**Acute candidacies (thrush), acute bacterial infection, chronic non**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

		specific gingivitis, gingival			
18	1	**Gingival lesions of genetic origin, ascorbic acid deficiency gingivitis.**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	1	**Periodontal diseases in children, early onset periodontitis,**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	1	Papillon – Lefevere ,syndrome gingival recession, extrinsic **stains and deposits on teeth**	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	1	Management of space ,problems planning for space ,maintenance loss of primary incisors	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	1	Space Maintenance for the First and Second	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	1	Loss of the Second Primary Molar Before Eruption of the First Permanent Molar, Areas of Multiple Primary Molar Loss	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	1	Development of dental arch and occlusion;	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	1	Arch length analysis;	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

26	1	Dental problems of the disabled child	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	1	Mental disability, Down syndrome, Intellectual disability, Learning disability	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	1	Fragile X syndrome, cerebral palsy, autism,	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	1	Respiratory diseases, hearing loss, visual impairment, epilepsy	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	1	Heart disease, hemophilia, ,sickle cell anemia, viral ,hepatitis, AIDS children with systemic diseases	**Pediatric Dentistry**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- The method of giving questions and a space for discussion to solve them during the lecture.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ McDONALD AND AVERY'S DENTISTRY for CHILD and ADOLESCENT 2022 by Elsevier ○ Text book of pediatric dentistry Nikhil Marwa 2nd ed. 2019 New Delhi.

Oral Surgery

Course Description

1. Course Name	
Oral Surgery	
2. Course Code	
522OS	
3. Semester / Year	
Fifth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical and practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 theoretical + 180 practical	
7. Course administrator's name (mention all, if more than one name)	
Name: **م.د. مرتضى محمد باقر**	
8. Course Objectives	
Course objective	**Course objectives** ○ Preparing the student at a high level of science with regard to oral and maxillofacial surgery, especially benign and malignant tumors, orthodontic surgery, maxillofacial injuries and dental implants. **Cognitive goals** ○ Acquire basic knowledge of oral and maxillofacial surgery. ○ Gain basic knowledge about dental implants **The skills objectives of the course** ○ Surgical diagnostic training ○ Methods of tooth extraction and oral surgery ○ Training in minor dental surgeries
9. Teaching and Learning Strategies	
Strategy	○ Giving lectures through display screens and PowerPoint ○ Preparing seminars by students under the supervision of professors. ○ Dental extraction clinics, minor operations and surgical diagnosis

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	**1**	**Orofacial pain**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	**1**	Preliminary management of patients with facial **fractures**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	**1**	**Fractures of the mandible**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	**1**	Fractures of the mandible **Mandibular fractures that require special consideration**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	**1**	**Fractures of the middle third of facial skeleton**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	**1**	Fractures of the middle third of facial skeleton Classification, clinical presentation imaging and 1141 **treatment**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	**1**	**Dentoalveolar and soft tissue injuries**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	**1**	**Preprosthetic surgery**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9	**1**	Preprosthetic surgery Soft tissue **procedures**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

10	**1**	**Potentially malignant disorders of the oral mucosa**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	**1**	**Odontogenic diseases of the maxillary sinus**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	**1**	**Benign cystic lesions of the oral cavity**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	**1**	**Odontogenic tumors**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	**1**	Non-odontogenic tumors and fibro-osseous lesions **of the jaw**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	**1**	**Oral cancer**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	**1**	Oral cancer Management of the neck	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	**1**	Implant Treatment: Advanced Concepts Immediate **post-extraction implants**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	**1**	Implant Treatment: Advanced Concepts Inferior alveolar nerve lateralization	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
19	**1**	**Salivary gland diseases**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

20	**1**	Salivary gland diseases Autoimmune conditions: Sjögren ,syndrome **Immunoglobulin G4-related salivary gland disease**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	**1**	Temporomandibular joint (TMJ) disorders	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	**1**	Temporomandibular joint (TMJ) disorders	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	**1**	Orthognathic surgery	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	**1**	Orthognathic surgery **Mock surgery and fabrication of splints**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	**1**	Cleft lip and palate	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	**1**	Cleft lip and palate **Management;** Surgical procedures of ,cleft palate complications	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	**1**	Laser and Cryosurgery in oral and maxillofacial surgery	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	**1**	Vascular anomalies	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	**1**	Principles of reconstructive surgery of defects of the jaws	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

30	**1**	Principles of reconstructive surgery of defects of the Jaws **□ Maxillary reconstruction**	**Oral Surgery**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Daily attendance and participation in scientific questions/activity
- And the final exam

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Contemporary oral and maxillofacial surgery 7th edition 2019 (Elsevier) Perry M, Brown A, Banks P (2015). Fractures of ○ The Facial Skeleton, second edition. Wiley BlackwellPerry M, Brown A, Banks P (2015).

Conservative (Endo)

Course Description

1. Course Name	
Conservative (Endo)	
2. Course Code	
519CV	
3. Semester / Year	
Fifth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical and practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 theoretical + 180 practical	
7. Course administrator's name (mention all, if more than one name)	
Name:	**ا.م.د. بسام كريم حمد** **م.م.زهراء صاحب مزعل**
8. Course Objectives	
Course objective	**Course objectives** ○ Students are clinically trained in the specialty of restorative dentistry (fillings / root fillings / crowns and bridges) and laboratory training in root canal fillings. Students are also subjected to clinical training on patients in the dental clinic under the supervision of specialized professors. Students are also trained to identify and deal with tools They are used in restorative dentistry and provide them with adequate knowledge of the basic principles of making dental cavities and filling them with different metallic and optical fillings. Teaching students practical steps for making fillings for dental roots. They are trained in the processes of preparing fixed dental crowns and bridges, replacing missing teeth, and training students to assess their mistakes and improve their skills. **Cognitive goals** ○ Training the student on how to examine and diagnose disease states. ○ Focusing on the clinical steps of treating tooth decay and the use of various dental fillings ○ Students acquire clinical skills by enabling them to make root canal fillings for patients in clinics ○ Understand how to use root canal tools and regular dental fillings **The skills objectives of the course**

	○ Students acquire the skills of using various dental root restoration tools and fillings.
9. Teaching and Learning Strategies	
Strategy	○ Giving scientific and theoretical lectures through display screens and PowerPoint and watching educational films. ○ Practical application to patients ○ Educational films

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	**Endodontic diagnosis**	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	1	**Pain control in Endodontics**	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	1	**Endodontic radiography**	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	1	**Working length Determination**	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5& 6	1	**Microbiology**	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7 & 8	1	Intracanal instruments	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
9 & 10	1	Obturation of the root canal system	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

12	1	Endodontic Emergency Treatment	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	1	Restoration of Endodontic ally Treated Teeth	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14& 15	1	Endodontic-Periodontal Relations	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	1	**Tooth discoloration and bleaching.**	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	1	Terminology, definition of fixed partial denture , Effect of Tooth Loss, Comparism with R.P.D	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18 & 19	1	Types of Fixed Bridge including Basic Bridge Design	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	1	Components of Fixed ;Bridge -------.Retainers Pontics------- - --Connectors.-	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	1	Clinical • Consideration for -.Bridge Construction Abutment _ Tooth(evaluation and selection) .Crown/Root Ratio_ .Splinting of teeth_ Patient Occlusal _ .Status General Factors.	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	1	Clinical • Situations affecting ;Bridge Design **(Post. Tilted**	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and**

		Abutments, Span Length, Pier Abut., Arch Curvature)			**final exams**
23	1	**Resin bonded bridge**	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	1	Diagnosis And Treatment Plan. a. Intra-oral Examination. b. X-Rays Examination. c. Diagnostic Cast Examination. **Gingival retraction and impression(techniques)**	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	1	Gingival retraction and impression(techniques) and impression • **disinfection**	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	1	provisional Restoration , Oclussion and Aesthetics Principles of) occlusion occlusal plane, Anterior Bite Registeration guidance , and Articulation	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	1	Try-in and Shade Selection (Colour dimensions • Hue, Chroma,and Value).	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	1	• Final Cementation of F.P.Ds.(Techniques)	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
29	1	• Failure in Fixed Prosthodontics	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and**

					final exams
30	1	• Porcelain in Fixed Prosthodontics (Current Ceramic)	Conservative	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Theoretical exams
- Practical exams
- Evaluation of treatment methods for patients in clinical clinics
- Oral exams
- Quick Exams

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Cohen's Pathways of the Dental Pulp. 12th ed. Louis H. Berman and Kenneth M. Hargreaves Endodontic Lect. ○ Fundamentals of Fixed Prosthodontics, 2012, Quintessence Pub. SHILLINGBURG, H. T. & SATHER, D. A. ○ Contemporary Fixed Prosthodontics, 2016. Elsevier. ROSENSTIEL, S. F., LAND, M. F. Crown and bridge Lect & FUJIMOTO, J

Periodontology

Course Description

1. Course Name	
Periodontology	
2. Course Code	
528PT	
3. Semester / Year	
Fifth year	
4. Description Preparation Date	
2025	
5. Available Attendance Forms	
Theoretical and practical	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 theoretical + 90 practical	
7. Course administrator's name (mention all, if more than one name)	
Name: م.م ابتهال عطية حبيب	
8. Course Objectives	
	Course objective ○ The main objective of the branch is to increase health awareness of oral and dental health among citizens by preparing a health cadre of students who will perform this role after their graduation and serve them in health centers spread throughout Iraq ○ The teaching aspect by giving lectures and holding scientific symposia and performing advanced surgical operations for the purpose of training students on that ○ The curative and preventive aspect, as the branch currently covers all disease cases related to periodontal diseases and those around the teeth referred to the college, in addition to the preventive aspect related to this subject. **Cognitive goals** ○ Formulating information in a way that enables students to understand and increase knowledge regarding the diagnosis and treatment of various gum diseases ○ Giving students instructions for oral and dental care for patients visiting the College of Dentistry **The skills objectives of the course** ○ Training students to remove plaque from teeth ○ Instructions for oral health care.

9. Teaching and Learning Strategies	
Strategy	○ Giving scientific and theoretical lectures through displays, power points, and slides.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	1	**Periodontal examination and diagnosis**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
2	1	**Radiographic aids in the diagnosis of periodontal disease**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
3	1	**Advanced diagnosis**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
4	1	**Periodontal response to external forces**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
5	1	**Immunology**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
6	1	Immunology **- Adaptive immunity**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
7	1	**Tooth mobility**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
8	1	**Epidemiology of periodontal diseases**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

9	1	**Determination of prognosis**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
10	1	Interrelationships of periodontal disease and therapy with other dental disciplines **Restorative interrelationships**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
11	1	**Periodontal surgery. General principles**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
12	1	**Sonic and ultrasonic instrumentation and irrigation**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
13	1	**Gingivectomy and local excision**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
14	1	**Flap surgery**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
15	1	**Mucogingival and aesthetic surgery**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
16	1	**Furcation: involvement and treatment**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
17	1	**Laser therapy**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
18	1	Locally delivered, controlled-release antimicrobials Objectives - **- Types:**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

19	1	Management of medically compromised patients **Cardiovascular diseases:**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
20	1	Management of medically compromised patients **- Endocrine/metaboli c disorders:**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
21	1	**Gingival crevicular fluid (GCF)**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
22	1	**Dentin hypersensitivity 605.e1**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
23	1	Tissue regeneration. General principles **Periodontal Wound Healing**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
24	1	**Regenerative periodontal therapy**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
25	1	**Reconstructive surgical techniques:**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
26	1	**Advanced regenerative approaches**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
27	1	Oral implantology **Peri-implant anatomy and Peri-implant diseases classification**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
28	1	Oral implantology **Implant-related complications and failure**	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

29	1	Oral implant ology Supportive implant treatment	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**
30	1	Oral implant ology Supportive implant treatment - Rationale for supportive implant treatment - Examination of implants o Peri-implant probing o Microbial testing o Stability measures o Implant percussion	**Periodontology**	**A theoretical lecture using power point**	**Short, semester, half-year and final exams**

11. Course evaluation

- Daily exam scores
- Semester Exams
- Daily attendance and participation in scientific questions/activity

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	○ Lectures summarizing the important topics.
Main references	○ Clinical Periodontology and Implant Dentistry, Seventh Edition, Niklaus P. Lang and Jan Lindhe ○ Newman and Carranza's Clinical Periodontology, Thirteen Edition