وزارة التعليم العالي والبحث العلمي
Ministry of Higher Education & Scientific Research

جامعة كلكامش
GILGAMESH UNIVERSITY

University Name: Gilgamesh University

Faculty/Institute: College of Dentistry

Academic or Professional Program Name:

Final Certificate Name: Bachelor of Dentistry

Academic System: .....

Description Preparation Date: Annual

File Completion Date:

Signature:

Head of Department Name:

Date:

Signature:

Scientific Associate Name:

Date:

جامعة كلكامش
قسم ضمان الجودة والاداء الجامعي

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:

1. Program Vision

Excellence and leadership in the quality of education and scientific research in dentistry to serve the community, and for the college to be a pioneer locally and globally in the field of education and scientific research.

2. Program Mission

Preparing graduates with high professional and scientific competence, capable of competing in the labor market and contributing to the development and service of the community, and preparing them to serve society effectively through a motivating environment for learning and the dissemination of knowledge in the field of dentistry, in accordance with the requirements of academic accreditation.

3. Program Objectives

- Supplying the local and regional community with specialized cadres in the medical field, qualified both scientifically and ethically.
- Providing distinguished training services in various health fields that serve its students and members of the community.
- Building outstanding relations with educational, health, and research institutions.
- Excellence in its teaching staff and administrative cadre, with continuous development of their skills and abilities.
- Qualifying and graduating dentists with a high level of knowledge, science, and skills to provide therapeutic services.
- Meeting the needs of the labor market for dentists.
- Raising health awareness in the community and promoting necessary preventive measures to maintain oral and dental health.
- Providing distinguished therapeutic services to patients in all dental specialties by students under the supervision of a team of professors with scientific and practical expertise, using modern technologies in treatment and diagnosis.
- Creating and supporting opportunities for scientific research to find appropriate solutions to oral and dental health problems in the community.

4. Program Accreditation

Does the program have program accreditation? And from which agency?

5. Other external influences

Is there a sponsor for the program?

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements				
College Requirements				
Department Requirements				
Summer Training				
Other				

* This can include notes whether the course is basic or optional.

7. Program Description

Year / Level	Course Code	Course Title	Credit Hours	Practical Hours
First Year	DEN101	General Anatomy	1	2
First Year	DEN102	Medical Biology	2	2
First Year	DEN103	Computer	1	2
First Year	DEN104	Medical Physics	2	2
First Year	DEN105	Human Rights	1	0
First Year	DEN106	Dental Anatomy	2	2
First Year	DEN107	English Language	1	0
First Year	DEN108	Arabic Language	1	0
First Year	DEN109	Medical Chemistry	2	2
Second Year	DEN201	General Anatomy	1	2
Second Year	DEN202	Biochemistry	2	2
Second Year	DEN203	Oral Tissues and Embryology	2	2
Second Year	DEN204	General Histology	2	2
Second Year	DEN205	Dental Materials	1	2
Second Year	DEN206	Dental Fabrication	1	4
Second Year	DEN207	General Physiology	2	2
Second Year	DEN208	Ba'ath Party Crimes	2	0

8. Expected learning outcomes of the program

Knowledge

- Demonstrate comprehensive knowledge of basic medical and dental sciences.
- Understand the etiology, pathology, diagnosis, and management of oral and dental diseases.
- Recognize the ethical and legal principles governing dental practice.

Skills

- Apply critical thinking and problem-solving skills in clinical decision-making.
- Correlate theoretical knowledge with clinical practice.
- Analyze and interpret diagnostic data to plan appropriate treatment.

9. Teaching and Learning Strategies

- **Lectures** – to deliver core theoretical knowledge in dental and medical sciences.
- **Problem-Based Learning (PBL)** – engaging students in solving clinical scenarios to develop critical thinking.
- **Case-Based Learning** – analyzing real or simulated patient cases to connect theory with practice.
- **Clinical Training** – supervised hands-on practice with patients in different dental specialties.
- **Laboratory and Simulation Sessions** – practicing pre-clinical skills using simulators, mannequins, and models.
- **Small Group Discussions** – promoting interaction, teamwork, and exchange of ideas.
- **Brainstorming and Interactive Sessions** – stimulating creativity and active participation.
- **Self-Directed Learning** – encouraging independent study, research, and use of e-resources.
- **E-learning and Digital Tools** – integrating multimedia, online platforms, and digital dentistry applications.
- **Community-Based Learning** – participation in outreach programs and public health activities.

10. Evaluation methods

Implemented at all stages of the program in general.

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer

Professional Development

Mentoring new faculty members

Briefly describes the process used to mentor new, visiting, full-time, and part-time faculty at the institution and department level.

Professional development of faculty members

Briefly describe the academic and professional development plan and arrangements for faculty such as teaching and learning strategies, assessment of learning outcomes, professional development, etc.

12. Acceptance Criterion

(Setting regulations related to enrollment in the college or institute, whether central admission or others)

13. The most important sources of information about the program

State briefly the sources of information about the program.

Program Skills Outline															
				Required program Learning outcomes											
Year/Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First Year	DEN101	General Anatomy													
First Year	DEN102	Medical Biology													
First Year	DEN103	Computer													
First Year	DEN104	Medical Physics													
First Year	DEN105	Human Rights													
First Year	DEN106	Dental Anatomy													
First Year	DEN107	English Language													
First Year	DEN108	Arabic Language													
First Year	DEN109	Medical Chemistry													
Second Year	DEN201	General Anatomy													
Second Year	DEN202	Biochemistry													
Second Year	DEN203	Oral Tissues and Embryology													

Second Year	DEN204	General Histology													
Second Year	DEN205	Dental Materials													
Second Year	DEN206	Dental Fabrication													
Second Year	DEN207	General Physiology													
Second Year	DEN208	Ba'ath Party Crimes													

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

Course Description Form

1. Course Name:
Computer Fundamentals (1)
2. Course Code:
DEN103
3. Semester / Year:
2023/2024
4. Description Preparation Date:
7-Mar-2024
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
30hrsTheory - 60hrs Laboratory
7. Course administrator's name (mention all, if more than one name)
Name: Jannat Tariq Email:
8. Course Objectives

Course Objectives	**1. Understanding Basic Concepts:** • **Define key computer terminology.** • **Explain the fundamental components of a computer system.** **2. Operating System Proficiency:** • **Familiarize students with various operating systems.** • **Teach basic navigation and file management skills.** **3. Introduction to Hardware:** • **Identify and describe essential hardware components.** • **Understand the role of CPU, memory, and storage devices.** **4. Software Awareness:** • **Introduce different types of software (system, application, utility).** • **Highlight the importance of software in computer functionality.**

9. Teaching and Learning Strategies

Strategy	Teaching Strategies: 1. Lectures and Demonstrations: • Present theoretical concepts through lectures. • Demonstrate practical applications of computer fundamental

	2. Hands-on Exercises: • Provide students with hands-on activities using computers. • Encourage practice to reinforce theoretical knowledge. 3. Case Studies: • Present real-world examples to illustrate concepts. • Analyze how computer fundamentals are applied in various scenarios. 4. Interactive Learning: • Foster class discussions and Q&A sessions. • Encourage collaborative problem-solving among students. Learning Strategies: 1. Active Participation: • Engage actively in class discussions and activities. • Take initiative in hands-on exercises and experiments. 2. Self-Study: • Read additional resources to deepen understanding. • Explore online tutorials and documentation. 3. Peer Collaboration: • Work with classmates on projects and assignments. • Share knowledge and collaborate on problem-solving. 4. Practical Application: • Apply theoretical knowledge to real-world situations. • Undertake projects that require the use of comput fundamentals.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	Knowledge and practical application	Introduction about computer /Hardware and Software/computer structure/ Floppy magnetic disks	Theoretical and practical	Short quizzes Term exam Final exam
2	1	Knowledge and practical application	E-learning	Theoretical and practical	Short quizzes Term exam Final exam
3	1	Knowledge and practical application	Introduction to E-learning Google Classroom Platform Google drive	Theoretical and practical	Short quizzes Term exam Final exam
4	1	Knowledge and practical application	Google forms	Theoretical and practical	Short quizzes Term exam Final exam
5	1	Knowledge and practical	Online conferencing	Theoretical and practical	Short quizzes Term exam

		application			Final exam
6	1	Knowledge and practical application	Introduction about Windows / A look at Windows 10/Stating Windows 10/Working with a windows Program	Theoretical and practical	Short quizzes Term exam Final exam
7	1	Knowledge and practical application	Working with files and folders/ Using My computer	Theoretical and practical	Short quizzes Term exam Final exam
8	1	Knowledge and practical application	Working with Taskbar and Desktop	Theoretical and practical	Short quizzes Term exam Final exam
9	1	Knowledge and practical application	Using Windows Accessories	Theoretical and practical	Short quizzes Term exam Final exam
10	1	Knowledge and practical application	A look at Control Panel	Theoretical and practical	Short quizzes Term exam Final exam
11	1	Knowledge and practical application	Widows Explorer	Theoretical and practical	Short quizzes Term exam Final exam
12	1	Knowledge and practical application	Libraries	Theoretical and practical	Short quizzes Term exam Final exam
13	1	Knowledge and practical application	Introduction about Microsoft Word2016 A look at Microsoft Wor /Editing Document	Theoretical and practical	Short quizzes Term exam Final exam
14	1	Knowledge and practical application	Formatting Text/	Theoretical and practical	Short quizzes Term exam Final exam
15	1	Knowledge and practical application	Formatting paragraphs	Theoretical and practical	Short quizzes Term exam Final exam
16	1	Knowledge and practical application	Proofing documents	Theoretical and practical	Short quizzes Term exam Final exam
17	1	Knowledge and practical application	Adding Tables	Theoretical and practical	Short quizzes Term exam Final exam
18	1	Knowledge and practical application	Inserting Graphic Elements	Theoretical and practical	Short quizzes Term exam Final exam
19	1	Knowledge and practical application	Controlling page Appearance	Theoretical and practical	Short quizzes Term exam Final exam
29	1	Knowledge and practical application	Introduction about Excels /A Look a Microsoft Excel	Theoretical and practical	Short quizzes Term exam Final exam
21	1	Knowledge and practical application	Modifying A Worksheet /performin Calculations	Theoretical and practical	Short quizzes Term exam Final exam
22	1	Knowledge and practical application	Formatting a worksheet/ Developing a work book	Theoretical and practical	Short quizzes Term exam Final exam

23	1	Knowledge and practical application	Printing Workbook Contents/Customizing Layout	Theoretical and practical	Short quizzes Term exam Final exam
24	1	Knowledge and practical application	Introduction about Microsoft Access/ A look at Microsoft Access	Theoretical and practical	Short quizzes Term exam Final exam
25	1	Knowledge and practical application	Creating Data tables /properties of t fields	Theoretical and practical	Short quizzes Term exam Final exam
26	1	Knowledge and practical application	Querying the database/Designing Forms/Producing reports	Theoretical and practical	Short quizzes Term exam Final exam
27	1	Knowledge and practical application	Introduction about Microsoft Power point/starting power point2016	Theoretical and practical	Short quizzes Term exam Final exam
28	1	Knowledge and practical application	Formatting text/Using graphics and Text	Theoretical and practical	Short quizzes Term exam Final exam
28	1	Knowledge and practical application	Manipulating the slides/Using Multimedia Elements	Theoretical and practical	Short quizzes Term exam Final exam
30	1	Knowledge and practical application	Powerpoint Management	Theoretical and practical	Short quizzes Term exam Final exam

Lab. Experiment		
Week	**Hours**	**Unit or subject name**
1	2	Introduction about computer / Hardware and Software/computer structure/`Floppy magnetic disks.
2	2	Operating systems/CD-ROM
3	2	Create Files &Folders High level programming language /Constant and variable/Library Function /Arithmetic expression/Type of Monitor /Number of systems
4	2	Introduction about MS-DOS Operating systems/DOS drive /Key-Board
5	2	DOS commands /Internal Commands/External Commands
6	2	Introduction about Windows /A look at Windows 7/Stating Windows 7/Working with a windows Program
7	2	Working with files and folders/ Using My computer
8	2	Working with Taskbar and Desktop
9	2	Using Windows Accessories
10	2	A look at Control Panel
11	2	Widows Explorer
12	2	Libraries
13	2	Introduction about Microsoft Word2016 A look at Microsoft Word /Editing Document
14	2	Formatting Text/
15	2	Formatting paragraphs

16	2	Proofing documents
17	2	Adding Tables
18	2	Inserting Graphic Elements
19	2	Controlling page Appearance
29	2	Introduction about Excels /A Look at Microsoft Excel
21	2	Modifying A Worksheet /performing Calculations
22	2	Formatting a worksheet/ Developing a work book
23	2	Printing Workbook Contents/Customizing Layout
24	2	Introduction about Microsoft Access/ A look at Microsoft Access
25	2	Creating Data tables /properties of the fields
26	2	Querying the database/Designing Forms/Producing reports
27	2	Introduction about Microsoft Power point/starting power point2016
28	2	Formatting text/Using graphics and Text
28	2	Manipulating the slides/Using Multimedia Elements
30	2	Powerpoint Management

11. Course Evaluation

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

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	E-learning concepts and techniques, Mousa Afaneh, Vince Basile, Justin Bennett, Pamela Berman, Michael Bond
Recommended books and references (scientific journals, reports…)	Computer application in management, P. S. Aithal
Electronic References, Websites	

Course Description Form

1. Course Name:
Human Anatomy
2. Course Code:
DEN101
3. Semester / Year:
2023_2024
4. Description Preparation Date:
6-Mar-2024
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
30hrs Theory _60hrs Laboratory/16 U Theory_30U Laboratory
7. Course administrator's name (mention all, if more than one name)
Name: Dr. Elham Majeed FLAYH Email: Elham.m.flayh@gau.edu.iq
8. Course Objectives

Course Objectives	Preparing the student at a high scientific level through: • Identifying the descriptive terminology of anatomy • Studying the branches of anatomy • Dissecting the basic structures of the human body, including the skin, muscles, bones, joints and ligaments, blood and lymphatic vessels, nervous system, skeletal system, layers of the brain and spinal cord, twelve cranial nerves with an explanation of the sensory and motor functions of each nerve • Study skull with facial bones and details of each bone, studying the openings and foramina in the bones with knowledge of the nerves and veins that pass through them • Dissecting the bones of the nasal cavity, eye cavity, and ear cavity • Dissecting the skeleton of the human body • Dissecting the chest cavity with dissection of the heart, lung, trachea • Dissection of the abdominal cavity and its organs. • Studying the practical and clinical applications that reflect the importance of anatomy and its relationship to clinical work in dentistry

9. Teaching and Learning Strategies

Strategy

A. Cognitive Objectives.

- Acquire basic knowledge of the anatomy of the human body
- This objective is about learning the names and definitions of the various structures of the human body.
- Acquire knowledge about the relationship between anatomy and the physiology of the organs
- This objective is about learning how the different organs and systems of the human body work together to maintain homeostasis.
- Basic knowledge of the practical and clinical applications related to the anatomical bases
- This objective is about learning how anatomy is used in clinical practice, such as in diagnosing and treating diseases.
- This means that the student will learn how anatomy is used in clinical practice, such as in diagnosing and treating diseases.

B. Skill Objectives

- These are the goals that the student is expected to achieve in terms of skills and abilities.
- Thinking in three dimensions for anatomical parts
- This objective is about helping the student develop the ability to visualize the three-dimensional relationships of the body's organs. This can be done using models, diagrams, and other visual aids.
- Surgical and clinical applications and their direct relationship with anatomy
- This objective is about helping the student understand how anatomy is used in clinical practice. This can be done by studying case studies, watching surgical videos, and participating in clinical rotations.

C. Affective and Value Objectives:

- Give the student confidence in how to deal with medical information related to the subject of general anatomy.
- Enable the student to visualize the anatomical relationships of the organs of the body with each other and to use this ability in anatomical analysis with surgery.
- Acquire the basic principles set out in the learning methodology.
- This objective is about helping the student feel confident in their ability to understand and apply medical information related to anatomy.

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

- Prepare the student practically in terms of the anatomy of the human body
- Learn professional ethics and scientific integrity
- Prepare the student to find the correct medical diagnosis and prepare him to become a successful dentist in the future
- Develop the student's ability to deal with various educational means

Teaching and Learning Methods.

These are the methods that will be used to help students achieve the learning outcomes of the course:

- In-person education lectures using data show (PowerPoint) software
- This is a traditional method of teaching that involves the instructor presenting information to the students in a lecture format. The instructor may use PowerPoint slides or other visual aids to help illustrate the information.
- Labs
- Labs are hands-on activities that allow students to apply the knowledge they have learned in the classroom. In the context of an anatomy course, labs might involve dissecting animals or examining human cadavers.
- Displaying videos related to the anatomy of an organ or body structure
- Videos can be a helpful way to visualize the anatomy of the human body. They can also be used to show surgical procedures or other clinical applications of anatomy.
- Using a Kahoot game about anatomy questions to make the students more interactive and add a fun and lively atmosphere to the class
- Kahoot is a game-based learning platform that can be used to create interactive quizzes and games. This can be a fun and effective way to help students learn and review anatomy concepts.
- Using 3D body model applications
- 3D body model applications can help students visualize the anatomy of the human body in three dimensions. This can be a helpful way to learn about the relationships between different structures in the body.
- Discussing an anatomical question and linking it to a clinical problem

Assessment Methods:

- Short quizzes
- Term exams
- Practical exam including the motor pattern for performing model testing
- Reports and activities
- Final exam

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	Introduction to Anatomy. scriptive anatomical terms	Human Anatomy	In-person education lectures using data show (PowerPoint) software.	• Short quizzes • Term exam • Final exam
2	1	Basic Structures: Skin, Fasciae, Muscle, Joints, Ligament, Bursae	Human Anatomy	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
3	2	Basic Structures: Bone, Cartilage, Blood Vessels, Lymphatic System	Human Anatomy	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
4	1	Basic Structures: Nervous System, Mucous Membranes, Serous Membranes	Human Anatomy	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
5	2	Skeletal system of the body: Skull: Cranial Bones	Human Anatomy	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam

6	2	Skeletal system of the body: Skull: Facial Bones	Human Anatomy	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
7	2	External Views of the Skull	Human Anatomy	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam • Short quizzes • Term exam • Final exam
8	2	The Cranial Cavity Major Foramina and Fissures locations and structures pass through Neonatal Skull	Human Anatomy	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
9	2	Skeleton of the Orbital Region, Openings into the Orbital Cavity Skeleton of the External Nose, nasal cavity, Paranasal Sinuses Auditory ossicles Hyoid bone	Human Anatomy	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
10	2	The Vertebral Column	Human Anat	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam

11	2	Structure of the Thoracic Wall. Joints of the Chest wall Suprapleural Membrane Diaphragm Surface Anatomy	Human Anato	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
12	2	Thoracic cavity: Mediastinum, Pleurae, Trachea, Bronchi, Lungs	Human Anato	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
13	3	Pericardium, Heart, Large arteries, veins, and nerves of thorax	Human Anatomy	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
14	2	Bones of the Shoulder (Pectoral girdle) girdles Bones of the Upper extremities	Human Anato	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
15	2	Bones of the Pelvic girdle Bones of the Lower extremities	Human Anato	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
16	2	Abdominal cavity and organs	Human Anato	In-person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
Total	30				

11. Course Evaluation

Course Development Plan

A. Development of the Course Content:

- Review and update the course content to ensure that it is accurate, current, and relevant to the needs of students.
- Identify any gaps in the curriculum and develop new content to fill those gaps.
- Remove outdated or irrelevant content from the curriculum.
- Reorganize the content to improve the flow of the course.

B. Use of Modern Teaching Methods:

- Incorporate a variety of teaching methods into the course, such as lectures, discussions, group work, and hands-on activities.
- Use technology to enhance the learning experience, such as online resources, simulations, and virtual reality.
- Adapt the teaching methods to the different learning styles of the students.
- Updating Assessment Methods:
- Develop a variety of assessment methods to measure student learning, such as tests, quizzes, projects, and presentations.
- Use rubrics to provide clear and consistent feedback to students.
- Align the assessment methods with the learning objectives of the course.

D. Equipping Students with the Skills Needed for the Dental Profession:

- Focus on developing the skills that are most important for dental professionals, such as critical thinking, problem-solving, communication, and teamwork.
- Provide students with opportunities to practice these skills in a variety of settings.
- Help students develop the professional values that are important for dental professionals, such as ethics, integrity, and compassion.

Week	Laboratory sessions & Clinical requirements	Hours
1	Introduction to anatomy	2
2	Basic structures part 1 (Skin, Fasciae, Muscle, Joints, Ligament, Bursae)	2
3	Basic structures part 2 (bone, Cartilage, Blood Vessels, Lymphatic System) and classification of the human skeleton	2
4	Basic structures part 3(Nervous System, Mucous Membranes, Serous Membranes)	2
5	Frontal Bone, Parietal bones	2
6	Occipital bone	2
7	Temporal bone	2
8	Sphenoid bone	2

9	Ethmoid bone	2
10	Zygomatic bone and Maxilla	2
11	Nasal bones, Lacrimal bones, Vomer, Palatine bones, Inferior conchae	2
12	Mandible	2
13	External Views of the Skull	2
14	Cranial cavity	2
15	Major Foramina and Fissures locations and structures pass through the skull	2
16	Orbit	2
17	Nasal cavity	2
18	Auditory ossicles, Hyoid bone	2
19	General Characteristics of a Vertebra	2
20	Vertebral column	2
21	Structure of the Thoracic cage (Sternum, Ribs, Costal Cartilages)	2
22	Thoracic cavity (Mediastinum, Pleurae, Trachea, Bronchi)	2
23	Lung	2
24	Anatomy of heart	2
25	Major arteries, veins, and nerves	2
26	Bones of the shoulder (pectoral girdle)	2
27	Bones of the upper extremities	2
28	Bones of pelvic girdle	2
29	Bones of the lower extremities	2
30	Abdominal cavity and organs	2
TOTAL		60

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1. Snell's Clinical Anatomy by Regions, 10th edition. Wolters Kluwer 2019 2. Netter's Head and Neck Anatomy for Dentistry, 3rd edition. Elsevier 2017 3. Gray's Atlas of Anatomy, 3rd edition. Elsev 2021
Main references (sources)	4. Snell's Clinical Anatomy by Regions, 10th edition. Wolters Kluwer 2019 5. Netter's Head and Neck Anatomy for Dentistry, 3rd edition. Elsevier 2017 Gray's Atlas of Anatomy, 3rd editi Elsevier 2021
Electronic References, Websites	TM Anatomy and Anatomy Learni applications

Course Description Form

1. Course Name:

Medical physics

2. Course Code:

DEN 104

3. Semester / Year:

2023_2024

4. Description Preparation Date:

7/4/2024

5. Available Attendance Forms:

Weekly

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

60hrs Theory _60hrs Laboratory/32 U Theory_60U Laboratory

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

Name: MSC. Thalfaa Rasheed Ajeel Email:Thalfaa.rasheed@gau.edu.irq

8. Course Objectives

Course Objectives	The course aims to study the applications of physical laws on the human body, such as electrical, mechanical, kinetic, and pressure, in addition to sound, hearing, light, and vision, in addition to studying the medical devices used in the diagnosis and treatment of some pathological conditions and the effect of the work of these devices on the human body.

9. Teaching and Learning Strategies

Strategy	Cognitive objectives:

	--1 The student can understand the basic components of bones -2 The student can distinguish between the forces acting on and in the body 3- The student can explain the mechanism of heat transfer and its transformations. A -4 The student can understand the meaning of volume, pressure, temperature and methods of measuring them

	B - Skills objectives for the course: B1 - The student can solve problems related to the Unik coefficient B2 - The student can solve problems related to work, force and power B3 - The student can solve problems related to pressure inside the human body C- Emotional and value-based goals: C-1 The student can harness his concepts of medical physics in practical applications A2- The student can understand heat and cold in the human body and their effects . C-3 The student can harness the concepts of force, pressure, and temperature for the human body and benefit from them in our lives today. D - General and transferable skills (other skills related to employability and personal development). D A - verbal communication D B - The ability to express ideas clearly and confidently in speech D C - Teamwork

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1 2	2 2	Terms: Medical Physics, physical medicine, Physical therapy, Health Physics, Radiological Physics, clinical physics. Modeling, Accuracy, Precision, False Positive, False Negative.	Terminology	in person education lectures using data show (PowerPoint) software.	• Short quizzes • Term exam • Final exam
3 4	2 2	Static forces :(type of levers with medical examples). Dynamic forces (Centrifuge)	Force on &in body:	in person education lectures using data show (PowerPoint) software.	• Short quizzes • Term exam • Final exam

5 6	2 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).	Physics of the skeleton:	in person education lectures using data show (PowerPoint) software.	• Short quizzes • Term exam • Final exam
7 8	2 2	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.	Heat and cold in medicine	in person education lectures using data show (PowerPoint) software.	• Short quizzes • Term exam • Final exam
9 10	2 2	: First law of thermodynamic. Energy change in the body (Met, Basal metabolic rate (BMR). Work and power.	Energy, work and power of the body	in person education lectures using data show (PowerPoint) software.	• Short quizzes • Term exam • Final exam
		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).			
11 12	2 2	Definition, absolute pressure, gauge pressure, negative pressure, unit of pressure. Measurement of pressure in the body (Manometer).Pressure inside the skull. Eye pressure. Pressure in the skeleton. Pressure in the urinary bladder.Boyle's law: (pressure while diving).HOT (hyperbaric oxygen therapy).	Pressure:	in person education lectures using data show (PowerPoint) software.	• Short quizzes • Term exam • Final exam
13 14	2 2	Electrical potential of nerves (resting potential, action potential in myelinated and unmyelinated nerves) Electromyogram (EMG). Electrical potential in the heart (electrocardiogram ECG). Electroencephalogram (EEG)	Electricity within the body:	in person education lectures using data show (PowerPoint) software.	• Short quizzes • Term exam • Final exam
15 16	2 2	: Properties of sound. Stethoscope (including heart sound).mechanism of hearing	Sound in medicine	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
17 18	2 2	(A-scan, B-scan, M-scan and Doppler effect). Physiological effect of ultrasound in therapy.	Ultrasound	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam

30	2	Gray).Principles of radiation therapy. Brach therapy, quality factor (QF). 2 30			

11. Course Evaluation

19 20	2 2	Light nature, Planck Equation, (Reflection, Refraction and 2 11 20 Absorption of Light, Properties of light), Diffuse reflection, Specular reflection, Phototherapy, Application of ultraviolet and infrared light in medicine, Tanning and Skin Cancer.	Light in medicine:	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
21 22	2 2	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.	Laser in medicine.	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
23 24	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.	Physics of eye and vision:	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
25 26	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).	Physics of diagnostic X-ray	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
27 28	2 2	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.	Physics of nuclear medicine	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
29	2	The dose units (Rad and	Physics of radiation therapy:		

Course Development Plan A. Development of the Course Content: • Review and update the course content to ensure that it is accurate, current, and relevant to the needs of students. • Identify any gaps in the curriculum and develop new content to fill those gaps. • Remove outdated or irrelevant content from the curriculum. • Reorganize the content to improve the flow of the course. B. Use of Modern Teaching Methods: • Incorporate a variety of teaching methods into the course, such as lectures, discussions, group work, and hands-on activities. • Use technology to enhance the learning experience, such as online resources, simulations, and virtual reality. • Adapt the teaching methods to the different learning styles of the students. • Updating Assessment Methods: • Develop a variety of assessment methods to measure student learning, such as tests, quizzes, projects, and presentations. • Use rubrics to provide clear and consistent feedback to students. • Align the assessment methods with the learning objectives of the course. D. Equipping Students with the Skills Needed for the Dental Profession: • Focus on developing the skills that are most important for dental professionals, such as critical thinking, problem-solving, communication, and teamwork. • Provide students with opportunities to practice these skills in a variety of settings. • Help students develop the professional values that are important for dental professionals, such as ethics, integrity, and compassion.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

	Laboratory sessions & *Clinical requirements*	hours
1	Guidelines of Medical Physics Lab and Rules must be obeyed by the students	2
2	Graphing Techniques	2
3 4	Ohm’s law: - verify ohm’s law - to find the value of different values of resistance 2 4	2 2
5 6	Semiconductors (junction diode): To determine the characteristics of the semiconductors Comparison between omic and non-omic resistance	2
7 8	The focal length of convex lens: -Rough value of focal length of different convex lenses, -A graphical method of measuring of focal length, Comparison between these methods and the given value.	2 2
9 11	Hook's law: -To verify Hook's law and determine the force constant of the spring. -To determine the work done by stretching the spring	2 2
11 12	Focal length of concave mirror: -Locating the radius of curvature -Dete	2 2
13 14	Laser applications: -To measure the width of a single slit by using a laser -To measure the wavelength of laser by using a certain single slit	2 2
15 16	Boyle’s law: -To verify Boyle's law -To measure the pressure of the atmosphere	2 2
17 18	Inverse Square law: - To verify the inverse square law - Radiation shielding by different thicknesses of of a certain material	2 2
19 21	Viscosity of a liquid - To determine the viscosity of a medium using a small sphere falls with a constant terminal velocity. - To verify Stokes' l	2 2
21 22	Velocity of the sound - To measure the velocity of the sound by using a resonance tube, closed at one end, at room temperature. - Calculated the theoretical and practical values of the velocity of sound and comparing between them.	2 2

23 24	The focal length of a converging lens - To determine the focal length of a converging lens by lens displacement method using conjugate foci. - To calculate curvature value of this converging lens	2 2
25 26	Simple Pendulum -To determine the periodic time and its variation with the length of the pendulum -To calculate the acceleration of free fall	2 2
27 28	Cathode Ray Oscilloscope -Measurement of deflection sensitivity of D. C. voltage. -Measurement of deflection sensitivity of A. C. volta	2 2
29 30	General review and exam	2

Course Description Form

1. Course Name:
Medical Chemistry
2. Course Code:
DEN 109
3. Semester / Year:
2023_2024
4. Description Preparation Date:
7/3/2024
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
60hrs Theory _60hrs Laboratory
7. Course administrator's name (mention all, if more than one name)
Name: Jamal Abd Al jabbar Email: jamal.att@gau.edu.iq
8. Course Objectives

Course Objectives	**1- Providing students with a solid scientific background about medicinal chemistry in general** **2- Developing the student's ability to distinguis between types of biological variables, whether quantitative or qualitative, and how to benefit from this knowledge in the medical fields.** **3- In the fields of applied sciences** **4- Give a comprehensive overview of fats and their metabolism** **5- Giving a comprehensive overview of carbohydrates and their effect on the teeth** **6- Giving a comprehensive overview of proteins and their effect on teeth**

9. Teaching and Learning Strategies	
Strategy	**A- Cognitive objectives** **A1 - Knowing the meaning of medicinal chemistry and its importance in applied calculations, as well as its importance in dental diseases** **A2 - Study of electrolytes and their medical benefit in diagnosing disease** **A3 - Identifying the substances present in the human body, such as proteins, enzymes, fats, and others** **A4 - Study the effect of proteins, carbohydrates, fats, etc. on the teeth** **B - The skills objectives of the course**

	B1 - Make the student familiar with the basics of medicinal chemistry in general **B2 - Providing important information to the student about the metabolic processes within the human body** **B3 - Giving important information to the student in terms of medical chemical processes and the changes that occur, supported by examples**

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Knowledge about Acid, Base and Salt its classified according to the types of reactions	Acid, Base and Salt	in person education lectures using data show (PowerPoint) .software	• Short quizzes • Term exam • Final exam
2	2	Knowledge about salts, preparation of salts and the types of reactions	salts, preparation of salts	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
3	2	Knowledge about Fluid and electrolyte and the types of reactions	Fluid and electrolyte	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
4	2	Knowledge about Buffer-pH and Acid-Base Balance and the types of reactions.	Buffer-pH and Acid-Base Balance	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
5	2	Studied in order to have perfect knowledge about acid-base balance and blood .pH	acid-base balance and blood pH	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
6	2	tudied in order to have perfect knowledge about the classification of Colloids and colloidal dispersions	Colloids and colloidal dispersions	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
7	2	Studied in order to have perfect knowledge concentration, preparation of solutions	concentration, preparation of solutions	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
8	2	Studied in order to have perfect knowledge about Radiochemistry	Radiochemistry	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
9	2	Studied in order to have perfect knowledge about the	Alkanes and Cycloalkanes	in person education lectures using data show	• Short quizzes • Term exam • Final exam

		Alkanes and Cycloalkanes		(PowerPoint) software	
10	*2*	Studied in order to have perfect knowledge about the Alkenes and Alkynes	Alkenes and Alkynes	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
11	*2*	Studied in order to have perfect knowledge about the Aromatic compounds	Aromatic compounds	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
12	*2*	Studied in order to have perfect knowledge about the Aromatic compounds in Nature	Aromatic compounds in Nature	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
13	*2*	Studied in order to have perfect knowledge about the Stereoisomers of Carbon	Stereoisomers of Carbon	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
14	*2*	General review and exam	Exam	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
15	*2*	Studied in order to have perfect knowledge about the Alcohols, Phenols, Ethers and Thiols (preparation, reactions)	Alcohols, Phenols, Ethers and Thiols (preparation, reactions)	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
16	*2*	Studied in order to have perfect knowledge about the Carboxylic Acids And Their Derivatives , part 1	Carboxylic Acids And Their Derivatives , part 1	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
17	*2*	Studied in order to have perfect knowledge about the Carboxylic Acids And Their Derivatives , part 2	Carboxylic Acids And Their Derivatives , part 2	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
18	*2*	Studied in order to have perfect knowledge about the Aldehydes and ketones	Aldehydes and ketones	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
19	*2*	Studied in order to have perfect knowledge about the	Carbohydrates	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam

		Carbohydrates and the classification			
20	*2*	Studied in order to have perfect knowledge about the Monosaccharide's and the classification	Monosaccharide's	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
21	*2*	Studied in order to have perfect knowledge about the Disaccharides Carbohydrates and oral health	Disaccharides Carbohydrates and oral health	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
22	*2*	Studied in order to have perfect knowledge about the Lipids and the classification	Lipids	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
23	*2*	Studied in order to have perfect knowledge about the Derived lipids. The role of lipids in teeth diseases	Derived lipids The role of lipids in teeth diseases	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
24	*2*	Studied in order to have perfect knowledge about the Proteins and the classification	Proteins	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
25	*2*	Studied in order to have perfect knowledge about the Amino acids the classification	Proteins Amino acids the classification	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
26	*2*	Studied in order to have perfect knowledge about the Amino acids effects of protein on oral health	Amino acids Effects of protein on oral health	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
27	*2*	Studied in order to have perfect knowledge about the Nucleic Acids and the classification	Nucleic Acids	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
28	*2*	Studied in order to have perfect knowledge about the Nucleosides, Nucleotides	Nucleosides, Nucleotides	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
29	*2*	Studied in order to have perfect	Dioxy and ribo Nucliec acids	in person education lectures	• Short quizzes • Term exam

		knowledge about the Dioxy and ribo Nucliec acids		using data show (PowerPoint) software	• Final exam
30	*2* *60*	General review and exam	Exam	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam

11.Course Evaluation

- Exams based on the CUSE system, as well as quarterly exams
- Preparing brief reports by the student and presenting them in the form of a seminar Activity and participation within the lecture
- Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1-David L. Nelson; Michael M. Cox . (2017) .Lehninger .Principles of Biochemistry. Seventh Edition| ©2017 New Edition Available . 2-John Wiley & Sons Ltd (2018). Peter Rae. Clinical Biochemistry Lecture Notes-John Wiley & Sons Ltd (2018)
Main references (sources)	-Principles of Medical Biochemistry, FOURTH EDITION, G. Meisenberg, W. H. Simmons, Elsevier, 2017
Recommended books and references (scientific journals, reports...)	Textbook of Medical Biochemistry EIGHTH EDITION, Brig M.N. Chatterjea, Jaypee . Brothers Medical Publishers (P) Ltd, 2012
Electronic References, Websites	Chemistry webs, journals, conferences that depended in the high ranked international universities
13. Course development plan	Complete titles of scientific topics that link the science of biochemistry and special metabolic processes Seminars for students on such topics

No	***Lab Subject Medical Chemistry***	***hours***
1	Action of Strong Base and Acids	2
2	Solubility rules and Applications (Solubility rules of salts).	2
3	Test for negative ions (Anions).part 1	2
4	Test for negative ions (Anions). part 2	2
5	PH meter	2
6	Test for positive ions (Cations). part 1	2
7	Test for positive ions (Cations). part 2	2

8	Safety of chemicals part 1	2
9	Safety of chemicals part2	2
10	Aliphatic Hydrocarbons	2
11	Aromatic hydrocarbons, part 1	2
12	Aromatic hydrocarbons, part 2	2
13	Preparation of aspirin	2
14	General review and exam , Exam ,	2
15	Phenols reactions	2
16	Carboxylic Acids reactions part 1	2
17	Carboxylic Acids reactions part 2	2
18	Aldehydes and ketones	2
19	Carbohydrates reactions	2
20	Monosaccharides reactions	2
21	Disaccharides reactions	2
22	Lipids reactions part 1	2
23	Lipids reactions part 2	2
24	Proteins reactions	2
25	Amino acids reactions	2
26	Paper chromatography	2
27	Paper chromatography part -1	2
28	Paper chromatography part -2	2
29	osmosis	2
30	General review and exam	2 /60

Course Description Form

1. Course Name:
dental anatomy
2. Course Code:
den 106
3. Semester / Year:
2023-2024
4. Description Preparation Date:
8.mars 2024
5. Available Attendance Forms:
labs-lectures
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hour(theory)-60 hours practical
7. Course administrator's name (mention all, if more than one name)
Name: DR.MAIS NABEEL ABDULFATAH Email: maisnabeel83@gmail.com
8. Course Objectives
Course Objectives: student will be taught how to make carving for crown and root. This makes the student closely related to whole anatomy of tooth, numeration and classification also included.
9. Teaching and Learning Strategies

Strategy	1- lectures presentation using power point 2- weekly quizzes 3-demostration of carving and laboratory sessions 4-videos and manikin

10. Course Structure

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

1	2	Knowledge and practical application	Introduction	lectures using power point	short quizzes term exam final exam
2	2	Knowledge and practical application	Numbering Systems	lectures using power point	short quizzes term exam final exam
3	2	Knowledge and practical application	Anatomical Landmarks	lectures using power point	short quizzes term exam final exam
4	2	Knowledge and practical application	permanent maxillary central incisor	lectures using power point	short quizzes term exam final exam
5	2	Knowledge and practical application	permanent maxillary lateral incisor	lectures using power point	short quizzes term exam final exam
6	2	Knowledge and practical application	permanent mandibular incisors	lectures using power point	short quizzes term exam final exam
7	2	Knowledge and practical application	permanent canines	lectures using power point	short quizzes term exam final exam
8	2	Knowledge and practical application	permanent maxillary premolar	lectures using power point	short quizzes term exam final exam
9	2	Knowledge and practical application	permanent mandibular premolar	lectures using power point	short quizzes term exam final exam
10	2	Knowledge and practical application	permanent mandibular second premolar	lectures using power point	short quizzes term exam final exam
11	2	Knowledge and practical application	permanent maxillary molars	lectures using power point	short quizzes term exam final exam
13	2	Knowledge and practical application	permanent mandibular molars	lectures using power point	short quizzes term exam final exam
14	2	Knowledge and practical application	permanent mandibular second molar	lectures using power point	short quizzes term exam final exam
15	2	Knowledge and practical application	tooth development	lectures using power point	short quizzes term exam final exam
15	2	Knowledge and practical application	pulp cavities	lectures using power point	short quizzes term exam final exam

	Laboratory sessions & *Clinical requirements*	hours
1	**i**ntroduction to dental anatomy and carving instruments	2
2	numbering system	2
3	practical demonstration of carving a cube (1cm*1cm*1cm)	2
4	introduction to anatomical landmarks on teeth models	2
5	description and carving of labial aspect of P.max right central incisor	2
6	description and carving of mesial aspect of P.max right central incisor	2
7	description and carving and finishing of incisal aspect of P.max right central incisor	2
8	practical training of carving of P.max right central incisor	2
9	practical exam of carving of P.max right central incisor	2
10	description and carving of labial and mesial aspect of P.max right canine	2
11	description and carving and finishing of incisal aspect of P.max right canine	2
12	practical training of carving of P.max right canine	2
13	practical exam of carving of P.max right canine	2
14	mid year practical examination of tooth carving	2
15	description and carving of buccal and mesial aspect of P.max right 1st premolar	2
16	description and carving and finishing of occlusal aspect of P.max right 1st premolar	2
17	practical training of carving of P.max right 1st premolar	2
18	practical exam of carving of P.max right 1st premolar	2
19	description and carving of buccal and mesial aspect of P.mand. right 1st premolar	2
20	description and carving and finishing of occlusal aspect of P.mand. right 1st premolar	2
21	practical training of carving of P.mand. right 1st premolar	2
22	practical exam of carving of P.mand. right 1st premolar	2
23	description and carving of buccal and mesial aspect of P.max right 1st molar	2
24	description and carving and finishing of occlusal aspect of P.max right 1st molar	2
25	practical training of carving of P.max right 1st molar	2
26	practical exam of carving of P.max right 1st molar	2
27	description and carving of buccal and mesial aspect of P.mand right 1st molar	2
28	description and carving and finishing of occlusal	

	aspect of P.mand right 1st molar / practical training of carving of P.mand. right 1st molar	
29	practical exam of carving of P.man right 1st molar	2
30	final oral and practical examination of tooth carving	2

11. Course Evaluation	
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	1.Wheeler's Dental Anatomy, Physiology, and Occlusion By: Stanley J Nelson & Major M. Ash 2-Wheeler's Atlas of Tooth Form By Ma M. Ash
Main references (sources)	1-Dental Anatomy, Its Relevance to Dentistry By: Julian B. Woelfel & Rickne C. Scheid 2-Woelfel's Dental Anatomy By: Rickne C. Scheid & Gabriela Weiss
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

Course Description Form

1. Course Name:
Oral histology and embryology
2. Course Code:
DEN203
3. Semester / Year:
2023/2024
4. Description Preparation Date:
7_March_2024
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours theory/60 hours laboratory
7. Course administrator's name (mention all, if more than one name)
Name: Abeer Ahmed Yahya Email: Abeer.A.Yahya@ibinsina.edu.iq
8. Course Objectives

Course Objectives	1. Introducing an oral histology in general, as it is one of the most important subjects tha student will continue to need for the next four years. 2. Introducing the terms that will be used in explaining the course so that the student understand them correctly 3. Understanding the importance of the surgical and non surgical implementations of histology
9. Teaching and Learning Strategies	
Strategy	➢ Lecture presentation using Microsoft PowerPoint ➢ Seminars ➢ Laboratory sessions

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Knowledge practical application	Embryogenesis: first week,ovulation, fertilization and implantation	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
2	2	Knowledge practical application	2nd week,Bilaminar germ layer	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
3	2	Knowledge practical application	3rd week trilaminar germ layer: gastrulation and neurulation	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
4	2	Knowledge practical application	(Development of Head and neck(pharyngeal arch,pouch & cleft	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
5	2	Knowledge practical application	Development of face and anomalies	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
6	2	Knowledge practical application	Development of tongue and anomalies	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
7	2	Knowledge practical application	Development of palate and anomalies	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
8	2	Knowledge practical application	Slide preparation	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
9	2	Knowledge practical application	Tooth development and developme disturbances of teeth	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
10	2	Knowledge practical application	Dentinogenesis and dentin structure	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
11	2	Knowledge practical application	Amelogenesis, Enamel structures	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
12	2	Knowledge practical application	Clinical consideration for dentin and ename	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam

13	2	Knowledge practical application	Dental Pulp	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
14	2	Knowledge practical application	Cementum and clinical consideration	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
15	2	Knowledge practical application	Root formation& Cementogenesis	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
16	2	Knowledge practical application	Periodontal ligaments	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
17	2	Knowledge practical application	Principles fiber of pdl and gingival fiber	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
18	2	Knowledge practical application	Alveolar bone	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
19	2	Knowledge practical application	Bone formation and resorption	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
20	2	Knowledge practical application	Proteins involve in mineralization of bone and dentin	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
21	2	Knowledge practical application	Oral mucosa and their types	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
22	2	Knowledge practical application	Gingiva and dentogingival junctior	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
23	2	Knowledge practical application	Eruption of teeth	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
24	2	Knowledge practical application	Shedding of teeth	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
25	2	Knowledge practical application	Salivary gland	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
26	2	Knowledge practical application	Salivary proteins	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam

27	2	Knowledge practical application	TMJ	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
28	2	Knowledge practical application	Maxillary sinus	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
29	2	Knowledge practical application	Histochemistry	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam
30	2	Knowledge practical application	Age changes of soft and hard tissue	In person education lecture using data show (power point) software	Short quizzes Term exam Final exam

Week	Laboratory sessions	Hours
1.	Embryogenesis: first week,ovulation, fertilization and implantation	2
2.	2nd week,Bilaminar germ layer	2
3.	3rd week trilaminar germ layer: gastrulation and neurulation	2
4.	(Development of Head and and neck(pharyngeal arch,pouch & cleft	2
5.	Development of face and anomalies	2
6.	Development of tongue and anomalies	2
7.	Development of palate and anomalies	2
8.	Slide preparation	2
9.	Tooth development and developmental disturbances of teeth	2
10.	Dentinogenesis and dentin structure	2
11.	Amelogenesis, Enamel structures	2
12.	Clinical consideration for dentin and enamel	2
13.	Dental Pulp	2
14.	Cementum and clinical consideration	2
15.	Root formation& Cementogenesis	2
16.	Periodontal ligaments	2
17.	Principles fiber of pdl and gingival fibers	2
18.	Alveolar bone	2
19.	Bone formation and resorption	2
20.	Proteins involve in mineralization of bone and dentin	2
21.	Oral mucosa and their types	2
22.	Gingiva and dentogingival junction	2
23.	Eruption of teeth	2
24.	Shedding of teeth	2
25.	Salivary gland	2
26.	Salivary proteins	2
27.	TMJ	2

28.	Maxillary sinus	2
29.	Histochemistry	2
30.	Age changes of soft and hard tissue	2

11. Course Eval2uation

10 marks 1st semester (5 theory/ 5 laboratory)
10 marks 2nd semester (5 theory/ 5 laboratory)
20 marks Mid examination
60 marks Final examination

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	➢ Essentials of ORAL HISTOLOGY and EMBRYOLOGY (Fourth Edition) ➢ ATLAS OF ORAL HISTOLOGY (Sec Edition)
Main references (sources)	➢ Oral Anatomy, Histology and Embryology (Fifth Edition). ➢ ORBAN'S ORAL HISTOLOGY AND EMBRYOLOGY (FIFTEENTH EDITION)
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	

Course Description Form

1. Course Name:
Human anatomy
2. Course Code:
DEN201
3. Semester / Year:
2023-2024
4. Description Preparation Date:
6/3/2024
5. Available Attendance Forms:
weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours theory – 60 hours practical
7. Course administrator's name (mention all, if more than one name)
Name: Haydar Munir Salih Email: Haydar.munir.alnamir@gau.ed.iq
8. Course Objectives

Course Objectives	• Providing students with a solid scientific background about human anatomy • In the fields of applied sciences • Study of anatomy, organs and their function in the human body • Give a comprehensive overview of scientific references.
9. Teaching and Learning Strategies	
Strategy	A- Cognitive objectives B- The skills objectives of the course

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	1	Knowledge and application	Scalp	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
2	1	Knowledge application	The orbital region	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
3	1	Knowledge application	The Nasal region	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
4	1	Knowledge application	Mandibular nerve	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
5	1	Knowledge application	Face	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
6	1	Knowledge application	Oral cavity	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
7	1	Knowledge application	Tongue	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
8	1	Knowledge application	Temporal region	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
9	1	Knowledge application	Parotid gland	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
10	1	Knowledge application	The Pterygopalatine fossa	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
11	1	Knowledge application	Temporomandibular joint	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam

12	1	Knowledge application	the neck	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
13	1	Knowledge application	Triangles of the neck	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
14	1	Knowledge application	Submandib ular region	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
15	1	Knowledge application	Root of the neck	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
16	1	Knowledge application	Arteries of the neck	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
17	1	Knowledge application	Brain	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
18	1	Knowledge application	Cranial nerves	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
19	1	Knowledge application	Pharynx	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
20	1	Knowledge application	Larynx	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam

11.Course Evaluation

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

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Snell RS. Clinical Anatomy by Regions. 9th edition. Philadelphia, PA: Lippincott

	Williams & Wilkins. 2012
Main references (sources)	Snell RS. Clinical Anatomy by Regions. 9th edition. . Philadelphia, PA: Lippincott Williams & Wilkins. 2012
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

No.	Laboratory sessions *s*	Hours
1	Anatomy of scalp	2
2	Anatomy of face part 1	2
3	Anatomy of face part 2	2
4	Anatomy of parotid region	2
5	Temporal, infratemporal fossa	2
6	muscles of mastication	2
7	Mandibular nerve	2
8	Maxillary artery	2
9	Pterygopalatine fossa	2
10	Maxillary nerve	2
11	Nasal cavity and paranasal sinuses	2
12	Tempromandibular joint (TMJ)	2
13	Orbital region and Muscles of the eye	2

14	Ophthalmic nerve, artery and vein	2
15	anatomy of eyeball	2
16	Anatomy of mouth(The Lips ,oral Cavity,Tongue)	2
17	The Palate	2
18	Superficial anatomy of neck	2
19	Triangles of neck	2
20	Arteries of head and neck (internal carotid artery)	2
21	External carotid artery	2
22	Subclavian artery	2
23	Veins of the Head and Neck (internal jugular vein, subclavian vein, and venus sinuses)	2
24	Anatomy of brain	2
25	Submandibular region	2
26	Anatomy of pharynx	2
27	Lymph drainage of head and neck	2
28	Anatomy of larynx	2

29	Root of neck	2
30	Cranial nerves	2

Course Description Form

1. Course Name:	
Prosthodontics	
2. Course Code:	
DEN206	
3. Semester / Year:	
2023/2024	
4. Description Preparation Date:	
6-Mar-2024	
5. Available Attendance Forms:	
Weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30hrs Theory - 120hrs Laboratory	
7. Course administrator's name (mention all, if more than one name)	
Name: Mustafa Sameer Mahmood Email: Mustafa.sameer@gau.edu.iq	
8. Course Objectives	
Course Objectives	• **Introducing the prosthodontics in general, as it is one of the most important subjects that the student will continue to study for the next four years.** • **Introducing the terms that will be used in explaining the course so that the student can understand them correctly.** • **Practical laboratory steps for making the complete denture and practical training within the laboratories on the use and adaptation of the materials used in manufacturing the denture.**
9. Teaching and Learning Strategies	
Strategy	• Providing the necessary information to deal with the materials involved in prosthodontics and the manufacture of complete dentures in particular. • Make the student knowledgeable and able to master all the laboratory steps for making the complete denture. • Description and use of the tools, equipment, and materials related to making the dentures.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	1	**Knowledge and practical application**	**Introduction**	Theoretical and practical	Short quizzes Term exam Final exam
2	1	**Knowledge and practical application**	**Anatomical landmarks**	Theoretical and practical	Short quizzes Term exam Final exam
3	1	**Knowledge and practical application**	**Anatomical landmarks**	Theoretical and practical	Short quizzes Term exam Final exam
4	1	**Knowledge and practical application**	**Complete Denture Impression**	Theoretical and practical	Short quizzes Term exam Final exam
5	1	**Knowledge and practical application**	**Complete Denture Impression**	Theoretical and practical	Short quizzes Term exam Final exam
6	1	**Knowledge and practical application**	**Complete Denture Impression**	Theoretical and practical	Short quizzes Term exam Final exam
7	1	**Knowledge and practical application**	**Record Base**	Theoretical and practical	Short quizzes Term exam Final exam
8	1	**Knowledge and practical application**	**Occlusion Rims**	Theoretical and practical	Short quizzes Term exam Final exam
9	1	**Knowledge and practical application**	**Anatomy And Physiology Of Temporomandibular Joint**	Theoretical and practical	Short quizzes Term exam Final exam
10	1	**Knowledge and practical application**	**Anatomy And Physiology Of Temporomandibular**	Theoretical and practical	Short quizzes Term exam Final exam

			Joint		
11	1	**Knowledge and practical application**	**Maxillomandibular relation**	Theoretical and practical	Short quizzes Term exam Final exam
12	1	**Knowledge and practical application**	**Methods Of Recording Vertical Relation**	Theoretical and practical	Short quizzes Term exam Final exam
13	1	**Knowledge and practical application**	**Horizontal Jaw Relation**	Theoretical and practical	Short quizzes Term exam Final exam
14	1	**Knowledge and practical application**	**Dental Articulators** (Classification & Digital computerized articulator programming)	Theoretical and practical	Short quizzes Term exam Final exam
15	1	**Knowledge and practical application**	**Face – Bow**	Theoretical and practical	Short quizzes Term exam Final exam
16	1	**Knowledge and practical application**	**Mounting**	Theoretical and practical	Short quizzes Term exam Final exam
17	1	**Knowledge and practical application**	**Selection Of Artificial Teeth**	Theoretical and practical	Short quizzes Term exam Final exam
18	1	**Knowledge and practical application**	**Selection Of Posterior Teeth**	Theoretical and practical	Short quizzes Term exam Final exam
19	1	**Knowledge and practical application**	**Arrangement Of Artificial Teeth**	Theoretical and practical	Short quizzes Term exam Final exam
20	1	**Knowledge and practical application**	**Arrangement Of Posterior Teeth**	Theoretical and practical	Short quizzes Term exam Final exam
21	1	**Knowledge and practical application**	**Waxing And Carving**	Theoretical and practical	Short quizzes Term exam Final exam

22	1	**Knowledge and practical application**	**Complete Denture Occlusion**	Theoretical and practical	Short quizzes Term exam Final exam
23	1	**Knowledge and practical application**	**Complete Denture Occlusion**	Theoretical and practical	Short quizzes Term exam Final exam
24	1	**Knowledge and practical application**	**Processing Of The Denture (Flasking)**	Theoretical and practical	Short quizzes Term exam Final exam
25	1	**Knowledge and practical application**	**Occlusal Correction**	Theoretical and practical	Short quizzes Term exam Final exam
26	1	**Knowledge and practical application**	**Finishing And Polishing Of Complete Denture**	Theoretical and practical	Short quizzes Term exam Final exam
27	1	**Knowledge and practical application**	**Repair Of Complete Denture**	Theoretical and practical	Short quizzes Term exam Final exam
28	1	**Knowledge and practical application**	**Repair Of Complete Denture**	Theoretical and practical	Short quizzes Term exam Final exam
29	1	**Knowledge and practical application**	**Relining And Rebasing**	Theoretical and practical	Short quizzes Term exam Final exam
30	1	**Knowledge and practical application**	**Relining And Rebasing**	Theoretical and practical	Short quizzes Term exam Final exam

11. Course Evaluation

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

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1. Syllabus of complete denture (text book of complete denture) 2. Dental laboratory technology for removable prosthodontics
Main references (sources)	

Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	

No.	Title of lab.	Hours
1-	Clinical and laboratory steps of complete denture construction	4
2-	Taking primary impression on metal mold by impression compound and beading and boxing and pouring by dental plaster	4
3-	Pouring on rubber mold (upper and lower primary cast)	4
4-	Description of anatomical landmarks (maxillary and mandibular arch)	4
5-	Demonstration of making upper and lower special tray by cold cure Acrylic	4
6-	Finishing and polishing of special tray and evaluation	4
7-	Demonstration of taking final impression and construction of master cast	4
8-	Evaluation of record base construction, finishing and polishing	4
9-	Bite rims construction (upper and lower arch)	4
10-	Demonstration of face bow and fox bite and description of types of jaw Relation	4
11-	Description about the methods of recording vertical jaw relation	4
12-	Description about the methods of recording horizontal jaw relation	4
13-	Demonstration about the types of articulators, parts, its uses and action	4
14-	Mounting of upper and lower casts on articulators	4
15-	Mounting of upper and lower casts on articulators (continue) and evaluation of the student work	4
16-	Description the methods of selection of anterior and posterior teeth for complete denture	4
17-	Demonstration about arrangement of upper and lower anterior teeth	4
18-	Arrangement of upper and lower anterior teeth (continue) and evaluation of the student work	4
19-	Demonstration about arrangement of upper and lower posterior teeth	4

20-	**Arrangement of upper and lower posterior teeth(continue).**	**4**
21-	**Arrangement of posterior teeth and carving of posterior palatal seal and evaluation of the student work**	**4**
22-	**Demonstration about carving and waxing of upper complete denture.**	**4**
23-	**Carving and waxing of lower complete denture (continue) and evaluation of the student work**	**4**
24-	**Flasking and investment of the denture**	**4**
25-	**Wax elimination, packing and curing of heat cure acrylic**	**4**
26-	**Deflasking ,finishing and polishing of upper complete denture**	**4**
27-	**Deflasking ,finishing and polishing of lower complete denture (continue)**	**4**
28-	**Demonstration of selective grinding**	**4**
29-	**Repair of fracture denture**	**4**
30-	**Repair of missing tooth**	**4**

Course Description Form

1. Course Name:
Physiology
2. Course Code:
DEN207
3. Semester / Year:
2023–2024
4. Description Preparation Date:
6/3/2024
5. Available Attendance Forms:
weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours theory – 60 hours practical
7. Course administrator's name (mention all, if more than one name)
Name: Atheer Khdyair Hamed Email: atheerspace@yahoo.com
8. Course Objectives

Course Objectives	• Providing students with a solid scientific background about physiology • In the fields of applied sciences • Study of systems, organs and their function in the human body • Give a comprehensive overview of scientific references.
9. Teaching and Learning Strategies	
Strategy	A- Cognitive objectives B- The skills objectives of the course

10. Course Structure :**theory**					
Week	**Hours**	**Required Learning Outcomes**	**Unit or subject name**	**Learning method**	**Evaluation method**
1	2	Knowledge and application	Introduction	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
2	2	Knowledge application	Body fluid, Edema	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
3	2	Knowledge application	Homeostasis and Transport across cell membrane	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
4	2	Knowledge application	ORAL CAVITY and Salivary Glands	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
5	2	Knowledge application	Salivary functions ar Regulation of Saliva Secretion	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
6	2	Knowledge application	BLOOD, Red blood cells	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
7	2	Knowledge application	White Blood Cells	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
8	2	Knowledge application	Hemoglobin	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
9	2	Knowledge application	Blood groups	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
10	2	Knowledge application	Hemostasis and bloo coagulation	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
11	2	Knowledge application	Cardiovascular syste Blood vessels	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
12	2	Knowledge application	Cardiovascular syste Blood pressure	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
13	2	Knowledge application	Cardiovascular syste	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
14	2	Knowledge application	Respiratory system	in person educa lectures using	Short quizzes Term exam Final exam

				show (PowerPo software	
15	2	Knowledge application	Respiratory system: Lung volumes and capacities	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
16	2	Knowledge application	Half-year Break	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
17	2	Knowledge application	SPECIAL SENSATI	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
18	2	Knowledge application	Temperature of the Body	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
19	2	Knowledge application	Urinary system	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
20	2	Knowledge application	Urinary system: Urin formation	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
21	2	Knowledge application	Endocrine System	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
22	2	Knowledge application	Major Endocrine Glands	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
23	2	Knowledge application	Digestive system	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
24	2	Knowledge application	Digestive system	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
25	2	Knowledge application	Muscular system: Muscle structure	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
26	2	Knowledge application	Muscular system: To , contraction	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
27	2	Knowledge application	Nervous System: Ne impulse, synapses	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
28	2	Knowledge application	Nervous System	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam
29	2	Knowledge application	Reproductive system Aging & reproductiv system	in person educa lectures using	Short quizzes Term exam Final exam

				show (PowerPo software	
30	2	Knowledge application	Aviation and Deep physiology, Nutritio and metabolism	in person educa lectures using show (PowerPo software	Short quizzes Term exam Final exam

Practical

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Knowledge and application	Microscope	Data show Practical application	Short quiz and seminar
2	2	Knowledge and application	Collection of Blood Samples	Data show Practical application	Short quiz and seminar
3	2	Knowledge and application	Blood Smears	Data show Practical application	Short quiz and seminar
4	2	Knowledge and application	Functions of Saliva & Taste Sensation	Data show Practical application	Short quiz and seminar
5	2	Knowledge and application	Stimulation and collection of salivary secretion	Data show Practical application	Short quiz and seminar
6	2	Knowledge and application	Separation of blood samples	Data show Practical application	Short quiz and seminar
7	2	Knowledge and application	Differential WBCs	Data show Practical application	Short quiz and seminar
8	2	Knowledge and application	Total Count of WBCs	Data show Practical application	Short quiz and seminar
9	2	Knowledge and application	Total Count of RBCs	Data show Practical application	Short quiz and seminar
10	2	Knowledge and application	Blood groups	Data show Practical application	Short quiz and seminar

11	2	Knowledge and application	Estimation of Hemoglobin	Data show Practical application	Short quiz and seminar
12	2	Knowledge and application	Bleeding and clotting time	Data show Practical application	Short quiz and seminar
13	2	Knowledge and application	Self-Monitoring of blood glucose test	Data show Practical application	Short quiz and seminar
14	2	Knowledge and application	Measurement of blood pressure &pulse rate	Data show Practical application	Short quiz and seminar
15	2	Knowledge and application	Effect of exercise on blood pressure and respiratory rate	Data show Practical application	Short quiz and seminar
16	2	Knowledge and application	Mid Exam	Data show Practical application	Short quiz and seminar
17	2	Knowledge and application	Physiology of vision test	Data show Practical application	Short quiz and seminar
18	2	Knowledge and application	Physiology of hearing test	Data show Practical application	Short quiz and seminar
19	2	Knowledge and application	Physiology of Smell sensation	Data show Practical application	Short quiz and seminar
20	2	Knowledge and application	Measurement of body temperature	Data show Practical application	Short quiz and seminar
21	2	Knowledge and application	Thyroid function (Body mass index)	Data show Practical application	Short quiz and seminar
22	2	Knowledge and application	Thyroid function (Body mass index)	Data show Practical application	Short quiz and seminar

23	2	Knowledge and application	Resuscitation &Artificial respiration	Data show Practical application	Short quiz and seminar
24	2	Knowledge and application	Resuscitation &Artificial respiration	Data show Practical application	Short quiz and seminar
25	2	Knowledge and application	Physiology of Skeletal muscles	Data show Practical application	Short quiz and seminar
26	2	Knowledge and application	Physiology of Skeletal muscles	Data show Practical application	Short quiz and seminar
27	2	Knowledge and application	Physiology of Skeletal muscles	Data show Practical application	Short quiz and seminar
28	2	Knowledge and application	Examination of reflexes (Motor Function)	Data show Practical application	Short quiz and seminar
29	2	Knowledge and application	Seminars and examinations	Data show Practical application	Short quiz and seminar
30	2	Knowledge and application	Seminars and examinations	Data show Practical application	Short quiz and seminar

11. Course Evaluation

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

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	**Guyton and Hall Medical Physiology 12th edition**
Main references (sources)	**Guyton and Hall Medical Physiology 12th edition**
Recommended books and references (scientific journals, reports…)	**Essentials of Physiology for Dental student**
Electronic References, Websites	

Course Description Form

1. Course Name:
Biochemistry
2. Course Code:
DEN 202
3. Semester / Year:
2023_2024
4. Description Preparation Date:
6/3/2024
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
60hrs Theory _60hrs Laboratory
7. Course administrator's name (mention all, if more than one name)
Name: Jamal Abd Al jabbar Email: jamal.att@gau.edu.iq
8. Course Objectives

Course Objectives	**1- Providing students with a solid scientific background about biochemistry in general** **2- Developing the student's ability to distinguish between types of biological variables, whether quantitative or qualitative, a how to benefit from this knowledge in the medical fields.** **3- In the fields of applied sciences** **4- Study of amino acids and proteins and their metabolism in the human body** **5- Study of vitamins in the human body and their benefits** **6- Give a comprehensive overview of fats and th metabolism**

9. Teaching and Learning Strategies	
Strategy	**A- Cognitive objectives** A1 - Knowing the meaning of biochemistry and its importance in applied calculations, as well as its importance in human diseases A2 - A study of enzymes, hormones, and electrolytes and their medical utility in diagnosing disease A3 - Identifying the substances present in the human body, such as proteins, enzymes, fats, and others A4 - Study of the metabolic processes that occur in the human body, such as proteins, enzymes, fats, etc

	B - The skills objectives of the course B1 - Make the student familiar with the basics of biochemistry in general B2 - Providing important information to the student about the metabolic processes within the human body B3 - Providing important information to the student in terms of medical chemical processes and the changes that occur, supported by examples

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Knowledge about its classified according to the types of reactions and the kinetic properties	Enzymes: Definition ,Terminology , and Classification	in person education lectures using data show (PowerPoint) .software	• Short quizzes • Term exam • Final exam
2	2	Enzymes are catalysts work within the mild conditions of temperature , pH, and pressure of the cells	Mechanism of enzyme action	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
3	2	The enzymes in clinical diagnosis are very important to be studied in order	Clinical significance of enzyme assays	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
4	2	Vitamin is very important to be studied in order to have perfect knowledge about its properties, asbsorption and clinical .significance	Vitamins, definition, classification	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
5	2	Studied in order to have perfect knowledge about digestion and absorption of carbohydrates, lipids , . proteins	Digestion and absorption of carbohydrates, lipids ,and proteins	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
6	2	Studied in order to have perfect knowledge about the classification of carbohydrates	Chemistry of carbohydrates	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
7	2	Studied in order to have perfect knowledge about metabolism of	Metabolism of Carbohydrates: part 1	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam

		carbohydrates : part 1 glycolysis			
8	*2*	Studied in order to have perfect knowledge about metabolism of carbohydrates , gluconeogenesis	Metabolism of Carbohydrates :part 2	in person education lectures using data show (PowerPoint) softwar*e*	• Short quizzes • Term exam • Final exam
9	*2*	Studied in order to have perfect knowledge about the regulation of blood glucose is the result of interplay of hormones	Carbohydrates metabolism regulation	in person education lectures using data show (PowerPoint) softwar*e*	• Short quizzes • Term exam • Final exam
10	*2*	Proteins are composed of high number of simple molecular named α – Amino acid which is linked together by peptide bond	Chemistry of Proteins and amino acids	in person education lectures using data show (PowerPoint) softwar*e*	• Short quizzes • Term exam • Final exam
11	*2*	Studied the metabolism of nitrogen-containing compounds ,it in many processes, most notably nitrogen excretion	Metabolism of Proteins and amino acids	in person education lectures using data show (PowerPoint) softwar*e*	• Short quizzes • Term exam • Final exam
12	*2*	Studied in order to have perfect knowledge about how the body uses of amino acids in many processes	Metabolism of Protein and amino acids regulation	in person education lectures using data show (PowerPoint) softwar*e*	• Short quizzes • Term exam • Final exam
13	*2*	Studied in order to have perfect knowledge about the acid inherited disorder in human body	Metabolism of Protein and amino acid inherited disorder	in person education lectures using data show (PowerPoint) softwar*e*	• Short quizzes • Term exam • Final exam
14	*2*	General review and exam	Exam	in person education lectures using data show (PowerPoint) softwar*e*	• Short quizzes • Term exam • Final exam
15	*2*	Lipid is very important to be studied in order to have perfect knowledge about the definition, classification	Lipid :definition, classification	in person education lectures using data show (PowerPoint) softwar*e*	• Short quizzes • Term exam • Final exam
16	*2*	Metabolism of lipid is studied in order to have perfect knowledge	Metabolism of Lipid: oxidation of Fatty Acids	in person education lectures using data show	• Short quizzes • Term exam • Final exam

		about the synthesis and degradation of fatty acids		(PowerPoint) software	
17	*2*	Lipid is very important to be studied in order to have perfect knowledge about β-oxidation	Biosynthesis of Fatty Acids	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
18	*2*	Integration of metabolism of carbohydrates, lipid ,and proteins	Integration of metabolism of carbohydrates, lipid ,and Protein	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
19	*2*	Studied in order to have perfect knowledge about Metabolism of Purines and pyrimidines	Metabolism of Purines and pyrimidines	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
20	*2*	Studied in order to have perfect knowledge about Metabolism of Purines and pyrimidines disorder	Metabolism of Purines and pyrimidines disorder	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
21	*2*	Studied in order to have perfect knowledge about Nucleic Acids and Protein synthesis	Nucleic Acids Definition and Protein synthesis	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
22	*2*	Hormone is very important to be studied in order to have perfect knowledge about the definition, classification	Hormone definition, classification	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
23	*2*	Hormone disorder is very important to be studied in order to have perfect knowledge about the definition	Hormone disorder	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
24	*2*	Studied in order to have perfect knowledge about disturbance of acid – base balance	Acid-base balance	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
25	*2*	Studied in order to have perfect knowledge about its trace elements characterizes	Trace elements disorder	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam

26	*2*	Studied Salivary secretion(saliva), Pancreatic juice	Salivary secretion(saliva), Pancreatic juice	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
27	*2*	Electrolytes is very important to be studied in order to have perfect knowledge about definition	electrolytes	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
28	*2*	Studied liver function tests about the definition, classification	Liver Function Tests	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
29	*2*	Studied kidney function tests about the definition, classification	Kidney Function Tests	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam
30	*2* *60*	General review and exam	Exam	in person education lectures using data show (PowerPoint) software	• Short quizzes • Term exam • Final exam

11.Course Evaluation

- Exams based on the CUSE system, as well as quarterly exams
- Preparing brief reports by the student and presenting them in the form of a seminar Activity and participation within the lecture
- Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1-David L. Nelson; Michael M. Cox . (2017) .Lehninger .Principles of Biochemistry. Seventh Edition| ©2017 New Edition Available . 2-John Wiley & Sons Ltd (2018). Peter Rae. Clinical Biochemistry Lecture Notes-John Wiley & Sons Ltd (2018)
Main references (sources)	-Principles of Medical Biochemistry, FOURTH EDITION, G. Meisenberg, W. H. Simmons, Elsevier, 2017
Recommended books and references (scientific journals, reports...)	Textbook of Medical Biochemistry EIGHTH EDITION, Brig M.N. Chatterjea, Jaypee . Brothers Medical Publishers (P) Ltd, 2012
Electronic References, Websites	Chemistry webs, journals, conferences that depended in the high ranked international universities
13. Course development plan	Complete titles of scientific topics that link the science of biochemistry and special metabolic processes Seminars for students on such topics

No	*Lab Subject*	*hours*
1	Lab safety	2
2	(Sample collection(part1	2
3	Sample collection (part2	2
4	Spectrophotometer	2
5	Standard curve	2
6	Blood glucose+ HbA1c	2
7	Total Protein	2
8	Albumin+ Globulin	2
9	Troponin	2
10	Liver function test (Bilirubin	2
11	Alkaline Phosphatase	2
12	(Transaminases (GPT&GOT	2
13	(Lipid in blood (cholesterol & lipoprotein	2
14	Triglyceride	2
15	(Kidney function Test (urea	2
16	Serum creatinine &creatinine clearness	2
17	General Urine Analysis(part1	2
18	General Urine Analysis(part2	2
19	Uric acid	2
20	Amylase in serum+ saliva	2
21	creatine phosphokinase	2
22	lactate Dehydrogenase	2
23	serum calcium	2
24	serum phosphorus	2
25	serum Na , serum K	2
26	serum Iron	2
27	Vitamin D	2
28	Vitamin C	2
29	Acid phosphatase	2

30	General review and exam	2 /60

Course Description Form

1. Course Name:	
Dental Materials	
2. Course Code:	
DEN205	
3. Semester / Year:	
2023/2024	
4. Description Preparation Date:	
6-Mar-2024	
5. Available Attendance Forms:	
Weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30hrs Theory - 60hrs Laboratory	
7. Course administrator's name (mention all, if more than one name)	
Name: Mustafa Sameer Mahmood Email: Mustafa.sameer@gau.edu.iq	
8. Course Objectives	
Course Objectives	• **Learn the physical, chemical and mechanical properties of materials used in dentistry.** • **Learn the skills necessary to properly handle and adapt materials used in dentistry.**
9. Teaching and Learning Strategies	
Strategy	• Introducing the student to the various types of materials involved in dentistry • Giving the necessary information to deal with these materials • Giving instructions and following up on the process of using materials, including mixing and following up on the reactions that the material undergoes to reach the end of the reaction
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	**Knowledge and practical application**	**Introduction and physical properties of dental material**	Theoretical and practical	Short quizzes Term exam Final exam
2	1	**Knowledge and practical application**	**Mechanical properties**	Theoretical and practical	Short quizzes Term exam Final exam
3	1	**Knowledge and practical application**	**Gypsum materials**	Theoretical and practical	Short quizzes Term exam Final exam
4	1	**Knowledge and practical application**	**Gypsum materials**	Theoretical and practical	Short quizzes Term exam Final exam
5	1	**Knowledge and practical application**	**Impression materials**	Theoretical and practical	Short quizzes Term exam Final exam
6	1	**Knowledge and practical application**	**Impression materials**	Theoretical and practical	Short quizzes Term exam Final exam
7	1	**Knowledge and practical application**	**Impression materials**	Theoretical and practical	Short quizzes Term exam Final exam
8	1	**Knowledge and practical application**	**Impression materials**	Theoretical and practical	Short quizzes Term exam Final exam
9	1	**Knowledge and practical application**	**Impression materials**	Theoretical and practical	Short quizzes Term exam Final exam
10	1	**Knowledge and practical application**	**Waxes**	Theoretical and practical	Short quizzes Term exam Final exam
11	1	**Knowledge and practical application**	**Waxes**	Theoretical and practical	Short quizzes Term exam Final exam
12	1	**Knowledge and practical application**	**Polymers**	Theoretical and practical	Short quizzes Term exam Final exam
13	1	**Knowledge and practical application**	**Polymers**	Theoretical and practical	Short quizzes Term exam Final exam
14	1	**Knowledge and practical application**	**Investment materials**	Theoretical and practical	Short quizzes Term exam Final exam

15	1	**Knowledge and practical application**	**Cement materials**	Theoretical and practical	Short quizzes Term exam Final exam
16	1	**Knowledge and practical application**	**Temporary filling**	Theoretical and practical	Short quizzes Term exam Final exam
17	1	**Knowledge and practical application**	**Metal and metal alloy**	Theoretical and practical	Short quizzes Term exam Final exam
18	1	**Knowledge and practical application**	**Metal and metal alloy**	Theoretical and practical	Short quizzes Term exam Final exam
19	1	**Knowledge and practical application**	**Metal and metal alloy**	Theoretical and practical	Short quizzes Term exam Final exam
20	1	**Knowledge and practical application**	**Metal and metal alloy**	Theoretical and practical	Short quizzes Term exam Final exam
21	1	**Knowledge and practical application**	**Filling materials**	Theoretical and practical	Short quizzes Term exam Final exam
22	1	**Knowledge and practical application**	**Filling materials**	Theoretical and practical	Short quizzes Term exam Final exam
23	1	**Knowledge and practical application**	**Filling materials**	Theoretical and practical	Short quizzes Term exam Final exam
24	1	**Knowledge and practical application**	**Filling materials**	Theoretical and practical	Short quizzes Term exam Final exam
25	1	**Knowledge and practical application**	**Preventive materials**	Theoretical and practical	Short quizzes Term exam Final exam
26	1	**Knowledge and practical application**	**Root canal filling materials (obturating materials)**	Theoretical and practical	Short quizzes Term exam Final exam
27	1	**Knowledge and practical application**	**Finishing and polishing material**	Theoretical and practical	Short quizzes Term exam Final exam
28	1	**Knowledge and practical application**	**Relining material**	Theoretical and practical	Short quizzes Term exam Final exam
29	1	**Knowledge and practical application**	**Implant materials**	Theoretical and practical	Short quizzes Term exam Final exam
30	1	**Knowledge and practical application**	**Maxillofacial materials**	Theoretical and practical	Short quizzes Term exam Final exam

11. Course Evaluation	
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	• Phillips applied dental material • Restorative dental material • Dental material their selection and use
Main references (sources)	
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	

No.	Title of lab.	Hours
1-	**Introduction and physical properties of dental material**	2
2-	**Mechanical properties(stress strain curve)**	2
3-	**Showing different types of gypsum materials (plaster ,stone)**	2
4-	**Steps of mixing plaster and demonstrate the steps of setting.**	2
5-	**Impression plaster , demonstrate the manipulation of impression compound .**	2
6-	**Zinc oxide impression material and agar impression \demonstrate the mixing of zinc oxide impression .**	2
7-	**Alginate impression (elastic impression) showing the trays used and the mixing of alginate and water according to manufacturer instructions.**	2
8-	**Poly sulphide ,condensation and addition silicon\mixing of heavy body and light body.**	2
9-	**Poly ether, hybrid impression , digital impression.**	2
10-	**Showing different types of wax(denture base plate ,denture casting wax and others)**	2
11-	**Demonstrate how to use wax material and its manipulation.**	2
12-	**Introduction to polymers.**	2

Course Description Form

Course Name:
Preclinical Operative Dentistry
Course Code: DEN30008
Semester / Year:
Annual
Description Preparation Date:
2024−2025
Available Attendance Forms:
weekly
Number of Credit Hours (Total) / Number of Units (Total)
30 theory+60 practice
Course administrator's name (mention all, if more than one name)
Name: dr. Abeer Email:
Course Objectives
(● **Be able to investigate all type of carious and treat them**. ● **Be able to diagnosis different type of lesions around teeth and jaw** ● Be able to protect the patients from more destructive lesion.
Teaching and Learning Strategies
1. Use PowerPoint lectures 2− Discussion sessions 3− Establishing workshops 4− Use the screen and the smart board to display the scientific material 5− Reports and projects 6− Oral discussions
Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1 theoretical + 2 Practical	Knowledge + practical application	Definition of operative dentistry	**Lecture & clinic**	Daily quiz and assessment of radiograph
	1 theoretical	Knowledge +	Definition of	**Lecture &**	Daily quiz and

2	+ 2 Practical	practical application	operative dentistry	**clinic**	assessment of radiograph
3	1 theoretical + 2 Practical	Knowledge + practical application	Instruments and general instrumentation of cavity preparation	**Lecture & clinic**	Daily quiz and assessment of radiograph
4	1 theoretical + 2 Practical	Knowledge + practical application	Instruments and general instrumentation of cavity preparation	**Lecture & clinic**	Daily quiz and assessment of radiograph
5	1 theoretical + 2 Practical	Knowledge + practical application	Sterilization of operative instruments	**Lecture & clinic**	Daily quiz and assessment of radiograph
6	1 theoretical + 2 Practical	Knowledge + practical application	Sterilization of operative instruments	**Lecture & clinic**	Daily quiz and assessment of radiograph
7	1 theoretical + 2 Practical	Knowledge + practical application	Amalgam cavity preparations for class I	**Lecture & clinic**	Daily quiz and assessment of radiograph
8	1 theoretical + 2 Practical	Knowledge + practical application	Amalgam cavity preparations for class I	**Lecture & clinic**	Daily quiz and assessment of radiograph
9	1 theoretical + 2 Practical	Knowledge + practical application	Amalgam cavity preparations for class II	**Lecture & clinic**	Daily quiz and assessment of radiograph
10	1 theoretical + 2 Practical	Knowledge + practical application	Amalgam cavity preparations for class II	**Lecture & clinic**	Daily quiz and assessment of radiograph
11	1 theoretical + 2 Practical	Knowledge + practical application	Amalgam cavity preparations for class II (MOD)	**Lecture & clinic**	Daily quiz and assessment of radiograph
12	1 theoretical + 2 Practical	Knowledge + practical application	Amalgam cavity preparations for class II (MOD)	**Lecture & clinic**	Daily quiz and assessment of radiograph
13	1 theoretical + 2 Practical	Knowledge + practical application	Amalgam cavity preparations for class III and class V	**Lecture & clinic**	Daily quiz and assessment of radiograph
14	1 theoretical + 2 Practical	Knowledge + practical application	Amalgam cavity preparations for class III and class V	Lecture & clinic	Daily quiz and assessment of radiograph
15	1 theoretical + 2 Practical	Knowledge + practical application	Cavity liners and cement bases (part 1)	Lecture & clinic	Daily quiz and assessment of radiograph
16	1 theoretical + 2 Practical	Knowledge + practical application	Cavity liners and cement bases (part 1)	Lecture & clinic	Daily quiz and assessment of radiograph
17	1 theoretical	Knowledge + pract	Cavity liners and cem	Lecture & clin	Daily quiz

	+ 2 Practical	application	bases (part 2)		assessment radiograph
18	1 theoretical + 2 Practical	Knowledge + pract application	Cavity liners and cem bases (part 2)	Lecture & clin	Daily quiz assessment radiograph
19	1 theoretical + 2 Practical	Knowledge + pract application	Dental amalgam all (material)	Lecture & clin	Daily quiz assessment radiograph
20	1 theoretical + 2 Practical	nowledge + practical application	Dental amalgam all (material)	Lecture & clin	Daily quiz assessment radiograph
21	1 theoretical + 2 Practical	nowledge + practical application	Complex amalg restoration	Lecture & clin	Daily quiz assessment radiograph
22	1 theoretical + 2 Practical	nowledge + practical application	Complex amalg restoration	Lecture & clin	Daily quiz assessment radiograph
23	1 theoretical + 2 Practical	nowledge + practical application	Failures in amalg restorations	Lecture & clin	Daily quiz assessment radiograph
24	1 theoretical + 2 Practical	nowledge + practical application	Failures in amalg restorations	Lecture & clin	Daily quiz assessment radiograph
25	1 theoretical + 2 Practical	nowledge + practical application	Tooth colo restorations (composit	Lecture & clin	Daily quiz assessment radiograph
26	1 theoretical + 2 Practical	nowledge + practical application	Tooth colo restorations (composit	Lecture & clin	Daily quiz assessment radiograph
27	1 theoretical + 2 Practical	nowledge + practical application	Cavity preparation anterior restorations	Lecture & clin	Daily quiz assessment radiograph
28	1 theoretical + 2 Practical	nowledge + practical application	Cavity preparation anterior restorations	Lecture & clin	Daily quiz assessment radiograph
29	1 theoretical + 2 Practical	nowledge + practical application	Resin material	Lecture & clin	Daily quiz assessment radiograph
30	1 theoretical + 2 Practical	nowledge + practical application	Resin material	Lecture & clin	Daily quiz assessment radiograph

Course Evaluation

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

Learning and Teaching Resources

Fundamentals of Operative Dentistry: a Contemporary Approach [Electronic Resource] by Thomas J. Hilton.	المراجع الرئيسية

Modern Operative Dentistry: Principles for Clinical Practice and historical texts like The American Text=book of Operative Dentistry.	المراجع الساندة
	ب و المراجع الاثرائية (الدوريات العلمية والخ....).
Google.com	المراجع الالكترونية و مواقع الانترنيت....

Lab number	Study unit title Preclinical Operative Dentistry	Hours
1	Introduction to operative dentistry, and to work in phantom lab. Demonstration about the rotary instrument, and how to cut geometrical cavities (circle, triangle, square, rectangle, and dove-tail), and leave students to work under supervision.	2
2	Demonstration of how to use phantom head, working positions for both student and phantom head, also demonstration cavity preparation on buccal pit of lower 1st molar and palatal pit of upper lateral incisor.	2
3	Demonstration of principles of amalgam cavity preparation for CL I on the occlusal surface of lower 2nd premolar on the board then do demonstration of cutting on the phantom head. Quiz about the principles of CL I amalgam cavity preparation.	2
4	Demonstration amalgam CL I cavity for lower 1st premolar and Leave students to work under supervision.	2
5	Demonstration amalgam CL I cavity for upper 1st molar (two separated cavities) on the phantom head and teaching the students how to work indirectly by using mirror. Leave students to work under supervision.	2
6	Demonstration amalgam cavity for the palatal extension in upper 1st molar (continue with last lab in distal occlusal cavity), and Demonstration on the hand instrument groups, and teach students to differentiate between them.	2
7	Practical assessment for the students in amalgam CL I cavity on lower 1st molar. Oral quiz on the hand instrument and their groups.	2
8	Demonstration amalgam CL II MO cavity for lower 1st premolar	2
9	Demonstration amalgam CL II MO cavity for upper 1st molar	2
10	Practical assessment for the students in amalgam CL II MO cavity on lower 1st molar. Quiz in amalgam CL II cavity lectures.	2
11	Demonstration amalgam CL II MOD cavity for lower 1st molar	2
12	Demonstration amalgam CL II MOD cavity for upper 2nd molar	2

13	Practical assessment for the students in cavity preparation of amalgam CL II MOD cavity on lower 2nd molar.	2
14	Demonstration amalgam CL V cavity for lower 2nd premolar, upper 1st molar and upper 2nd premolar.	2
15	Demonstration amalgam CL III cavity in distal side of upper canine.	2
16	Demonstration of the liner and base placement, their indication, advantage, and uses.	2
17	Supervised students in mixing and placing zinc phosphate cement in CL	2
18	Supervised students in mixing and placing zinc phosphate cement in CL II MO cavity of upper 1st molar and CL II MOD cavity of lower 2nd molar..	2
19	Practical assessment for the students in zinc phosphate mixing and placement in CL II MOD cavity on lower 1st molar.	2
20	Amalgam filling of CL I cavity of lower 1st premolar	2
21	Amalgam filling of CL II cavity of lower 2nd premolar.	2
22	Amalgam filling of CL II cavity of upper 1st molar.	2
23	Amalgam filling of CL II MOD cavity of upper 2nd molar.	2
24	Practical assessment on Amalgam filling of CL II MOD cavity of lower 1st molar.	2
25	Amalgam filling of CL V cavities of upper 1st molar and lower 2nd premolar.	2
26	Preparation of CL III composite cavity on upper central incisor with composite filling placement (light cure)	2
27	Preparation of CL III composite cavity on upper lateral incisor with composite filling placement (light cure	2
28	Preparation of CL V composite cavity on upper central incisor with composite filling placement (light cure).	2
29	Final practical assessment.	2
30	Finishing and evaluation of the practical work.	2
Total		60

Course Description Form

Course Name:
Medical ethics
Course Code: DEN30010
Semester / Year:2 semesters/3rd stage
Description Preparation Date:28/1/2025
Available Attendance Forms: weekly
Number of Credit Hours (Total) / Number of Units (Total): 30/30
Course administrator's name (mention all, if more than one name)
Name: Sara Yousif Email: Sara.yousif@gu.edu.iq
Course Objectives
To define the subject of professional ethics in general as one of the important subjects. Introduce the terms used to explain the course so that the student can understand them.....
Teaching and Learning Strategies
Knowledge Objectives 1- Giving the necessary information to students to deal with auditors and colleagues in the profession in accordance with professional ethics 2- Making the student familiar and able to master the ideal and legal way of dealing with patients

Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	Knowledge	professional ethics review \term of moral and ethical, obligation	Theory	Examination
1	1	Knowledge	Professional	Theory	Examination

			ethics review\ professionalism		
1	1	Knowledge	Professional ethics review\ Best interests	Theory	Examination
1	1	Knowledge	Professional ethics review\ code of ethics	Theory	Examination
1	1	Knowledge	Principal features of dental ethics\ What is special About dentistry?	Theory	Examination
1	1	Knowledge	principal features of dental ethics\ role of FDI	Theory	Examination
2	2	Knowledge	Ethical law and ethical theories	Theory	Examination
2	2	Knowledge	Fundamental principal of dental ethics	Theory	Examination
2	2	Knowledge	Duties and obligation of dentists in general	Theory	Examination
2	2	Knowledge	Duties and obligation of dentists/Ideal relation between dentist and patient	Theory	Examination
1	1	Knowledge	Duties and obligation of dentists toward the public	Theory	Examination
1	1	Knowledge	Duties and obligation of dentists/Duties of dental surgeon	Theory	Examination
1	1	Knowledge	Duties and Obligation of dentists/ Responsibilities of dental surgeon	Theory	Examination
2	2	Knowledge	Ethical issues and challenges in dental practice	Theory	Examination

1	1	Knowledge	Ethical issues and challenges in dental practice/ competence and judgment	Theory	Examination
1	1	Knowledge	Ethical issues And challenges in dental practice/ patient with compromised capacity	Theory	Exam ination
1	1	Knowledge	The impact of of business on dentistry	Theory	Exam ination
2	2	Knowledge	Ethical and dental research	Theory	Exam ination
2	2	Knowledge	Ethical and dental research/ scientific Merit	Theory	Exami nation
1	1	Knowledge	The standard of care	Theory	Exami nation
1	1	Knowledge	Ethical decision making and conflicting obligations	Theory	Exami nation
1	1	Knowledge	Studying profession's central values	Theory	Exami nation
1	1	Knowledge	The duty to treat	Theory	Exami nation

Course Evaluation	
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports.... etc	
Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Syllabus of medical ethics
Main references (sources)	Clinical Ethics: A Practical Approach to Ethical Decisions in Clinical Medicine.
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	

Course Description Form

Course Name:
Dental radiology
Course Code: DEN30002
Semester / Year:
annual
Description Preparation Date:
2024−2025
Available Attendance Forms:
weekly
Number of Credit Hours (Total) / Number of Units (Total)
30 theory+60 practice
Course administrator's name (mention all, if more than one name)
Name: Prof. Nuhad Alwan Hassan Email:
Course Objectives
(● **Be able to take all types of dental radiograph (periapical radiograph** ● **Be able to diagnosis different type of lesions around teeth and jaw** ● Be able to protect themselves and the patients from radiation
Teaching and Learning Strategies
1. Use PowerPoint lectures 2- Discussion sessions 3- Establishing workshops 4- Use the screen and the smart board to display the scientific material 5- Reports and projects 6- Oral discussions
Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1 theoretical + 3 Practical	Knowledge + practical application	Physics of Radiation	**Lecture & clinic**	Daily quiz and assessment of radiograph
2	1 theoretical + 3 Practical	Knowledge + practical application	Production of Radiation	**Lecture & clinic**	Daily quiz and assessment of radiograph
3	1 theoretical + 3 Practical	Knowledge + practical	Film imaging	**Lecture & clinic**	Daily quiz and assessment of

		application			radiograph
4	1 theoretical + 3 Practical	Knowledge + practical application	Factor controlling x - ray beam	**Lecture & clinic**	Daily quiz and assessment of radiograph
5	1 theoretical + 3 Practical	Knowledge + practical application	Projection geometry	**Lecture & clinic**	Daily quiz and assessment of radiograph
6	1 theoretical + 3 Practical	Knowledge + practical application	Biological effects of radiation	**Lecture & clinic**	Daily quiz and assessment of radiograph
7	1 theoretical + 3 Practical	Knowledge + practical application	Safety and protection	**Lecture & clinic**	Daily quiz and assessment of radiograph
8	1 theoretical + 3 Practical	Knowledge + practical application	Intraoral projection	**Lecture & clinic**	Daily quiz and assessment of radiograph
9	1 theoretical + 3 Practical	Knowledge + practical application	Digital Radiography	**Lecture & clinic**	Daily quiz and assessment of radiograph
10	1 theoretical + 3 Practical	Knowledge + practical application	Patient management	**Lecture & clinic**	Daily quiz and assessment of radiograph
11	1 theoretical + 3 Practical	Knowledge + practical application	Cephalometric imaging	**Lecture & clinic**	Daily quiz and assessment of radiograph
12	1 theoretical + 3 Practical	Knowledge + practical application	Panoramic radiography imaging	**Lecture & clinic**	Daily quiz and assessment of radiograph
13	1 theoretical + 3 Practical	Knowledge + practical application	Craniofacial imaging	**Lecture & clinic**	Daily quiz and assessment of radiograph
14	1 theoretical + 3 Practical	Knowledge + practical application	CBCT	Lecture & clinic	Daily quiz and assessment of radiograph
15	1 theoretical + 3 Practical	Knowledge + practical application	CBCT	Lecture & clinic	Daily quiz and assessment of radiograph
16	1 theoretical + 3 Practical	Knowledge + practical application	Radiographic anatomy part 1	Lecture & clinic	Daily quiz and assessment of radiograph
17	1 theoretical + 3 Practical	Knowledge + practi application	Radiographic anato part 2	Lecture & clin	Daily quiz assessment of radiogra
18	1 theoretical + 3 Practical	Knowledge + practi application	Advanced imaging modalities	Lecture & clin	Daily quiz assessment of radiogra
19	1 theoretical + 3 Practical	Knowledge + practi application	Radiography and implantology	Lecture & clin	Daily quiz assessment of radiogra
20	1 theoretical + 3 Practical	nowledge + practical application	Infection control	Lecture & clin	Daily quiz assessment of radiogra

21	1 theoretical + 3 Practical	nowledge + practical application	Prescribing diagno imaging	Lecture & clin	Daily quiz assessment of radiogra
22	1 theoretical + 3 Practical	nowledge + practical application	Radiographical interpretation of Common disease	Lecture & clin	Daily quiz assessment of radiogra
23	1 theoretical + 3 Practical	nowledge + practical application	Cysts of the jaw	Lecture & clin	Daily quiz assessment of radiogra
24	1 theoretical + 3 Practical	nowledge + practical application	Dental anomalies	Lecture & clin	Daily quiz assessment of radiogra
25	1 theoretical + 3 Practical	nowledge + practical application	Inflammatory of conditions of the jaws	Lecture & clin	Daily quiz assessment of radiogra
26	1 theoretical + 3 Practical	nowledge + practical application	Trauma	Lecture & clin	Daily quiz assessment of radiogra
27	1 theoretical + 3 Practical	nowledge + practical application	Salivary gland disease	Lecture & clin	Daily quiz assessment of radiogra
28	1 theoretical + 3 Practical	nowledge + practical application	Craniofacial anomalies	Lecture & clin	Daily quiz assessment of radiogra
29	1 theoretical + 3 Practical	nowledge + practical application	Computed tomography	Lecture & clin	Daily quiz assessment of radiogra
30	1 theoretical + 3 Practical	nowledge + practical application	Salivary gland disease	Lecture & clin	Daily quiz assessment of radiogra

Course Evaluation

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

Learning and Teaching Resources

1-White and Pharoah's Oral radiology principles and interpretation. Sanjay Mallya and Ernest Lam. 8th edition. 2019, Elsevier. 2. Ghom, Anil Govindrao. Textbook of oral radiolog E-Book. 2016, Elsevier Health Sciences	المراجع الرئيسية
1. Dental Radiology Principles and Techniques, Joen Haring, 2nd edition, 2012. 2. Essentials of Dental Radiography and Radiology, Eric Whaites &Nicholas Drage, 6th edition,2020.	المراجع الساندة
1. Oral Radiology, Mosby; 2009 2. Digital Radiography, Ghris Gunn; 2009. 3. Principles of Dental Imaging, Langland and Langlais; 1997. 4. Step by Step Radiology;1st edition, 2011	الكتب و المراجع الاثرائية (الدوريات العلمية والخ....).
Google.com	المراجع الالكترونية و مواقع الانترنيت....

Course Description Form

Course Name:
Medical microbiology
Course Code: DEN30007
Semester / Year:
Year
Description Preparation Date:
2024/12/29
Available Attendance Forms:
Weekly
Number of Credit Hours (Total) / Number of Units (Total)
30 12
Course administrator's name (mention all, if more than one name)
Name: Rafal Mohammed Lefta Email: Rafel.m.lefta@gu.edu.iq
Course Objectives
Course Objectives : **Introduction to the subject of medical microbiology, as it is one of the important subjects that the student will continue to study for a year,** **definition of the terms that will be used in explaining the curriculum so that the student can understa them correctly,** **practical laboratory steps for isolating microbes,** **diagnosing and studying pathogens and how to control them,** **and practical training in laboratories on the use of materials** **used in isolating microbes and experimental conditions in terms of sterilization and equipment**
Teaching and Learning Strategies
1. Providing the necessary information to deal with pathogens and methods of isolating and diagnosing them, in addition to how to prevent and control epidemics caused by these microbes. 2.Description of tools, devices and materials related to the subject of isolating, staining and microscopic examination of microbes
Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Morphology and Ultra-	Knowledge	Theoretical	Theoretical

		structures of M.Os: Eukaryotic Vs Prokaryotic cells:	and practical application		tests
2	2	Growth curve (diagram) phases	Knowledge and practical application	Theoretical	Theoretical tests
3	2	Physiology and metabolism of M.O	Knowledge and practical application	Theoretical	Theoretical tests
4	2	Sterilization Bacterial growth	Knowledge and practical application	Theoretical	Theoretical tests
5	2	Antibiotic and Chemotherapy Types	Knowledge and practical application	Theoretical	Theoretical tests
6	2	Immunology(part1) Sampling and transport of test material	Knowledge and practical application	Theoretical	Theoretical tests
7	2	Immunology(part2)	Knowledge and practical application	Theoretical	Theoretical tests
8	2	Immunology part 3	Knowledge and practical application	Theoretical	Theoretical tests
9	2	Immunology part 4	Knowledge and practical application	Theoretical	Theoretical tests
10	2	Staphylococci	Knowledge and practical application	Theoretical	Theoretical tests
11	2	Streptococci	Knowledge and practical application	Theoretical	Theoretical tests
12	2	Corynebacterium	Knowledge and practical application	Theoretical	Theoretical tests
13	2	Bacillus	Knowledge and practical application	Theoretical	Theoretical tests

14	2	Lactobacilli	Knowledge and practical application	Theoretical	Theoretical tests
15	2	Closterdium	Knowledge and practical application	Theoretical	Theoretical tests
16	2	Entebacteracea 1	Knowledge and practical application	Theoretical	Theoretical tests
17	2	Entebacteracea 2	Knowledge and practical application	Theoretical	Theoretical tests
18	2	Entebacteracea 3	Knowledge and practical application	Theoretical	Theoretical tests
19	2	Entebacteracea 4	Knowledge and practical application	Theoretical	Theoretical tests
20	2	Spiochaetes	Knowledge and practical application	Theoretical	Theoretical tests
21	2	Actinobacillus	Knowledge and practical application	Theoretical	Theoretical tests
22	2	Mycobacterium	Knowledge and practical application	Theoretical	Theoretical tests
23	2	Ecology of the oral flora 1	Knowledge and practical application	Theoretical	Theoretical tests
24	2	Ecology of the oral flora 2	Knowledge and practical application	Theoretical	Theoretical tests
25	2	Ecology of the oral flora 3	Knowledge and practical application	Theoretical	Theoretical tests
26	2	Dental plaque and dental caries:	Knowledge and practical	Theoretical	Theoretical tests

			application		
27	2	Fusiform	Knowledge and practical application	Theoretical	Theoretical tests
28	2	Neisseriae spp.	Knowledge and practical application	Theoretical	Theoretical tests
29	2	Virology	Knowledge and practical application	Theoretical	Theoretical tests
30	2	Oral mycology	Knowledge and practical application	Theoretical	Theoretical tests
1	2	Parasitology	Knowledge and practical application	Practic	Practic tests
2	2	Orientation to the Microbiolgy laboratory	Knowledge and practical application	Practic	Practic tests
3	2	The microscope	Knowledge and practical application	Practic	Practic tests
4	2	Sterilization Bacterial growth	Knowledge and practical application	Practic	Practic tests
5	2	Antibiotic and Chemotherapy Types of culture media	Knowledge and practical application	Practic	Practic tests
6	2	Sampling and transport of test material	Knowledge and practical application	Practic	Practic tests
7	2	Bacterial identification: 1-Macroscopical characteristics (colonial morphology and cultural characteristics).	Knowledge and practical application	Practic	Practic tests
8	2	Microscopical examination (morphology of bacterial cells).	Knowledge and practical application	Practic	Practic tests
9	2	Staining	Knowledge and	Practic	Practic tests

			practical application		
10	2	Biochemical tests (part 1).	Knowledge and practical application	Practic	Practic tests
11	2	Biochemical tests (part 2)	Knowledge and practical application	Practic	Practic tests
12	2	Antibiotic sensitivity test(part 1).	Knowledge and practical application	Practic	Practic tests
13	2	Antibiotic sensitivity test(part 2)	Knowledge and practical application	Practic	Practic tests
14	2	Serlogical tests	Knowledge and practical application	Practic	Practic tests
15	2	Nucleic acids assay	Knowledge and practical application	Practic	Practic tests
16	2	pathogenicity test	Knowledge and practical application	Practic	Practic tests
17	2	Staphylococci	Knowledge and practical application	Practic	Practic tests
18	2	Streptococci	Knowledge and practical application	Practic	Practic tests
19	2	Serologic tests part 2	Knowledge and practical application	Practic	Practic tests
20	2	Virology	Knowledge and practical application	Practic	Practic tests
21	2	Virology 2	Knowledge and practical application	Practic	Practic tests
22	2	Oral mycology 1	Knowledge	Practic	Practic

			and practical application		tests
23	2	Oral mycology 2	Knowledge and practical application	Practic	Practic tests
24	2	Oral mycology 3	Knowledge and practical application	Practic	Practic tests
25	2	Parasitology 1	Knowledge and practical application	Practic	Practic tests
26	2	Parasitology	Knowledge and practical application	Practic	Practic tests
27	2	Parasitology 2	Knowledge and practical application	Practic	Practic tests
28	2	Sampling and transport of test material	Knowledge and practical application	Practic	Practic tests
29	2	Sterilization Bacterial growth	Knowledge and practical application	Practic	Practic tests
30	2	Neisseriae spp.	Knowledge and practical application	Practic	Practic tests

Course Evaluation

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

Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Jawetz
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	

Course Description Form

Course Name:
Pharmacology
Course Code: DEN30006
Semester / Year:
Third stage / two semesters
Description Preparation Date:
2024−2025
Available Attendance Forms:
Weekly
Number of Credit Hours (Total) / Number of Units (Total)
60 h theoretical / 60 h particles
Course administrator's name (mention all, if more than one name)
Name: Assist. L. Abdulrahman Zaid Abdulellah Email:
Course Objectives
Course Objectives Preparing a student with a high level of secularism and accuracy in dealing with medicines related to his precise specialty Such as a dentist and other specialties so that there is no interference of a kind.
Teaching and Learning Strategies
1- Teaching medicines 2- Teaching the effects of medications 3- Giving lectures on medications 4- Warnings regarding the use of medications
Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Knowledge and practical application	General Pharmacology	theoretical	Theoretical tests
2	2	Knowledge and practical application	Pharmacokinetics & Pharmacokinetics	theoretical	Theoretical tests
3	2	Knowledge and	Autonomic nervous	theoretical	Theoretical tests

		practical application	system from a pharmacological prespective		
4	2	Knowledge and practical application	Adrenergic Agonists	theoretical	Theoretical tests
5	2	Knowledge and practical application	Adrenergic Antagonists	theoretical	Theoretical tests
6	2	Knowledge and practical application	Antihypertensive drugs	theoretical	Theoretical tests
7	2	Knowledge and practical application	Management of angina and heart failure	theoretical	Theoretical tests
8	2	Knowledge and practical application	Management of arrhythmia	theoretical	Theoretical tests
9	2	Knowledge and practical application	Anticoagulants, antiplatelet and hyperlipidemic drugs	theoretical	Theoretical tests
10	2	Knowledge and practical application	Introduction the pharmacology of CNS drugs, sedative, hypnotics and antiseizures drugs	theoretical	Theoretical tests
11	2	Knowledge and practical application	Antipsychotic and antidepressant drugs	theoretical	Theoretical tests
12		Knowledge and practical application	Local and general anesthetics	theoretical	Theoretical tests
13	2	Knowledge and practical application	Drug of abuse and opioid analgesics	theoretical	Theoretical tests
14	2	Knowledge and practical application	Management of diabetes mellitus	theoretical	Theoretical tests
15	2	Knowledge and practical application	Drugs affecting GIT	theoretical	Theoretical tests
16	2	Knowledge and practical application	Drugs acting on respiratory system	theoretical	Theoretical tests
17	2	Knowledge and practical application	Non-steroidal anti-inflammatory drugs part 1	theoretical	Theoretical tests
18	2	Knowledge and practical	Non-steroidal anti-inflammatory drugs	theoretical	Theoretical tests

		application	part 2		
19	2	Knowledge and practical application	Chemotherapeutic drugs (principles of antimicrobial therapy)	theoretical	Theoretical tests
20	2	Knowledge and practical application	Cell wall inhibitors part 1	theoretical	Theoretical tests
21	2	Knowledge and practical application	Cell wall inhibitors part 2	theoretical	Theoretical tests
22	2	Knowledge and practical application	Protein synthesis inhibitors	theoretical	Theoretical tests
23	2	Knowledge and practical application	Quinolones, Folic acid antagonists and antimycobacterial	theoretical	Theoretical tests
24	2	Knowledge and practical application	Antifungal, antiviral and antiprotozoal drugs	theoretical	Theoretical tests
25	2	Knowledge and practical application	Sex hormone and contraceptive	theoretical	Theoretical tests
26	2	Knowledge and practical application	Thyroid hormones and antithyroid drugs	theoretical	Theoretical tests
27	2	Knowledge and practical application	Anticancer drugs	theoretical	Theoretical tests
28	2	Knowledge and practical application	Dental pharmacology: drugs and chemical used in dental clinic	theoretical	Theoretical tests
29	2	Knowledge and practical application	Anticaries and drugs used in prevention of dental plaque	theoretical	Theoretical tests
30	2	Knowledge and practical application	Essential emergency drugs in dental clinic	theoretical	Theoretical tests

Course Evaluation

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

Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	1- Katzung, B.G., 2018. Basic and clinical pharmacology. Mc Graw

	Hill. 2- Whalen, K., 2019. Lippincott illustrated reviews: pharmacology. Lippincott Williams & Wilkins.
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	

Course Description Form

Course Name:
Preclinical Fixed prosthodontics
Course Code: DEN30009
Semester / Year:
Annual
Description Preparation Date:
2024−2025
Available Attendance Forms:
weekly
Number of Credit Hours (Total) / Number of Units (Total)
30 theory+60 practice
Course administrator's name (mention all, if more than one name)
Name: dr. Abeer Email:
Course Objectives
● **Be able to investigate all type of carious and treat them. And made the (fixed prostheses / crown and bridge)** ● **Be able to diagnosis different type of lesions around teeth and jaw** ● Be able to protect the patients from more destructive lesion. And give them teeth with good function and aesthatics
Teaching and Learning Strategies
1. Use PowerPoint lectures 2- Discussion sessions 3- Establishing workshops 4- Use the screen and the smart board to display the scientific material 5- Reports and projects 6- Oral discussions
Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1 theoretical + 2 Practical	Knowledge + practical application	Definitions	**Lecture & clinic**	Daily quiz and assessment of radiograph

2	1 theoretical + 2 Practical	Knowledge + practical application	Definitions	**Lecture & clinic**	Daily quiz and assessment of radiograph
3	1 theoretical + 2 Practical	Knowledge + practical application	Definitions	**Lecture & clinic**	Daily quiz and assessment of radiograph
4	1 theoretical + 2 Practical	Knowledge + practical application	Biomechanical principles of tooth preparation:	**Lecture & clinic**	Daily quiz and assessment of radiograph
5	1 theoretical + 2 Practical	Knowledge + practical application	Biomechanical principles of tooth preparation:	**Lecture & clinic**	Daily quiz and assessment of radiograph
6	1 theoretical + 2 Practical	Knowledge + practical application	Biomechanical principles of tooth preparation:	**Lecture & clinic**	Daily quiz and assessment of radiograph
7	1 theoretical + 2 Practical	Knowledge + practical application	Full metal crown	**Lecture & clinic**	Daily quiz and assessment of radiograph
8	1 theoretical + 2 Practical	Knowledge + practical application	Full metal crown	**Lecture & clinic**	Daily quiz and assessment of radiograph
9	1 theoretical + 2 Practical	Knowledge + practical application	Porcelain fused to metal crown	**Lecture & clinic**	Daily quiz and assessment of radiograph
10	1 theoretical + 2 Practical	Knowledge + practical application	Porcelain fused to metal crown	**Lecture & clinic**	Daily quiz and assessment of radiograph
11	1 theoretical + 2 Practical	Knowledge + practical application	Complete ceramic crown (Porcelain Jacket Crown)	**Lecture & clinic**	Daily quiz and assessment of radiograph
12	1 theoretical + 2 Practical	Knowledge + practical application	Complete ceramic crown (Porcelain Jacket Crown)	**Lecture & clinic**	Daily quiz and assessment

					of radiograph
13	1 theoretical + 2 Practical	Knowledge + practical application	Partial veneer crown (three-quarter crown)	**Lecture & clinic**	Daily quiz and assessment of radiograph
14	1 theoretical + 2 Practical	Knowledge + practical application	Partial veneer crown (three-quarter crown)	Lecture & clinic	Daily quiz and assessment of radiograph
15	1 theoretical + 2 Practical	Knowledge + practical application	Post crown	Lecture & clinic	Daily quiz and assessment of radiograph
16	1 theoretical + 2 Practical	Knowledge + practical application	Post crown	Lecture & clinic	Daily quiz and assessment of radiograph
17	1 theoretical + 2 Practical	Knowledge + practi application	Impression for crown bridge work	Lecture & clin	Daily quiz assessment radiograph
18	1 theoretical + 2 Practical	Knowledge + practi application	Impression for crown bridge work	Lecture & clin	Daily quiz assessment radiograph
19	1 theoretical + 2 Practical	Knowledge + practi application	Provisional restoration	Lecture & clin	Daily quiz assessment radiograph
20	1 theoretical + 2 Practical	nowledge + practical application	Provisional restoration	Lecture & clin	Daily quiz assessment radiograph
21	1 theoretical + 2 Practical	nowledge + practical application	Working cast and dies	Lecture & clin	Daily quiz assessment radiograph
22	1 theoretical + 2 Practical	nowledge + practical application	Working cast and dies	Lecture & clin	Daily quiz assessment radiograph
23	1 theoretical + 2 Practical	nowledge + practical application	Waxing, investi casting	Lecture & clin	Daily quiz assessment radiograph
24	1 theoretical + 2 Practical	nowledge + practical application	Waxing, investi casting	Lecture & clin	Daily quiz assessment radiograph
25	1 theoretical + 2 Practical	nowledge + practical application	Finishing of the cast and clinical try-in	Lecture & clin	Daily quiz assessment radiograph
26	1 theoretical + 2 Practical	nowledge + practical application	Finishing of the cast and clinical try-in	Lecture & clin	Daily quiz assessment radiograph
27	1 theoretical	nowledge + practical	Cementation	Lecture & clin	Daily quiz

	+ 2 Practical	application			assessment radiograph
28	1 theoretical + 2 Practical	nowledge + practical application	Cementation	Lecture & clin	Daily quiz assessment radiograph
29	1 theoretical + 2 Practical	nowledge + practical application	CAD /CAM Technol for crown construction	Lecture & clin	Daily quiz assessment radiograph
30	1 theoretical + 2 Practical	nowledge + practical application	CAD /CAM Technol for crown construction	Lecture & clin	Daily quiz assessment radiograph

1. Course Evaluation

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

2. Learning and Teaching Resources

1Contemporary Fixed Prosthodontics" by Stephen F. Rosenstiel and "Fundamentals of Fixed Prosthodonti by Herbert T. Shillingburg	المراجع الرئيسية
Contemporary Fixed Prosthodontics" by Stephen F. Rosenstiel and "Fundamentals of Fixed Prosthodontics" by Herbert T. Shillingburg	المراجع الساندة
	الكتب و المراجع الاثرائية (الدوريات العلمية والخ....).
Google.com	المراجع الالكترونية و مواقع الانترنيت....

Lab number	Study unit title **Preclinical Fixed Prosthodontics**	Hours
1	Introduction on the lab work, phantom heads and teeth manikins.	2
2	Demonstration about the rotary instrument and how to cut geometrical cavities (Part 1).	2
3	Demonstration about the rotary instrument and how to cut geometrical cavities (Part 2).	2
4	Demonstration on full metal crown preparation on lower 1st molar.	2
5	Demonstration on full metal crown preparation on lower 2nd molar.	2
6	Practicing lab under supervision.	2
7	Practicing lab under supervision.	2
8	Practical assessment of full metal crown preparation on lower 1st molar.	2
9	Demonstration on porcelain fused to metal crown preparation on upper central incisor.	2
10	Demonstration on porcelain fused to metal crown preparation on upper	2

11	Practicing lab under supervision.	2
12	Practicing lab under supervision.	2
13	Practical assessment of porcelain fused to metal crown preparation on upper central incisor.	2
14	Demonstration on post crown preparation on extracted root canal filled upper canine.	2
15	Demonstration on post crown preparation on extracted root canal filled lower 1st premolar.	2
16	Practicing lab under supervision.	2
17	Practicing lab under supervision.	2
18	Practical assessment of post crown preparation on extracted root canal filled upper canine.	2
19	Demonstration on special tray construction.	2
20	Demonstration on impression materials used in Fixed Prosthodontics.	2
21	Demonstration on impression techniques in Fixed Prosthodontics.	2
22	Demonstration on die construction using dowel pin.	2
23	Demonstration on provisional restoration (Part 1): Materials.	2
24	Demonstration on provisional restoration (Part 2): Techniques.	2
25	Demonstration on direct waxing for post crown construction on upper canine.	2
26	Demonstration on indirect waxing technique.	2
27	Demonstration on investing and casting.	2
28	Demonstration on cleaning and finishing of the cast restoration.	2
29	Final assessment of the practical work.	2
30	Final practical exam.	2
Total		60

Course Description Form

Course Name: oral surgery

Course Code: DEN30005

Semester / Year: year

Description Preparation Date: 25/1/2025

Available Attendance Forms: face to face learning

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

30 hrs / theory
60 hrs / practical
4 units

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

Name: assoc. prof. dr. Haydar Munir salih
Email: Haydar.m.alnamir@GU.EDU.IQ

Course Objectives

Providing students with a solid scientific background about ORAL SURGERY
In the fields of applied sciences
Study of local anesthesia technique
Give a comprehensive overview of scientific references

Teaching and Learning Strategies

A- Cognitive objectives
B- The skills objectives of the course

Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	Knowledge and application	Diagnosis in oral surgery	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
2	1	Knowledge and application	Diagnosis in oral surgery	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam

3	1	Knowledge and application	Infection Control in Surgical Practice	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
4	1	Knowledge and application	Infection Control in Surgical Practice 2	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
5	1	Knowledge and application	Extraction of teeth and Contra indications of extraction	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
6	1	Knowledge and application	Extraction of teeth and Contra indications of extraction 2	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
7	1	Knowledge and application	General arrangement for extraction and Dental forceps (types)	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
8	1	Knowledge and application	General arrangement for extraction and Dental forceps (types) 2	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
9	1	Knowledge and application	Techniques of forceps extraction and post-operative instruction	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
10	1	Knowledge and application	Elevators	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam

11	1	Knowledge and application	Elevators 2	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
12	1	Knowledge and application	Complications of dental extraction	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
13	1	Knowledge and application	Complications of dental extraction 2	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
14	1	Knowledge and application	Basic surgical instruments	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
15	1	Knowledge and application	Introduction to local anesthesia	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
16	1	Knowledge and application	Pharmacology of local anesthesia 2	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
17	1	Knowledge and application	Pharmacology of local anesthesia 2	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
18	1	Knowledge and application	Surgical anatomy in local anesthesia 2	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
19	1	Knowledge and application	Instruments of local anesthesia	in person education	Short quizzes Term exam

				lectures using d show (Power Point software)	final exam
20	1	Knowledge and application	Techniques of local anesthesia	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
21	1	Knowledge and application	Techniques of local anesthesia 2	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
22	1	Knowledge and application	Techniques of local anesthesia 2	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
23	1	Knowledge and application	Complications of local anesthesia	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
24	1	Knowledge and application	Complications of local anesthesia 2 Advances in local anesthesia	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
25	1	Knowledge and application	Conscious sedation	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
26	1	Knowledge and application	Fundamentals of general anesthesia	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
27	1	Knowledge and application	Medical emergencies during dental treatment	in person education lectures using d show (Power Point	Short quizzes Term exam final exam

				software)	

Course Evaluation	
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc	
Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Hand book of local anesthesia 7th edition Stanely F. Malamed , Elsevier.2019
Main references (sources)	Contemporary oral and maxillofacial surgery 7th edition 2019 (Elsevier).
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	

Course Description Form

Course Name:
Prosthodontics
Course Code: DEN30004
Semester / Year:
2 semesters / 3ed year
Description Preparation Date:
25/1/2025
Available Attendance Forms:
Weekly
Number of Credit Hours (Total) / Number of Units (Total)
30 hrs / theory 60 hrs / practical
Course administrator's name (mention all, if more than one name)
Name: Zaid Samir Qasim Alganabi Email: zaid.s.qasim@gu.edu.iq
Course Objectives
Providing students with a solid scientific background about material and construction of Removable partial denture In the fields of applied sciences Study of removable partial denture Give a comprehensive overview of scientific references
Teaching and Learning Strategies
A- Cognitive objectives B- The skills objectives of the course
Course Structure

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

1	1	Knowledge and application	Introduction to Removable Partial Dentures	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
2	1	Knowledge and application	Classification of Partially Edentulous	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
3	1	Knowledge and application	Arches	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
4	1	Knowledge and application	Surveying	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
5	1	Knowledge and application	Surveying (continue)	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
6	1	Knowledge and application	Component Parts of a Removable Partial Denture	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
7	1	Knowledge and application	Maxillary Major Connectors	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
8	1	Knowledge and application	Mandibular Major Connectors	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
9	1	Knowledge and application	Minor Connectors	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam

10	1	Knowledge and application	Rests and Rest Seats	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
11	1	Knowledge and application	Retention and Removable Partial Denture Retainers	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
12	1	Knowledge and application	Extra Coronal Direct Retainers (Types of clasp assemblies)	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
13	1	Knowledge and application	Intracoronal Direct Retainers (Internal Attachments, Precision Attachments	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
14	1	Knowledge and application	Stress-Breakers (Stress Equalizers)	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
15	1	Knowledge and application	Indirect Retainers	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
16	1	Knowledge and application	Indirect Retainers (continue)	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
17	1	Knowledge and application	Laboratory procedures in RPD construction: Blockout and Relief	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
18	1	Knowledge and application	Laboratory procedures in RPD construction: Duplication and Refractory Cast Construction	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
19	1	Knowledge and	Laboratory procedures in RPD	in person	Short

		application	construction: Wax Pattern	education lectures using d show (Power Point software)	quizzes Term exam final exam
20	1	Knowledge and application	Laboratory procedures in RPD construction: Casting and Finishing	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
21	1	Knowledge and application	Denture Base in RPD	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
22	1	Knowledge and application	Record Bases, Occlusion Rims, Mounting and Arrangement of Teeth	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
23	1	Knowledge and application	Biomechanics of Removable Partial Dentures	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
24	1	Knowledge and application	Biomechanics of Removable Partial Dentures (continue)	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
25	1	Knowledge and application	Principles of Removable Partial Denture Design	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
26	1	Knowledge and application	Principles of Removable Partial Denture Design (continue)	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
27	1	Knowledge and application	Clinical Phases of Removable Partial Denture Construction.	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
28	1	Knowledge and application	Acrylic Removable Partial Dentures	in person education lectures using d	Short quizzes Term exam

				show (Power Point software)	final exam
29	1	Knowledge and application	Flexible Removable Partial Dentures	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
30	1	Knowledge and application	Repairs and Additions to Removable Partial Dentures	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
31	1	Knowledge and application Knowledge and application	Digitally Designed & Fabrication Process of RPD Framework Using CAD/CAM System	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam

Course Evaluation

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

Learning and Teaching Resources

Required textbooks (curricular books, if any)	Syllabus of partial complete denture (text book of partial complete denture) Dental laboratory technology for removable prosthodontics
Main references (sources)	Dental laboratory technology for removable prosthodontics
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	

Course Description Form

Course Name:
Pathology
Course Code: DEN30003
Semester / Year:
2024/2025
Description Preparation Date:
15/01/2025
Available Attendance Forms:
Weekly
Number of Credit Hours (Total) / Number of Units (Total)
30 hours theory & 15 hours practice
Course administrator's name (mention all, if more than one name)
Name: Haidar N. Mohammed Email: haidar.mohammed@uod.ac

Course Objectives	
Course Objectives: generally, learn about diseases microscopically and morphology	• **Terminology to get understanding the pathology.** • **Laboratory & practical steps to diagnose general diseases and dental diseases** • **To know about the signs and symptoms of the of the diseases that appear in the dental field.**

Teaching and Learning Strategies

A. Knowledge goals
1. Knowledges of dealing with diseases conservatively
2. How to diagnose the dental related diseases

B. Skills
1. Every skill to diagnose the diseases
2. To get idea about the treatments especially conservatives

Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	90	Theory	**Introduction to**	Theory &	Paper

	2minutes		**pathology**	applying	Exam
2	930 mi4nutes	Theory	**Cellular response to stimulus**	Theory & applying	Paper Exam
3	90 5minutes	Theory	**Cellular response to injury**	Theory & applying	Paper Exam
4	960 mi7nutes	Theory	**Cellular accumulation**	Theory & applying	Paper Exam
5	90 8minutes	Theory	**Healing of Tissue 1**	Theory & applying	Paper Exam
6	990 minutes	Theory	**Healing of Tissue 2**	Theory & applying	Paper Exam
7	90 minutes	Theory	**Immune System**	Theory & applying	Paper Exam
8	90 minutes	Theory	**Allergic and hypersensitivity**	Theory & applying	Paper Exam
9	90 minutes	Theory	**Other immune disorders**	Theory & applying	Paper Exam
10	90 minutes	Theory	**GIT pathology 1**	Theory & applying	Paper Exam
11	90 minutes	Theory	**GIT pathology 2**	Theory & applying	Paper Exam
12	90 minutes	Theory	**Pathology of liver and biliary tracts 1**	Theory & applying	Paper Exam
13	90 minutes	Theory	**Pathology of liver and biliary tracts 2**	Theory & applying	Paper Exam
14	90 minutes	Theory	**Acute inflammation**	Theory & applying	Paper Exam
15	90 minutes	Theory	**Chronic inflammation 1**	Theory & applying	Paper Exam
16	90 minutes	Theory	**Chronic inflammation 2**	Theory & applying	Paper Exam
17	90 minutes	Theory	**Infectious diseases 1**	Theory & applying	Paper Exam
18	90 minutes	Theory	**Infectious diseases 2**	Theory & applying	Paper Exam
19	90 minutes	Theory	**Infectious diseases 3**	Theory & applying	Paper Exam
20	90 minutes	Theory	**Hemodynamic disorder 1**	Theory & applying	Paper Exam
21	90 minutes	Theory	**Hemodynamic disorder 2**	Theory & applying	Paper Exam
22	90	Theory	**Hemodynamic**	Theory &	Paper

	minutes		**disorder 3**	applying	Exam
23	90 minutes	Theory	**Genetic basis 1**	Theory & applying	Paper Exam
24	90 minutes	Theory	**Genetic basis 2**	Theory & applying	Paper Exam
25	90 minutes	Theory	**Genetic diseases 1**	Theory & applying	Paper Exam
26	90 minutes	Theory	**Genetic diseases 2**	Theory & applying	Paper Exam
27	90 minutes	Theory	**Molecular Basis 1**	Theory & applying	Paper Exam
28	90 minutes	Theory	**Molecular Basis 2**	Theory & applying	Paper Exam
29	90 minutes	Theory	**Neoplasia 1**	Theory & applying	Paper Exam
30	90 minutes	Theory	**Neoplasia 2**	Theory & applying	Paper Exam

Course Evaluation

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

Learning and Teaching Resources

Required textbooks (curricular books, if any)	Robbins & Cotran Pathology Basis of Disease
Main references (sources)	Clinical pathology board review
Recommended books and references (scientific journals, reports…)	Robbins essential pathology E-Book Textbook of pathology Rapid review pathology-E-Book
Electronic References, Websites	American Journal of clinical pathology Pathologica

Operative and esthetic dentistry & endodontics

Course name:

Operative and esthetic dentistry & endodontics

Course code:

DEN40009

Semester / Year:

Annual

Description Preparation Date:

8/2/2026

Available Attendance Forms:

In-person study (face to face)

Number of Credit Hours (Total) / Number of Units (Total):

30 hours theoretical + 60 hours practical

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

Assistant lecturer Hussain Raad Khaled

Course Objectives:

To be able to diagnose and treat all types of tooth decay and to be able to diagnose and treat pulpal lesions.

Teaching and Learning Strategies:

1. Use PowerPoint lectures
2. Discussion sessions
3. Establishing workshops
4. Use the screen and the smart board to display the scientific material
5. Reports and projects
6. Oral discussions

Course Structure:

Week	Hours	Required learning outcomes	Unit or subject name	Learning method	Evaluation method
1	1 theoretical + 2 Practical	Knowledge+ practical application	Biologic Considerations of Enamel structure and its Clinical Significance in Practice of Operative Dentistry.	Theortical+ practical	Short quizzes +Term exam +final exam
2	1 theoretical + 2 Practical	Knowledge+ practical	Biologic Considerations of	Theortical+ practical	Short quizzes +Term exam

		application	Enamel structure and its Clinical Significance in Practice of Operative Dentistry.		+final exam
3	1 theoretical + 2 Practical	Knowledge+ practical application	Biologic Considerations of Dentin structure & its Clinical Significance in Operative Dentistry	Theortical+ practical	Short quizzes +Term exam +final exam
4	1 theoretical + 2 Practical	Knowledge+ practical application	Biologic Considerations of Dentin structure & its Clinical Significance in Operative Dentistry	Theortical+ practical	Short quizzes +Term exam +final exam
5	1 theoretical + 2 Practical	Knowledge+ practical application	Patient Evaluation Diagnosis & Treatment Planning	Theortical+ practical	Short quizzes +Term exam +final exam
6	1 theoretical + 2 Practical	Knowledge+ practical application	Caries Management (Diagnosis & treatment strategies)	Theortical+ practical	Short quizzes +Term exam +final exam
7	1 theoretical + 2 Practical	Knowledge+ practical application	Cervical Lesions (carious and non-carious lesions)	Theortical+ practical	Short quizzes +Term exam +final exam
8	1 theoretical + 2 Practical	Knowledge+ practical application	Restorative Dentistry and Pulpal Health	Theortical+ practical	Short quizzes +Term exam +final exam
9	1 theoretical + 2 Practical	Knowledge+ practical application	Management of Deep-Seated Caries	Theortical+ practical	Short quizzes +Term exam +final exam
10	1 theoretical + 2 Practical	Knowledge+ practical application	Inflammatory Conditions of the Pulp	Theortical+ practical	Short quizzes +Term exam +final exam
11	1 theoretical + 2 Practical	Knowledge+ practical application	Treatment of Deep-Seated Caries Simplified anatomical modeling.	Theortical+ practical	Short quizzes +Term exam +final exam
12	1 theoretical + 2 Practical	Knowledge+ practical application	Fluoride – Releasing Materials	Theortical+ practical	Short quizzes +Term exam +final exam
13	1 theoretical + 2 Practical	Knowledge+ practical application	Indirect aesthetic adhesive restorations Inlays and Onlays (materials, techniques) CAD/CAM Technology.	Theortical+ practical	Short quizzes +Term exam +final exam
14	1 theoretical + 2 Practical	Knowledge+ practical application	Direct tooth-colored restorations (Composite)	Theortical+ practical	Short quizzes +Term exam +final exam

15	1 theoretical + 2 Practical	Knowledge+ practical application	Dental Laser	Theortical+ practical	Short quizzes +Term exam +final exam
16	1 theoretical + 2 Practical	Knowledge+ practical application	Application of Laser in Conservative Dentistry.	Theortical+ practical	Short quizzes +Term exam +final exam
17	1 theoretical + 2 Practical	Knowledge+ practical application	Application of Laser in Conservative Dentistry.	Theortical+ practical	Short quizzes +Term exam +final exam
18	1 theoretical + 2 Practical	Knowledge+ practical application	Indirect tooth-colored restorations	Theortical+ practical	Short quizzes +Term exam +final exam
19	1 theoretical + 2 Practical	Knowledge+ practical application	Techniques of posterior composite Inlay/Onlay restoration system Laboratory-processed composite inlays and onlays.	Theortical+ practical	Short quizzes +Term exam +final exam
20	1 theoretical + 2 Practical	Knowledge+ practical application	Ceramic veneers, inlays and onlays, clinical procedures.	Theortical+ practical	Short quizzes +Term exam +final exam
21	1 theoretical + 2 Practical	Knowledge+ practical application	Ceramic veneers, inlays and onlays, clinical procedures.	Theortical+ practical	Short quizzes +Term exam +final exam
22	1 theoretical + 2 Practical	Knowledge+ practical application	CAD/CAM techniques	Theortical+ practical	Short quizzes +Term exam +final exam
23	1 theoretical + 2 Practical	Knowledge+ practical application	Topics Covered	Theortical+ practical	Short quizzes +Term exam +final exam
24	1 theoretical + 2 Practical	Knowledge+ practical application	Objective of endodontic treatment	Theortical+ practical	Short quizzes +Term exam +final exam
25	1 theoretical + 2 Practical	Knowledge+ practical application	Basic Phases of Treatment	Theortical+ practical	Short quizzes +Term exam +final exam
26	1 theoretical + 2 Practical	Knowledge+ practical application	Pulp pathologies	Theortical+ practical	Short quizzes +Term exam +final exam
27	1 theoretical + 2 Practical	Knowledge+ practical application	Classification of periapical diseases	Theortical+ practical	Short quizzes +Term exam +final exam
28	1 theoretical + 2 Practical	Knowledge+ practical application	Access Opening Preparation	Theortical+ practical	Short quizzes +Term exam +final exam
29	1 theoretical + 2 Practical	Knowledge+ practical application	Endodontic Instruments	Theortical+ practical	Short quizzes +Term exam +final exam

30	1 theoretical + 2 Practical	Knowledge+ practical application	Roentgenography in Endodontics and Root canal preparation	Theortical+ practical	Short quizzes +Term exam +final exam

Course Evaluation:	
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly or written exams, reports .... etc.	
Learning and Teaching Resources:	
Required textbooks (curricular books, if any)	1. Textbook of Operative Dentistry, Nisha Garg,Amit Garg 2. Textbook of Endodontics, Nisha Garg,Amit Garg 3. Minimal Invasive Dentistry (Pb), Mini Jain
Main references (sources)	1. Textbook of Operative Dentistry, Nisha Garg,Amit Garg 2. Textbook of Endodontics, Nisha Garg,Amit Garg 3. Minimal Invasive Dentistry (Pb), Mini Jain
Recommended books and references (scientific journals, reports...)	Reports published on the college website
Electronic References, Websites	College website

General Surgery

Course name
General Surgery
Course code
DEN40002
semester/ year
2024/2025
Date this description was prepared
15/1/2025
Available attendance forms
Weekly
Number of study hours (total) / Number of units (total)
Theory=1/units=2
Name of the course administrator (if more than one name is mentioned)
Haidar N. Mohammed Email: haidar.n.mohammed@gu.edu.iq
objectives Course
The objectives of this course are: **-To make the student familial with the clinical examination** **-To make them able to detect the critical cases that need urgent intervention** **-How to diagnose some of the common surgical diseases** **-Whom to call for each specific case** **Knowlagent of the effect and side effects of the most common used drugs**
Teaching and learning strategies
-Lectures with power point -Practical training -Group discussion -Clinical visiting
Course structure

Evaluation method	Learning method	Name of unit or topic	Required learning outcomes	Hours	week
Quizzes and term exam	Lectures and practical training	Blood transfusion	Safe to deal with these patients	2	1.
Quizzes and	Lectures and	Fluid balance	Safe to deal with these	2	2.

term exam	practical training		patients		
Quizzes and term exam	Lectures and practical training	Head injury	Safe to deal with these patients	2	3.
Quizzes and term exam	Lectures and practical training	Metabolic injury response	Safe to deal with these patients	2	4.
Quizzes and term exam	Lectures and practical training	Hemorrhage	Safe to deal with these patients	2	5.
Quizzes and term exam	Lectures and practical training	Nutrition feeding modes	Safe to deal with these patients	2	6.
Quizzes and term exam	Lectures and practical training	Pain control in operative dentistry	Safe to deal with these patients	2	7.
Quizzes and term exam	Lectures and practical training	Post operative care	Safe to deal with these patients	2	8.
Quizzes and term exam	Lectures and practical training	Preoperative preparation	Safe to deal with these patients	2	9.
Quizzes and term exam	Lectures and practical training	Shock	Safe to deal with these patients	2	10.
Quizzes and term exam	Lectures and practical training	Surgical wound infection	Safe to deal with these patients	2	11.
Quizzes and term exam	Lectures and practi training	Water electrolytes and acid-base balance	Safe to deal with these patients	2	12.
Quizzes	Lectures	Wound healing	Safe to deal	2	13.

and term exam	and practical training		with these patients		
Quizzes and term exam	Lectures and practical training	Parenteral feeding	Safe to deal with these patients	2	14.
Quizzes and term exam	Lectures and practical training	Review of the items	Safe to deal with these patients	2	15.

Course Evaluation	
2 terms examinations and final exam	
Learning and teaching resources	
Bailly and love's book	Book
Schwartz's principles of surgery	Book
Fischer's Mastery of surgery	Book
Cameron's surgical therapy	Book

General Medicine

Course name
General Medicine
Course code
DEN40001
semester/ year
2025−2026
Date this description was prepared
1/10/2025
Available attendance forms
yes
Number of study hours (total) / Number of units (total)
2hrs/2units
Name of the course administrator (if more than one name is mentioned)
Dr.Haidar N. Mohammed Email: haidar.n.mohammed@gu.edu.iq
objectives Course

The objectives of this course are:

- **To make the student familial with the clinical examination**
- **To make them able to detect the critical cases that need urgent intervention**
- **How to diagnose some of the common medical diseases**
- **Whom to call for each specific case**
- **Knowlagent of the effect and side effects of the most common used drugs**

Teaching and learning strategies

-Lectures with power point
-Practical training
-Group discussion
-Clinical visiting

Course structure

Evaluation method	Learning method	Name of unit or topic	Required learning outcomes	Hours	week
Quizzes and term exam	Lectures and practical training	Dental management of patients with cardiovascular disorders	Safe to deal with these patients	2	1.
Quizzes and term exam	Lectures and practical training	Dental management of patients with gastrointestinal diseases	Safe to deal with these patients	2	2.
Quizzes and term exam	Lectures and practical training	Diabetes mellitus	Safe to deal with these patients	2	3.
Quizzes and term exam	Lectures and practical training	Endocrine system	Safe to deal with these patients	2	4.
Quizzes and term exam	Lectures and practical training	Hemostasis and disorders	Safe to deal with these patients	2	5.
Quizzes and term exam	Lectures and practical training	Hepatitis B & C	Safe to deal with these patients	2	6.
Quizzes and	Lectures and	Infective endocarditis and dentistry	Safe to deal with these	2	7.

term exam	practical training		patients		
Quizzes and term exam	Lectures and practical training	Pregnancy and dentistry	Safe to deal with these patients	2	8.
Quizzes and term exam	Lectures and practical training	Respiratory Diseases	Safe to deal with these patients	2	9.
Quizzes and term exam	Lectures and practical training	Renal diseases	Safe to deal with these patients	2	10.
Quizzes and term exam	Lectures and practical training	Oral manifestation systemic diseases	Safe to deal with these patients	2	11.
Quizzes and term exam	Lectures and practical training	Neurological disorder	Safe to deal with these patients	2	12.
Quizzes and term exam	Lectures and practical training	Dental consideration liver diseases	Safe to deal with these patients	2	13.
Quizzes and term exam	Lectures and practical training	Dental management in immune compromised patients	Safe to deal with these patients	2	14.
Quizzes and term exam	Lectures and practical training	Disorder of WBCs	Safe to deal with these patients	2	15.

Course Evaluation	
2 terms examinations and final exam	
Learning and teaching resources	
Oxford of clinical medicine	
Davidson medicine	
Current essentials of medicine	

API Textbook of Medicine	

Course Name:

Oral Pathology

Course Code: DEN4003

Semester / Year:

Fourth Year / two semesters

Description Preparation Date:

2025−2026

Available Attendance Forms:

Weekly

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

60 h theoretical / 60 h particles

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

Name: Assist. L. Abdulrahman Zaid Abdulellah

Course Objectives

Course Objectives

Preparing a student with a high level of secularism and accuracy in dealing with medicines related to his precise specialty

Such as a dentist and other specialties so that there is no interference of any kind.

Teaching and Learning Strategies

Strategy

Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	Knowledge and practical application	Biopsy in oral pathology	theoretical	Theoretical tests
2	2	Knowledge and practical application	Healing in oral pathology	theoretical	Theoretical tests

3	2	Knowledge and practical application	Dental Caries	theoretical	Theoretical tests
4	2	Knowledge and practical application	Pulpitis	theoretical	Theoretical tests
5	2	Knowledge and practical application	Periapical lesions	theoretical	Theoretical tests
6	2	Knowledge and practical application	Osteomyelitis	theoretical	Theoretical tests
7	2	Knowledge and practical application	Developmental disorder of teeth	theoretical	Theoretical tests
8	2	Knowledge and practical application	Developmental disorder of soft and hard tissue	theoretical	Theoretical tests
9	2	Knowledge and practical application	Non odontogenic cysts	theoretical	Theoretical tests
10	2	Knowledge and practical application	Odontogenic cysts	theoretical	Theoretical tests
11	2	Knowledge and practical application	Odontogenic tumors 1	theoretical	Theoretical tests
12		Knowledge and practical application	Odontogenic tumors 2	theoretical	Theoretical tests

13	2	Knowledge and practical application	Benign epithelial lesions, leukoplakia	theoretical	Theoretical tests
14	2	Knowledge and practical application	Epithelial Hyperplasia, atrophy and dysplasia	theoretical	Theoretical tests
15	2	Knowledge and practical application	Squamous cell carcinoma and other malignant epithelial neoplasms	theoretical	Theoretical tests
16	2	Knowledge and practical application	Fibro osseous lesions, metabolic and genetic conditions	theoretical	Theoretical tests
17	2	Knowledge and practical application	Giant cell lesions	theoretical	Theoretical tests
18	2	Knowledge and practical application	Benign tumor of the bone	theoretical	Theoretical tests
19	2	Knowledge and practical application	Malignant tumor of the bone	theoretical	Theoretical tests
20	2	Knowledge and practical application	Viral infection	theoretical	Theoretical tests
21	2	Knowledge and practical	Bacterial and fungal infection	theoretical	Theoretical tests

		application			
22	2	Knowledge and practical application	Immune mediated disorder 1	theoretical	Theoretical tests
23	2	Knowledge and practical application	Immune mediated disorder 2	theoretical	Theoretical tests
24	2	Knowledge and practical application	Connective tissue lesions	theoretical	Theoretical tests
25	2	Knowledge and practical application	Connective tissue lesions	theoretical	Theoretical tests
26	2	Knowledge and practical application	Salivary gland disorders	theoretical	Theoretical tests
27	2	Knowledge and practical application	Salivary gland neoplasms	theoretical	Theoretical tests
28	2	Knowledge and practical application	Physical and chemical injuries	theoretical	Theoretical tests
29	2	Knowledge and practical application	Hematopoietic tumors	theoretical	Theoretical tests
30	2	Knowledge and practical application	Forensic dentistry	theoretical	Theoretical tests
Course Evaluation					
Distributing the score out of 100 according to the tasks assigned to the student such as daily					

preparation, daily oral, monthly, or written exams, reports .... etc	
Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (sources)	
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	

Oral surgery

Course name: Oral Surgery
Course code: DEN40004
semester/ year: year
Date this description was prepared: 9/2/2026
Available attendance forms: face to face learning
Number of study hours (total) / Number of units (total))
30hr/ theory 6 units 120hr/ practical
Name of the course administrator (if more than one name is mentioned)
Assoc. Prof. Dr. Haydar Munir Salih
objectives Course
• Understand fundamental oral surgery principles • Perform patient assessment and treatment planning • Apply infection control and aseptic techniques • Administer local anesthesia safely • Perform simple extractions and minor oral surgery • Manage postoperative care and referrals
Teaching and learning strategies
• Lectures and seminars • Case-based and problem-based learning

- Clinical demonstrations
- Supervised clinical practice
- Simulation / pre-clinical training
- Self-directed learning with feedback

Course structure

Evaluation method	Learning method	Name of unit or topic	Required learning outcomes	watches	week
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Cardiovascular diseases	Knowledge And Application	1	1
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Cardiac arrhythmia	Knowledge And Application	1	2
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Bleeding disorder	Knowledge And Application	1	3
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Endocrinology	Knowledge And Application	1	4
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Pulmonary diseases	Knowledge And Application	1	5
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Liver Diseases	Knowledge And Application	1	6
Short quiz Term exam Final exam	In-person education Lectures Using	Chronic kidney disease and	Knowledge And Application	1	7

	powerpoint	dialysis			
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Neurologic disorders	Knowledge And Application	1	8
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Pregnancy	Knowledge And Application	1	9
Short quiz Term exam Final exam	In-person education Lectures Using Powerpoint1	AIDS and HIV infection	Knowledge And Application	1	10
Short quiz Term exam Final exam	In-person 1education Lectures Using powerpoint	Rheumatologic and connective tissue disorders	Knowledge And Application	1	11
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Allergy	Knowledge And Application	1	12
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Patients on radiotherapy and chemotherapy	Knowledge And Application	1	13
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Odontogenic infections and fascial space infections	Knowledge And Application	1	14
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Fascial space infections	Knowledge And Application	1	15
Short quiz	In-person education	Principles of	Knowledge	1	16

Term exam Final exam	Lectures Using powerpoint	treatment of odontogenic infections	And Application		
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Principles of Flaps, suturing and management of difficult extraction	Knowledge And Application	1	17
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Management of difficult extraction	Knowledge And Application	1	18
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Principles of management of impacted teeth	Knowledge And Application	1	19
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Impacted upper third molars	Knowledge And Application	1	20
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Impacted mandibular canines	Knowledge And Application	1	21
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Surgical aids to orthodontics	Knowledge And Application	1	22
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Principles of endodontic surgery	Knowledge And Application	1	23
Short quiz Term exam Final exam	In-person education Lectures	Osteomyelitis and osteonecrosis of	Knowledge And Application	1	24

	Using powerpoint	the jaw			
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Radiation induced osteomyelitis and osteoradionecrosis	Knowledge And Application	1	25
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Dental Implants: Basic Concepts and Techniques	Knowledge And Application	1	26
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Surgical Treatment Planning Considerations	Knowledge And Application	1	27
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Biopsy in oral and maxillofacial surgery	Knowledge And Application	1	28
Short quiz Term exam Final exam	In-person education Lectures Using powerpoint	Diagnostic imaging in oral and maxillofacial surgery	Knowledge And Application	1	29

Course Evaluation

Distributing the score of 100 according to the task assigned to the student as oral surgery clinic cases and oral, monthly and final written exam.

Learning and teaching resources

-Little and Falace's Dental Management of the Medically Compromised Patient 9th Edition , 2018.	
Contemporary oral and maxillofacial surgery 7th edition 2019 (Elsevier).	

orthodontics

Course Name: orthodontics

Course Code: DEN40005

Semester / Year: year

Description Preparation Date: 8/2/2026

Available Attendance Forms: face to face learning

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

30 hrs / theory
60 hrs / practical
6 units

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

Name: assist literature sara yousif halain
Email: Sara.yousif@GU.EDU.IQ

Course Objectives

- Providing students with a solid scientific background about orthodontics
- In the fields of applied sciences
- Give a comprehensive overview of scientific references

Teaching and Learning Strategies

- A- Cognitive objectives
- B- The skills objectives of the course

Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	Knowledge and application	Introduction Definition of orthodontics Definition of occlusion, normal occlusion, ideal occlusionand	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam

			malocclusion Six keys of normal occlusion		
2		1 Knowledge and application	Aims of orthodontic treatment Orthodontic definitions)overjet, overbite, crossbite, spacing, crowding, midline deviation, rotation, displacement, proclination, retroclination, protrusion, retrusion, imbrication, overlap, impaction(– including types	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
3		1 Knowledge and application	Classification of malocclusion a. Angle's classification including division and subdivisions	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
4		1 Knowledge and application	b.molar, canine, incisor classifications c. classification of deciduous and mixed dentitions	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
5		1 Knowledge and	Definitions of growth,	in person education	Short quizzes Term exam

		application	development and maturity Stages of development)ovum till birth(Theories of bone growth)cartiligeneous, sutural, endosteal -periosteal, matrix theories(	lectures using d show (Power Point software)	final exam
6		Knowledge and application	Definitions of growth site, growth center, displacement, and drift Growth curve and maximum growth spurt	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
7		Knowledge and application	-Growth and development of hard tissues (cranial base, cranial vault, nasomaxillary complex, mandible) including prenatal and postnatal - Growth and development of soft tissues (lip, nose, cheek and tongue) including prenatal and postnatal	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
8		Knowledge and application	Developmental anomalies Jaw rotation and adaptation	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam

9		Knowledge and application	Deciduous and permanent dentition Stages of tooth development: Formation, calcification and root completion	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
10		Knowledge and application	Tooth eruption (stages and theories(Sequences and timing of eruption	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
11		Knowledge and application	Development of occlusion a. new born oral cavity)relationship of gum pads, neonatal jaw relationships, natal and neonatal teeth(b. Deciduous dentition stage - Dental changes till 6 years of age (jaw relationship, attrition, primary spaces	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
12		Knowledge and application	C -Early mixed dentition stage -eruption of first molars and incisors (occlusal relationships of primary	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam

			and permanent molars, early mesial shift, ugly duckling stage, secondary spaces(d. Late mixed dentition stage - eruption of canines and premolars (Leeway space and late mesial shift e.Permanent dentition- eruption second and third molars (mesial migration)(		
13		Knowledge and application	Etiology of malocclusion: Genetic factors and inherited factors Classification of etiological factors a. General factors i. Skeletal (dental base and cranial base, variation of position and size of the jaws(	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
14		Knowledge and application	ii- Soft tissue (muscles of face and mastication, muscles of lip and tongue, relation to skeletal factors,	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam

			abnormalities of oro-facial musculature, interference with soft tissue function(iii. Tooth size and arch length relationship)Crowding and spacing(including types		
15		Knowledge and application	b. Local factor 1 i-Extra-teeth (supernumerary) and missing teeth)hypodontia(ii. Anomalies of tooth size and shape	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
16		Knowledge and application	iii- Early loss of deciduous teeth iv. Retained deciduous teeth, delayed eruption of permanent teeth, impacted teeth, ankylosis	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
17		Knowledge and application	Abnormal eruptive behavior)displacement, transposition(vi. Large frenum (labial	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam

			and lingual), periodontal diseases		
18	1	Knowledge and application	vii. Oral habit viii. Dental caries, improper dental restoration	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
19	1	Knowledge and application	Tooth movement a. Tissue changes associated with tooth movement: i. Histology of periodontium ii. Theories of tooth movement (pressure tension theory, blood flow theory, and piezoelectric theory(	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
20	1	Knowledge and application	b. Biomechanics i. Force (application, type, magnitude, duration and direction(ii. Center of resistance and rotation, moment of force and moment of couple.١	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
21	1	Knowledge and application	iii. Types of tooth movement iv. Rate of tooth	in person education lectures using d show (Power Point	Short quizzes Term exam final exam

			movement and factors affecting it	software)	
22	1	Knowledge and application	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,(	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
23	1	Knowledge and application	b. Removable Orthodontic 1 Appliance: i. Properties of various components (SS wire, acrylic(ii. Components: (١active components)springs, screws and elastics(	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
24	1	Knowledge and application	(٢retentive components)clasps((٣acrylic base plate and bite planes	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam

			(ٔanchorage		
25		Knowledge and application	iii. Design of a removable orthodontic appliance iv. Construction of a removable orthodontic appliance	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
26		Knowledge and application	V.Soldering and welding vi. Post-insertion instructions and guidelines	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
27		Knowledge and application	c. Fixed orthodontic 1 appliance: Types, components, advantages, limitation, biomechanics, banding vs. Bonding	in person education lectures using d show (Power Point software)	Short quizzes Term exam final exam
28			Use of extra-oral anchorage, temporary anchorage devices (TADs), and lingual fixed appliance		
29			d. Orthopedic and Myofunctional appliance: -Types, components, advantages, limitation, mode of action e. Other active appliances:		

			combination appliances, Invisalign		
30			f. Retention and retainer - Retention (definition, reason, time(Retainers (Hawley, clear overlay, positioners, permanent fixation, precision(		

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

Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Hand book of local anesthesia 7th edition Stanely F. Malamed , Elsevier.2019
Main references (sources)	Contemporary oral and maxillofacial surgery 7th edition 2019 (Elsevier).
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	

Pediatric Dentistry

Course Name:
Pediatric Dentistry / 4th class
Course Code:
Semester / Year:

Year

Description Preparation Date:

7/2/2026

Available Attendance Forms:

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

90 hours / 4 credits

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

Name: lecturer. Abeer Ahmed Yahya
Email: Abeer.A.Yahya@gmail.com

Course Objectives

1. Understanding and assimilating theoretical and practical methods for treating all cases of children's dental injuries
2. Learn about scientific methods and methods supported by means of explanation to learn how to determine primary and permanent teeth and the problems related to them.

Teaching and Learning Strategies

1. Microsoft power point lecture method
2. Discussion method.
3. Report method.
4. The method of e-learning within the university campus is by uploading the lectures on the college's website for the lectures of teachers in the college.

Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
١	1 theory 2 seminar	Eruption of teeth , normal eruption process	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
٢	1 theory 2 seminar	Teething and difficult eruption	Pediatric Dentistry	Microsoft power point	Daily, weekly, monthly exam, mid-

				lecture method, Discussion method., Report method.	year and final exam
٣	1 theory 2 seminar	Eruption haematoma , sequestrum ,ectopic eruption	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
٤	1 theory 2 seminar	Factors causes differences in time of eruption	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
٥	1 theory 2 seminar	Systemic (disease) Factors which cause late eruption Deciduous Dentition Period, Ugly Duckling Stage	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
٦	1 theory 2 seminar	Morphology of the primary teeth	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
٧	1 theory 2 seminar	Normal morphology of all primary teeth and their clinical consideration	Pediatric Dentistry	Microsoft power point lecture method, Discussion	Daily, weekly, monthly exam, mid-year and final exam

				method., Report method.	
٨	1 theory 2 seminar	Morphological differences between primary and permanent teeth	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
٩	1 theory 2 seminar	Functions of primary teeth	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
١٠	1 theory 2 seminar	Dental caries; Definition and Classification	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
١١	1 theory 2 seminar	Rampant dental caries, Early childhood caries,	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
١٢	1 theory 2 seminar	Restorative dentistry for children Isolation and maintenance of dry field and application of the rubber Dam	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
١٣	1 theory 2 seminar	Morphological consideration ,cavity preparation Cavity	Pediatric Dentistry	Microsoft power point lecture method, Discussion	Daily, weekly, monthly exam, mid-year and final exam

		preparation on primary teeth,		method., Report method.	
١٤	1 theory 2 seminar	Restorative materials used on pediatric dentistry	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
١٥	1 theory 2 seminar	Matrices and retainers	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
١٦	1 theory 2 seminar	Chrome steel crowns, Atraumatic Restorative Treatment (ART)	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
١٧	1 theory 2 seminar	Treatment of deep caries	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
١٨	1 theory 2 seminar	Indirect pulp treatment	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
١٩	1 theory 2 seminar	Vital pulp therapy pulpotomy	Pediatric Dentistry	Microsoft power point lecture method, Discussion	Daily, weekly, monthly exam, mid-year and final exam

				method., Report method.	
٢٠	1 theory 2 seminar	Non vital pulp therapy technique	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
٢١	1 theory 2 seminar	Reaction of pulp to various capping material	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
٢٢	1 theory 2 seminar	Local anesthesia and pain control for children	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
٢٣	1 theory 2 seminar	Anesthetizing mandibular and maxillary teeth and soft tissue	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
٢٤	1 theory 2 seminar	complications after a local anesthetic	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
٢٥	1 theory 2 seminar	supplemental injection techniques	Pediatric Dentistry	Microsoft power point lecture method, Discussion method.,	Daily, weekly, monthly exam, mid-year and final exam

				Report method.	
٢٦	1 theory 2 seminar	Oral surgery for children, indication and contrain dication for extraction of primary teeth,	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
٢٧	1 theory 2 seminar	technique for extraction of primary teeth	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
٢٨	1 theory 2 seminar	extraction complications	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method	Daily, weekly, monthly exam, mid-year and final exam
٢٩	1 theory 2 seminar	postoperative extraction complications, radiographic survey of teeth extracted	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam
٣٠	1 theory 2 seminar	Infections manifestation and management	Pediatric Dentistry	Microsoft power point lecture method, Discussion method., Report method.	Daily, weekly, monthly exam, mid-year and final exam

1. Course Evaluation

Distributing the score out of 100 according to the followings: 20% first and second semesters. 20% mid year exam, 60% final exam

2. Learning and Teaching Resources

Required textbooks (curricular books, if any)	McDonald and Avery Dentistry for the Child Adolescent .2011 (Ninth Edition) ISBN 978-0-3

	28745-6,MOSBY ELSEVIER3251 River LaneMaryland Heights, Missouri 63043.
Main references (sources)	Handbook of Pediatric Dentistry .2013Fourth edi 2013, ISBN 9780723436959, British Lib Cataloguing in Publication Data
Recommended books and references (scientific journals, reports…)	• Journal of Dentistry for Children. • Journal of Clinical Pediatric Dentistry. • International Journal of Paediatric Dentistry. • European archives of paediatric dentistry : official journal of the European Academy of Paediatric Dentistry. • Journal of Dental Traumatology. • Pediatric Dental Journal. • Journal of Dentistry for Children.
Electronic References, Websites	American Academy of Pediatric Dentistry https://www.aapd.org/ The International Association of Dental Traumatology (IADT)

periodontics

Course name
periodontics
Course code
DEN40007

semester/ year

Annual

Date this description was prepared

9.2.2026

Available attendance forms

On-campus (Face-to-face)

Number of study hours (total) / Number of units (total)

Name of the course administrator (if more than one name is mentioned)

Teaching Assistant Dhuha mohammed

objectives Course

1. Provide students with fundamental theoretical and clinical knowledge in periodontics, and enable them to relate scientific principles to clinical practice within the scope of a general dental practitioner.
2. Develop students' ability to diagnose periodontal cases and formulate appropriate treatment plans through a clear understanding of clinical procedures and work sequences.
3. Enhance students' clinical skills and self-confidence by applying basic periodontal procedures in a supervised clinical environment.

Teaching and learning strategies

The teaching of the Periodontics course is based on a variety of educational strategies designed to simplify the subject and promote active learning, including:

1. Theoretical lectures delivered using PowerPoint presentations supported by clinical photographs and practical examples to explain core periodontal concepts.
2. Clinical teaching in dental clinics, where students perform periodontal procedures under direct academic supervision.
3. Interactive discussions during lectures and clinical sessions to encourage critical thinking and integration of theoretical knowledge with clinical practice.
4. Case-based learning, using clinical cases to train students in diagnosis, treatment planning, and clinical decision-making.
5. Continuous feedback and guidance to identify common clinical errors and improve students' technical and professional performance.

Course structure

Evaluation method	Learning method	Name of unit or topic	Required learning outcomes	watches	week
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method,	Terms & definitions frequently used in periodontology	Understand key periodontal terms and their meanings	1	1

	Discussion method., Report method.				
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Anatomy of the periodontium	Identify the structures of the periodontium and their functions	1	2
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Anatomy of the periodontium	Identify the structures of the periodontium and their functions	1	3
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Anatomy of the periodontium	Identify the structures of the periodontium and their functions	1	4
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Anatomy of the periodontium	Identify the structures of the periodontium and their functions	1	5
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Anatomy of the periodontium	Identify the structures of the periodontium and their functions	1	6
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Classification of periodontal diseases and conditions (2017)	Understand the main types of periodontal diseases and their features.	1	7
quiz every 2–4	Microsoft	Classification of	Understand the	1	8

lectures Term exam Final exam	power point lecture method, Discussion method., Report method.	periodontal diseases and conditions (2017)	main types of periodontal diseases and their features.		
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Classification of periodontal diseases and conditions (2017)	Understand the main types of periodontal diseases and their features.	1	9
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Etiology of periodontal disease	Identify the causes and contributing factors of periodontal disease	1	10
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Etiology of periodontal disease and risk factors	Identify the causes and contributing factors of periodontal disease	1	11
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Microbiologic specificity of periodontal diseases	Understand the role of specific microorganisms in periodontal disease development.	1	12
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Dental calculus	Recognize formation, composition, and clinical significance of dental calculus	1	13
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method.,	Dental stain	Identify types, causes, and prevention of dental stains	1	14

	Report method.				
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Etiology of periodontal disease	Understand the main causes of periodontal disease	1	15
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Etiology of periodontal disease	Understand the main causes of periodontal disease	1	16
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Etiology of periodontal disease and risk factors	Understand the main causes of periodontal disease	1	17
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Impact of periodontal infection on systemic health	Recognize how periodontal disease can affect overall health.	1	18
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Impact of periodontal infection on systemic health	Recognize how periodontal disease can affect overall health.	1	19
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Periodontal indices	Learn to measure and assess periodontal health using standard i ndices	1	20
quiz every 2–4 lectures Term exam	Microsoft power point lecture	The periodontal pocket	Understand formation, depth, and clinical	1	21

Final exam	method, Discussion method., Report method.		significance of periodontal pockets.		
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	The periodontal pocket	Understand formation, depth, and clinical significance of periodontal pockets.	1	22
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Treatment plan guidelines	Develop appropriate periodontal treatment plans based on diagnosis.	1	23
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Treatment plan guidelines	Develop appropriate periodontal treatment plans based on diagnosis.	1	24
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Treatment plan guidelines	Develop appropriate periodontal treatment plans based on diagnosis.	1	25
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Treatment plan guidelines	Develop appropriate periodontal treatment plans based on diagnosis.	1	26
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Plaque biofilm control for the periodontal patient	Learn methods to control plaque and maintain periodontal health.	1	27

quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Plaque biofilm control for the periodontal patient	Learn methods to control plaque and maintain periodontal health.	1	28
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Periodontal instruments and sharpening	Identify periodontal instruments and maintain their effectiveness through proper sharpening.	1	29
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Breath Malodor (Halitosis)	Recognize causes and management of bad breath in periodontal patients.	1	30
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Systemic anti-infective therapy for periodontal diseases	Understand the use of systemic medications to manage periodontal infections	1	31

Course Evaluation

First Semester: 20 marks(10 marks Theory)(10 marks Clinical)
Second Semester: 20 marks(10 marks Theory)(10 marks Clinical)
Final Exam: 60 marks(20 marks Practical Exam)(40 marks Written (Theory) Exam)
Total: 100 marks

Learning and teaching resources

Required textbooks (curricular books, If any)	Newman And Carranza's Clinical Periodontology A Implantology, Fourteenth Edition 2025 By Elsevier, In
Main references (sources)	
Recommended books and references (journals, reports, etc.)	Journals of clinical periodontology in the field of specialization and under the supervision of the specialist professor when conducting research or preparing a topic for discussion
Electronic references, websites	Essentials of periodontology - Websites that may pub new modalities and resent news

Prosthodontics

Course name
Prosthodontics
Course code
DEN40008
semester/ year
Annual
Date this description was prepared
٧,٢,٢٠٢٦
Available attendance forms
On-campus (Face-to-face)
Number of study hours (total) / Number of units (total)
Name of the course administrator (if more than one name is mentioned)
Teaching Assistant Riyam Hasan Hazim Reyam.h.hazim@gu.edu.iq
objectives Course
1. Provide students with fundamental theoretical and clinical knowledge in prosthodontics, and enable them to relate scientific principles to clinical practice within the scope of a general dental practitioner. 2. Develop students' ability to diagnose prosthodontic cases and formulate appropriate treatment plans through a clear understanding of clinical procedures and work sequences. 3. Enhance students' clinical skills and self-confidence by applying basic prosthodontic procedures in a supervised clinical environment
Teaching and learning strategies
The teaching of the Prosthodontics course is based on a variety of educational strategies designed to simplify the subject and promote active learning, including: **-Theoretical lectures** delivered using PowerPoint presentations supported by clinical photographs and practical examples to explain core prosthodontic concepts. **-Clinical teaching in dental clinics**, where students perform prosthodontic procedures under direct academic supervision. **-Interactive discussions** during lectures and clinical sessions to encourage critical thinking and integration of theoretical knowledge with clinical practice. **-Case-based learning**, using clinical cases to train students in diagnosis, treatment planning, and clinical decision-making. **-Continuous feedback and guidance** to identify common clinical errors and improve students' technical and professional performance
Course structure

Evaluation method	Learning method	Name of unit or topic	Required learning outcomes	watches	week
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Anatomy and physiology as related to dental prosthesis	Understand oral anatomical structures and physiological function that affect dental prosthesis	1	1
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	(osteology)	Understand the structure of jaw bones and bony landmarks.	1	2
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Anatomy and physiology as related to dental prosthesis (Myology)	Understand the role of oral and facial muscles to denture	1	3
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Diagnosis and treatment plan for RPD	Understand patient assessment and formulate an appropriate treatmen plan	1	4
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	To be continued Diagnosis and treatment	Understand patient assessment and formulate an appropriate treatment plan	1	5
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Preparation of the mouth to receive an RPD	Recognize required oral preparations to ensure proper support, retention, and success	1	6
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Preparation of the mouth to receive an RPD (Continued).	Recognize required oral preparations to ensure proper support, retention, and success	1	7
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Classification of impression technique	Understand the different impression techniques and their indications	1	8
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Classification of impression technique (To be continue)	Understand the different impression techniques and their indications	1	9
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report	Designing Support	Identify and plan proper support areas	1	10

	method.				
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Fitting the removable partial denture framework	Ensure proper seating and adaptation of the RPD framework	1	11
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Occlusal Relationship for Removable Partial Denture	Understand and establish proper bite and occlusion	1	12
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Jaw relation in RPD	Record and relate jaw positions accurately	1	13
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Trial RPD	Evaluate fit, comfort, and function before final denture fabrication.	1	14
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Initial placement and adjustment of RPD	Place the RPD and make necessary adjustments	1	15
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Pre- prosthetic surgery	Prepare the oral tissues surgically to optimize prosthesis fi and function	1	16
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Pre-prosthetic Surgical Considerations (Continued).	Prepare the oral tissues surgically to optimize prosthesis fit and function	1	17
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Diagnosis and treatment plan CD	Assess the patient and plan treatment	1	18
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	To be continued diagnosis and treatment plan for CD	Assess the patient and plan treatment	1	19
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Impression in CD	Take accurate impressions for complete denture	1	20
quiz every 2–4 lectures	Microsoft power point lecture	TMJ and mandibular	Understand jaw movements and TMJ	1	21

Term exam Final exam	method, Discussion method., Report method.	movement.	function		
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Digital RPD	Understand digital techniques for designing and fabricating RPDs	1	22
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Vertical jaw relation	Determine proper vertical dimension	1	23
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Horizontal jaw relation (Centric occlusion)	Determine proper horizontal dimension	1	24
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Try in stage in CD	Check fit, occlusion, and aesthetics before final denture processing.	1	25
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Insertion of CD	Place the complete denture and ensure proper fit and comfor	1	26
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Adjustments of CD	Make necessary corrections to improv fit, comfort, and funct	1	27
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Post insertion complications in CD	Identify and manage common issues after denture placement	1	28
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	relining and rebasing of CD	Restore denture fit by modifying or refabricating the base	1	29
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Repair of fractured RPD	Restore function by repairing broken removable partial dentures	1	30
quiz every 2–4 lectures Term exam Final exam	Microsoft power point lecture method, Discussion method., Report method.	Esthetic denture materials	Understand materials used to enhance denture appearance	1	31

Course Evaluation	
First Semester: 20 marks(10 marks Theory)(10 marks Clinical) **Second Semester:** 20 marks(10 marks Theory)(10 marks Clinical) **Final Exam:** 60 marks(20 marks Practical Exam)(40 marks Written (Theory) Exam) Total: 100 marks	
Learning and teaching resources	
Required textbooks (curricular books, if any)	McCracken's Removable Partial Prosthodontics 13th Edition December 2, 2015
Main references (sources)	Textbook of Prosthodontics (Deepak Nallaswamy) Published December 1, 2006