

**Ministry of Higher Education and Scientific Research  
Scientific Supervision and Scientific Evaluation Apparatus  
Directorate of Quality Assurance and Academic Accreditation  
Accreditation Department**



**Academic Program  
and Course  
Description Guide  
Department of dental  
prevention and  
orthodontics techniques**

**2025**

## **Introduction:**

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

## **Concepts and terminology:**

**Academic Program Description:** The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

**Course Description:** Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

**Program Vision:** An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

**Program Mission:** Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

**Program Objectives:** They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

**Curriculum Structure:** All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

**Learning Outcomes:** A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

**Teaching and learning strategies:** They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

## **Academic Program Description Form**

University Name: Al-Furat Al-Awsat Technical University

Faculty/Institute: Najaf Technical Institute

Scientific Department: Department of dental prevention and orthodontics techniques

Academic or Professional Program Name: Diploma in dental prevention and orthodontics techniques

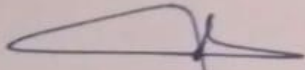
Final Certificate Name: Technical Diploma in dental prevention and orthodontics techniques

Academic System: Semester course system

Description Preparation Date: 3/11/2024

File Completion Date: 4/6/2025

Signature:



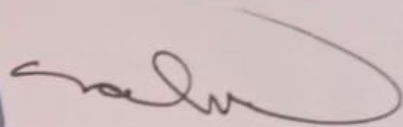
Head of Department Name:

Dr- Mahmoud Abdaljaleel

Date: 4/6/2025



Signature:



Scientific Associate Name:

Dr- Salah Mahdi

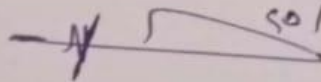
Date:

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance Department:

Date:



Signature:



Approval of the Dean  
Dr- Haider Hassan Abed

### 1. Program Vision

Program vision is written here as stated in the university's catalogue and website.

### 2. Program Mission

Program mission is written here as stated in the university's catalogue and website.

### 3. Program Objectives

General statements describing what the program or institution intends to achieve.

### 4. Program Accreditation

**Not available**

### 5. Other external influences

**Not available**

### 6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	39	134	%29	
College Requirements	39	134	%29	
Department Requirements	39	134	%29	
Summer Training	270	–	–	
Other				

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

## 7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
<b>1st Year / 1st Semester</b>		Dental Anatomy	theoretical	practical
		Dental Materials (Dental Laboratories)	theoretical	practical
		Dental Instruments	theoretical	practical
		Oral and Maxillofacial Anatomy	theoretical	practical
		Introduction to Orthodontic Practices	theoretical	practical
		Microbiology	theoretical	practical
		Oral Chemistry	theoretical	practical
		Computer Applications	theoretical	practical
		Human Rights	theoretical	
		English Language	theoretical	
<b>1st Year / 2nd Semester</b>		Oral Pathology	theoretical	practical
		Dental Materials (Dental Clinics)	theoretical	practical
		Dental Appliances	theoretical	practical
		Dental and Periodontal Diseases	theoretical	practical
		Pre-Orthodontic Treatment	theoretical	practical
		Occlusion and Malocclusion	theoretical	-
		Immunology	theoretical	practical
		Oral Physiology	theoretical	practical
		Arabic Language	theoretical	-
<b>2nd Year / 1st Semester</b>		Nutrition and Oral Health	theoretical	practical
		Dental Radiology	theoretical	practical
		General Dental Health	theoretical	practical
		Oral Surgery	theoretical	practical
		Types of Orthodontic Treatment	theoretical	practical
		Orthodontic Appliances and Instruments	theoretical	practical
		Pediatric Dentistry	theoretical	practical
		Dental Prosthetics	theoretical	practical
		Dental Implantology	theoretical	practical
		Research Methodology		practical

<b>2nd Year / 2nd Semester</b>		Oral Prevention		
		Maxillofacial Radiology		
		Biostatistics		
		Oral Medicine		
		Pediatric Dental Prevention		
		Post-Orthodontic Retention		
		Implant Prosthodontics		
		Professional Ethics		
		Research Project		

### 8. Expected learning outcomes of the program

<b>Knowledge</b>	
<b>A 1</b> – Understanding the properties and uses of materials and tools in dentistry, including sterilization methods and proper storage practices.	<b>A 2</b> – Familiarity with basic medical information in the diagnosis of oral and dental diseases, as well as knowledge of the principles of preliminary diagnosis.
<b>A 3</b> – Knowledge of tooth cleaning methods and calculus removal, and the application of preventive materials such as fluoride and sealants.	<b>A 4</b> – Understanding the fundamentals of orthodontics, including the diagnosis of malocclusion and methods for early prevention and treatment.
<b>Skills</b>	
<b>B 1</b> – The ability to perform preventive procedures such as professional cleaning, fluoride application, and placement of preventive fillings.	<b>B 2</b> – Assisting in simple orthodontic procedures, such as the installation and maintenance of removable orthodontic appliances.
<b>B 3</b> – Mastery of the use of devices and sterilization according to infection control protocols.	<b>B 4</b> – Providing health education to patients regarding oral and dental care, as well as the prevention of cavities and gum diseases.
<b>Ethics</b>	
<b>C1</b> – Commitment to professional ethics and respect for patient privacy and confidentiality of information. patients and colleagues.	<b>C2</b> – Demonstrating empathy and humane care for all patients, especially vulnerable groups.
<b>C3</b> – Working effectively within the medical team and enhancing effective communication with	<b>C4</b> – Actively participating in community and awareness activities to promote public health.

## 9. Teaching and Learning Strategies

Lecturing	Scientific Research	Reports Discussion
Questioning		Audiovisual Aids in Lectures
Laboratory Experiments		Self-Directed Learning
Use of Educational Models	Preclinical	and Clinical Education

## 10. Evaluation methods

- **Daily quizzes** along with attendance and punctuality + **activity grade + midterm exam (40%) + final exam (60%)**
- **Laboratory practical exams**
- **Clinical exams on patients**
- **Evaluation of student interaction with patients**
- **Observation of performance in the clinic** (including interaction with patients and colleagues)
- **Evaluation surveys from patients and supervisors**

## 11. Faculty

### Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)	Number of the teaching staff	
	General	Special		Staff	Lecturer
Professor	-	-			
Associate Professor	1	1		Staff	

Lecturer		1				Lecturer
Assistant Lecturer	2	2			Staff	
Assistant Lecturer	-	4				Lecturer
Technician	2	1			Staff	
Technician	-	4				Lecturer

## Professional Development

### Mentoring new faculty members

- **Orientation for new faculty members**
- **Specialized training:** Workshops on modern teaching methods (e.g., Problem-Based Learning)
- **Clinical development:** Courses on new dental prevention techniques (e.g., laser applications)
- **Mentorship:** Pairing new faculty with senior professors for guidance
- **Teaching and research performance evaluations every 6 months**

### Professional development of faculty members

- Enhancing teaching and clinical competencies of faculty members
- Strengthening scientific research and academic publishing skills
- Keeping pace with the latest advancements in dental prevention and orthodontics
- Improving the quality of education and aligning it with labor market requirements

## 12. Acceptance Criterion

- (High School Diploma (Scientific Stream))
- Competitive GPA

## 13. The most important sources of information about the program

- Scientific references

- Information network (Internet)
- Books and specialized libraries in dental prevention

#### 14. Program Development Plan

- Review and update the curriculum
- Organize the academic schedule
- Enhance practical training
- Promote scientific research

### 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	
1st Year / 1st Semester		Dental Anatomy	Basic	√	√			√								√
		Dental Materials (Dental Laboratories)	Basic	√		√		√				√				
		Dental Instruments	Basic	√							√	√			√	
		Oral and Maxillofacial Anatomy	Basic		√		√	√					√			
		Introduction to Orthodontic Practices	Basic		√		√		√		√					√

		Microbiology		√	√						√	√	√		
		Oral Chemistry		√		√		√			√			√	√
		Computer Applications							√					√	√
		Human Rights										√	√	√	√
		English Language										√		√	√
<b>1st Year / 2nd Semester</b>		Oral Pathology	<b>Basic</b>	√	√	√		√			√		√		

	Dental Materials (Dental Clinics)	<b>Basic</b>	√		√		√			√	√			√
	Dental Appliances	<b>Basic</b>	√			√		√	√		√		√	
	Dental and Periodontal Diseases	<b>Basic</b>	√	√			√			√		√		√
	Pre-Orthodontic Treatment	<b>Basic</b>	√	√		√		√	√		√			√
	Occlusion and Malocclusion	<b>Basic</b>		√		√		√				√		√
	Immunology		√	√			√			√	√		√	
	Oral Physiology		√	√			√			√	√	√		



		Orthodontic Appliances and Instruments			√		√		√				√		√
		Pediatric Dentistry		√	√			√							√
		Dental Prosthetics		√		√		√				√			
		Dental Implantology		√						√	√			√	
		Research Methodology										√		√	√
<b>2nd Year / 2nd Semester</b>		Oral Prevention	<b>Basic</b>	√			√		√	√		√		√	
		Maxillofacial Radiology	<b>Basic</b>	√	√			√			√		√		√

		Biostatistics	<b>Basic</b>	√	√	√		√		√	√		√		√
		Oral Medicine	<b>Basic</b>		√	√		√		√	√	√		√	
		Pediatric Dental Prevention	<b>Basic</b>		√		√		√				√		√
		Post-Orthodontic Retention			√	√	√	√		√	√			√	
		Implant Prosthodontics										√	√	√	√
		Professional Ethics											√	√	√

		Research Project											√	√	√	√

- Please tick the boxes corresponding to the individual program learning outcomes under evaluation.

## Course Description Form

1. Course Name:	
<b>Dental Anatomy</b>	
2. Course Code:	
3. Semester / Year:	
<b>1st Year / 1st Semester</b>	
4. Description Preparation Date:	
3/11/2024	
5. Available Attendance Forms:	
<b>In-Person (Lectures + Practical Laboratories)</b>	
6. Number of Credit Hours (Total) / Number of Units (Total)	
<b>4/60</b>	
7. Course administrator's name (mention all, if more than one name)	
Name: Bidaa Hassoun Salman Email:	
8. Course Objectives	
<b>Course Objectives</b>	<ul style="list-style-type: none"> <li>• Understand the anatomical structure of permanent and deciduous teeth</li> <li>• Identify the morphological features of each tooth and their functional significance</li> <li>• Analyze the relationship between tooth anatomy, oral health, and dental restorations</li> <li>• Develop practical drawing and dissection skills using dental models/simulators</li> </ul>
9. Teaching and Learning Strategies	
<b>Strategy</b>	<ul style="list-style-type: none"> <li>• <b>Theoretical Lectures:</b> Use of visual presentations and illustrative diagrams.</li> <li>• <b>Practical Learning:</b> Dental model dissection Use of 3D simulation software</li> <li>• <b>Interactive Learning:</b> Group discussions</li> </ul> <p style="text-align: center;">Clinical case problem-solving</p>
10. Course Structure	

Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods
1	1-3	General introduction and basic concepts of tooth parts	Demonstrating dental dissection tools usage	Lecture + Discussion + Presentation
2	1-3	Tooth parts: Enamel	Preparing wax blocks with anatomical measurements	
3	1-3	Tooth parts: Dentin	Demonstrating precise anatomical preparations	
4	1-3	Tooth parts: Pulp	Demonstrating labial surface dissection	
5	1-3	Tooth parts: Cementum	Demonstrating labial surface dissection	
6	1-3	Peridontal tissues/structures	Identifying anatomical landmarks	
7	1-3	Alveolar bone: Definition and cells	Using numbering in medical records	
8	1-3	Gingiva	Identifying morphological differences	
9	1-3	Tooth nomenclature	Analyzing tooth development stages	
10	1-3	Differences between primary and permanent teeth	Analyzing tooth development stages	
11	1-3	Embryology of dental tissues	Demonstrating nerve/vessel pathways	
12	1-3	Tooth numbering systems	Demonstrating nerve/vessel pathways	
13	1-3	Dental innervation	Relating anatomy to function	
14	1-3	Dental blood supply	Assessing dissection skills	
15	1-3	Comprehensive review	Assessing dissection skills	

### 11. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade + midterm exam (40%) + final exam (60%)**
- **Laboratory practical exams + Theoretical exams**

### 12. Learning and Teaching Resources

Wheeler's Dental Anatomy, Physiology and Occlusion – Stanley J. Nelson.	Woelfel's Dental Anatomy – Rickne Sch

13. Course Name:				
<b>Dental Materials (Dental Laboratories)</b>				
14. Course Code:				
15. Semester / Year:				
<b>1st Year / 1st Semester</b>				
16. Description Preparation Date:				
3/11/2024				
17. Available Attendance Forms:				
<b>In-Person (Lectures + Practical Laboratories)</b>				
18. Number of Credit Hours (Total) / Number of Units (Total)				
<b>5/75</b>				
19. Course administrator's name (mention all, if more than one name)				
Name: <b>Assistant Lecturer. Salah Mahdi Saleh Al-Hare</b>				
Email:				
20. Course Objectives				
Course Objectives		<ul style="list-style-type: none"> <li>• Provide students with theoretical and practical knowledge of dental anatomy and properties of dental materials used in dentistry</li> <li>• Develop diagnostic and clinical skills related to tooth structure and appropriate material selection for therapeutic procedures</li> <li>• Enhance deep understanding of the relationship between dental anatomy and clinical applications of dental materials</li> <li>• Introduce students to types of dental materials (gypsum, impression materials, fillings, cements)</li> </ul>		
21. Teaching and Learning Strategies				
Strategy		<ul style="list-style-type: none"> <li>• Theoretical Lectures: Use of visual presentations and illustrative diagrams.</li> <li>• Practical Labs</li> <li>• Interactive Learning: Group discussions .</li> </ul>		
22. Course Structure				
Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods
1	1-4	Introduction to Dental Materials and Their Classification	Familiarization with Basic Lab Tools	Lecture + Discussion + Presentation

2	1-4	Properties of Dental Materials (Physical, Chemical)	Measuring Viscosity and Hardness of Dental Materials	
3	1-4	Properties of Solid Materials and Wear Resistance	Testing Wear Resistance of Filling Materials	
4	1-4	Gypsum Products and Their Uses	Measuring Setting Time and Expansion of Gypsum	
5	1-4	Types of Impression Materials (Hydrocolloid, Elastomer)	Preparing Hydrocolloid Impression Materials	
6	1-4	Hydrocolloid Impression Materials and Applications	Taking an Impression Using Hydrocolloid Materials	
7	1-4	Elastic Impression Materials (Polysulfide, Silicone)	Comparing Elastic Impression Materials	
8	1-4	Digital Impressions and CAD/CAM Techniques	Using a Digital Scanner	
9	1-4	Metal Alloys in Dentistry	Analyzing Properties of Gold and Chromium Alloys	
10	1-4	Acrylic Materials (Mixing, Processing)	Step-by-Step Preparation of Amalgam Filling	
11	1-4	Acrylic Materials as Denture Bases	Preparing an Acrylic Denture Base	
12	1-4	Light-Cure Composite Materials	Applying Light-Cure Filling on a Dental Model	
13	1-4	Polishing and Finishing Materials for Fillings	Applying Polishing Techniques on Fillings	
14	1-4	Completion of Polishing and Finishing Techniques	Evaluating Filling Surfaces After Polishing	
15	1-4	Dental Cements and Their Types	Testing Bond Strength of Dental Cement	

### 23. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (40%)** + **final exam (60%)**
  - **Laboratory practical exams** + **Theoretical exams**

### 24. Learning and Teaching Resources

- **Phillips' Science of Dental Materials (12th Ed.)** | - **Craig's Restorative Dental Materials (14th Ed.)**

25. Course Name:

**Dental instruments**

26. Course Code:

27. Semester / Year:

**1st Year / 1st Semester**

28. Description Preparation Date:

3/11/2024

29. Available Attendance Forms:

**In-Person (Lectures + Practical Laboratories)**

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

**5/75**

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

Name: **Hoorah Ahmed**

Email:

32. Course Objectives

**Course Objectives**

- **Introduce students to the concept and roles of dental assistants and dental hygienists.**
- **Understand the history and key developments in the field of dentistry.**
- **Learn fundamental skills for preparing dental clinics and organizing instruments.**
- **Master sterilization principles and infection control in dental practice.**

33. Teaching and Learning Strategies

**Strategy**

- **Theoretical Lectures: Use of visual presentations and illustrative diagrams.**
- **Practical Labs**
- **Interactive Learning: Group discussions .**

34. Course Structure

Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods
1	1-4	Introduction, definition of dental assistant and dental hygienist, history of dentistry, branches of dentistry, preparation of treatment room.	Introduction to the role of dental assistant and technician in dentistry and its history.	Lecture + Discussion + Presentation

2	1-4	Dental clinic: Preparing doctor's room, operation method, instrument cabinet, dental chair.	Practical explanation and application of clinic preparation and instrument organization.	
3	1-4	Dental unit: Its components, protection, cleaning, electrical and water connections with filter.	Drawing dental unit components and explaining connections.	
4	1-4	Protecting dental unit, assistant's role before starting work, patient positioning on chair, doctor and assistant positions.	Practical application of patient and doctor positions during treatment.	
5	1-4	Oral surgery: Instruments used, methods of use, cleaning.	Demonstration and disassembly of oral surgery instruments.	
6	1-4	Sterilization: Methods of instrument sterilization, chemical disinfectants, types of disinfectants, instruments sterilized by these methods.	Practical application of instrument sterilization using chemical methods.	
7	1-4	Preventing disease transmission: Types of oral bacteria, medications used in oral surgery, methods of drug administration.	Preparing medications and administration methods (injection, topical).	
8	1-4	Restorative dentistry: Definition and importance, instruments used in dental drilling.	Demonstration of dental drilling instruments and their benefits.	
9	1-4	Types, sizes and shapes of drill burs, cleaning methods, instruments used in dental fillings.	Demonstration of drill burs and practical cleaning application.	
10	1-4	Methods of mixing dental fillings: Cement, temporary fillings, amalgam fillings, manual and electric mixing.	Practical application of manual and electric amalgam mixing.	
11	1-4	Anterior fillings: Light-cured fillings, self-cured (chemical) fillings, mixing methods, instruments used, acids used.	Practical application of light-cured filling on dental model.	
12	1-4	Patient examination: Examination tools, examination methods, systematic approach to handling instruments.	Clinical examination practice on colleague using examination tools.	
13	1-4	Numbering permanent and deciduous teeth,	Filling out patient record form (Case Sheet).	

		method of creating patient record, importance of records.		
14	1-4	Systemic diseases: Prevention methods, their importance in medical records, gum diseases, definition of gum tissues.	Analysis of patient records for diseases like diabetes.	
15	1-4	Dental calculus: Definition, types, formation process, components, adhesion method to teeth.	Calculus removal from artificial dental models.	

### 35. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (40%)** + **final exam (60%)**
  - **Laboratory practical exams + Theoretical exams**

### 36. Learning and Teaching Resources

<b>Textbooks &amp; Workbooks – Structured content aligned with curricula.</b>	<b>Handouts &amp; Worksheets – Practice exercises reinforcement</b>
<b>Charts &amp; Posters – Visual aids for better understanding.</b>	<b>Manipulatives – Physical objects (e.g., blocks, models) for hands-on learning.</b>

37. Course Name:				
<b>Oral and maxillofacial anatomy</b>				
38. Course Code:				
39. Semester / Year:				
<b>1st Year / 1st Semester</b>				
40. Description Preparation Date:				
3/11/2024				
41. Available Attendance Forms:				
<b>In-Person (Lectures + Practical Laboratories)</b>				
42. Number of Credit Hours (Total) / Number of Units (Total)				
4/60				
43. Course administrator's name (mention all, if more than one name)				
Name: <b>Mohammed Hussein Jabbar</b>				
Email:				
44. Course Objectives				
Course Objectives	<ul style="list-style-type: none"> <li>• Describe anatomical structures of the face and jaws (bones, muscles, nerves, vessels).</li> <li>• Apply anatomical knowledge in practical skills (models, experiments, drawings).</li> <li>• Analyze functional relationships between anatomical structures (mastication, facial expressions).</li> <li>• Integrate anatomy with clinical applications (oral surgery, dentistry, diagnostics).</li> </ul>			
45. Teaching and Learning Strategies				
Strategy	<ul style="list-style-type: none"> <li>• Theoretical Lectures: Use of visual presentations and illustrat diagrams.</li> <li>• Practical Labs</li> <li>• Interactive Learning: Group discussions .</li> </ul>			
46. Course Structure				
Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods

1	1-4	Introduction to the Skull (Divisions, Functions)	Assembling a Plastic Skull Model	Lecture + Discussion + Presentation
2	1-4	Facial Bones (Zygomatic, Maxilla)	Coloring Bones on Models	
3	1-4	Mandible (Structure, Foramina)	Sculpting the Mandible	
4	1-4	Maxilla and Paranasal Sinuses	Laser Illumination of Sinuses	
5	1-4	Cranial Bones	Assembling Skull Bone	
6	1-4	Paranasal Sinuses	Assembling Skull Bones	
7	1-4	Orbit and Nasal Cavity	Anatomical Drawing of the Orbit	
8	1-4	Base of the Skull	Pressure Experiments on Skull Base Models	
9	1-4	Temporomandibular Joint (TMJ)	Simulating Jaw Movements with a TMJ Simulator	
10	1-4	Oral Cavity	Peer-to-Peer Anatomical Examination	
11	1-4	Facial Muscles	Mimicking Facial Expressions	
12	1-4	Masticatory Muscles	Measuring Muscle Strength with Sensors	
13	1-4	Cranial Nerves	Tracing Nerve Pathways on Skin	
14	1-4	Blood Vessels & Lymphatics	Injecting Dye into Artery Models	
15	1-4	Salivary Glands	Simulating Saliva Secretion with Chemicals	

#### 47. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (40%)** + **final exam (60%)**
  - **Laboratory practical exams** + **Theoretical exams**

#### 48. Learning and Teaching Resources

<b>Composite resins, ceramics, dental cements, adhesion 14th Ed. (2018)</b>	<b>Clinical techniques, material selection, troubleshooting 4th Ed. (2020)</b>
<b>Biomaterials, CAD/CAM, mechanical testing 2nd Ed. (2019)</b>	<b>Gypsum, waxes, acrylics, corrosion 9th Ed. (2018)</b>

49. Course Name:

**Introduction to Orthodontic Practices**

50. Course Code:

51. Semester / Year:

**1st Year / 1st Semester**

52. Description Preparation Date:

3/11/2024

53. Available Attendance Forms:

**In-Person (Lectures + Practical Laboratories)**

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

4/60

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

Name: **Assistant Lecturer. Ronaq Rahman**

Email:

56. Course Objectives

Course Objectives

- Understand malocclusion diagnosis principles
- Apply clinical orthodontic examination
- Utilize basic orthodontic instruments
- Implement safe sterilization protocols

57. Teaching and Learning Strategies

Strategy

- Theoretical Lectures: Use of visual presentations and illustrative diagrams.
- Practical Labs
- Interactive Learning: Group discussions .

58. Course Structure

Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods
1	2-2	Introduction: Basic Concepts	Discussion Session 1 (Intro to Orthodontics)	Lecture + Discussion + Presentation
2	2-2	Orthodontic Clinical Practice	-	
3	2-2	Orthodontic Team Composition	-	
4	2-2	Occlusion Fundamentals	Discussion Session 2 (Occlusion - Part 1)	

5	2-2	Malocclusion Classification	Discussion Session 3 (Occlu Part 2)
6	2-2	Etiology of Malocclusion	-
7	2-2	Orthodontic Instruments	Discussion Session 4 (Instrumentation)
8	2-2	Sterilization Protocols	Discussion Session 6 (Sterilization)
9	2-2	Disinfection Methods	-
10	2-2	Hand Hygiene Protocols	-
11	2-2	Orthodontic Materials:	Wire materials photo/video presentation
12	2-2	Bracket Materials	Bracket systems photo/video presentation
13	2-2	Impression Materials	Photo/video demonstration (Part 1)
14	2-2	Bonding Materials	Photo/video demonstration (Part 2)
15	2-2	Comprehensive Review	Full practical review

#### 59. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (40%)** + **final exam (60%)**
  - **Laboratory practical exams** + **Theoretical exams**

#### 60. Learning and Teaching Resources

*Essentials of Orthodontics*" – Proffit  
(7th ed.)

*Clinical Orthodontic Diagnosis*" - Bishara

61. Course Name:

**Microbiology**

62. Course Code:

63. Semester / Year:

**1st Year / 1st Semester**

64. Description Preparation Date:

3/11/2024

65. Available Attendance Forms:

**In-Person (Lectures + Practical Laboratories)**

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

4/60

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

Name: **Assistant Professor Dr. Hayder Abdul-Ali Al-Shawi**

Email:

68. Course Objectives

Course Objectives

- Identify morphological features of oral bacteria, fungi, and viruses using microscopic and staining techniques
- Perform standardized microbial culture methods for isolation of oral pathogens
- Analyze antibiotic sensitivity patterns of oral streptococci using CLSI guidelines
- Demonstrate proper sterilization protocols for dental microbiology laboratories

69. Teaching and Learning Strategies

Strategy

- Theoretical Lectures: Use of visual presentations and illustrative diagrams.
- Practical Learning
- Interactive Learning: Group discussions

70. Course Structure

Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods
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1	2-2	Introduction to Microbiology: Branches of Science	Laboratory Tools: Microscope, Autoclave	Lecture + Discussion + Presentation
2	2-2	Bacterial Morphology: Internal Structure, Shape & Size	Smear Preparation & Staining Techniques	
3	2-2	Bacterial Classification: Taxonomic Methods, Structural Functions	Bacterial Morphology: Culture Media Preparation	
4	2-2	Growth Curve: Phases & Influencing Factors	Bacterial Morphology: Culture Media Preparation (Cont.)	
5	2-2	Sterilization & Disinfection: Types, Methods & Materials	Cultivation Techniques Streak/Stab Culture	
6	2-2	Oral Normal Flora: Types & Pathogenic Roles	Sterilization/Disinfection Applications	
7	2-2	Fermentation: Types & Role in Dental Caries	Isolation of Oral Normal Flora	
8	2-2	Role of Normal Flora in Dental Caries: Pathogenesis Stages	Isolation of Mutans & Mitis Bacteria	
9	2-2	Oral Bacteria: Mutans & Mitis Groups	Chemical Tests: Catalase/Oxidase Tests	
10	2-2	Streptococci: Streptococcus pyogenes	Antibiotic Sensitivity Testing	
11	2-2	Staphylococci: Staphylococcus aureus	Diagnostic Differentiation of Staphylococci/Streptococci	
12	2-2	Oral Viruses: Herpes Simplex Virus	HSV Diagnostic Techniques	
13	2-2	Oral Protozoa: Entamoeba gingivalis	E. gingivalis Diagnosis	
14	2-2	Oral Trichomonads: Trichomonas tenax	T. tenax Diagnosis	
15	2-2	Oral Fungi: Candida albicans	C. albicans Diagnosis	

#### 71. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (40%)** + **final exam (60%)**
  - **Laboratory practical exams + Theoretical exams**

#### 72. Learning and Teaching Resources

*Essentials of Orthodontics*" – Proffit  
(7th ed.)

*Clinical Orthodontic Diagnosis*" - Bishara

#### 73. Course Name:

## Oral Chemistry

74. Course Code:

75. Semester / Year:

**1st Year / 1st Semester**

76. Description Preparation Date:

3/11/2024

77. Available Attendance Forms:

**In-Person (Lectures + Practical Laboratories)**

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

2/30

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

Name: **Assist lecturer.** Abdullah sh. Abdulridha

Email: [Abdullahiq2@yahoo.com](mailto:Abdullahiq2@yahoo.com)

80. Course Objectives

<b>Course Objectives</b>	<ul style="list-style-type: none"><li>• Explain the biochemical composition of dental tissues (enamel, dentin, pulp) and their physiological significance</li><li>• Demonstrate proper lab safety protocols when handling dental chemicals and biological specimens</li><li>• Analyze the chemical processes involved in tooth development, mineralization, and caries formation</li><li>• Evaluate preventive strategies (e.g., fluoride applications) based on chemical interactions in the oral cavity</li></ul>
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81. Teaching and Learning Strategies

<b>Strategy</b>	<ul style="list-style-type: none"><li>• Theoretical Lectures: Use of visual presentations and illustrative diagrams.</li><li>• Practical Labs</li><li>• Interactive Learning: Group discussions .</li></ul>
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82. Course Structure

Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods
1	1-1	Safety and biosecurity measures in medical labs	Safety and biosecurity measures in medical labs	

2	1-1	Safety and biosecurity measures in medical institutes	Safety and biosecurity measures in medical institutes	Lecture + Discussion + Presentation
3	1-1	Chemical composition of teeth (proteins, lipids, carbohydrates)	Chemical composition of permanent teeth	
4	1-1	Chemistry of secretion and absorption in bones	Continued practical from week 3	
5	1-1	Physiology of permanent teeth (tooth shape)	Physiology of primary teeth, form	
6	1-1	Physiology of permanent teeth (dental action)	Physiology of primary teeth/tooth form	
7	1-1	Physiology of permanent teeth (embryology)	Physiology of primary teeth/dental anatomy	
8	1-1	Continued embryology concepts	Physiology of primary teeth/dental anatomy	
9	1-1	Shape of teeth and periodontal ligament (P.d.L.)	Physiology of primary teeth/geometrical relations	
10	1-1	Shape of teeth and tooth repair	Physiology of primary teeth/geometrical relations	
11	1-1	Chemical properties of enamel	P.d.L. and repair	
12	1-1	Chemical properties of dentine	Continued practical from week 11	
13	1-1	Chemical properties of pulp	Teeth eruption	
14	1-1	Continued pulp chemistry	Dental caries	
15	1-1	Salivary glands (anatomy, structure, types)	Dental caries prevention/fluoride	

### 83. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade + midterm exam (40%) + final exam (60%)**
- **Laboratory practical exams + Theoretical exams**

### 84. Learning and Teaching Resources

***Oral Biochemistry and Physiology"***

***Author: William V. Giannobile***

85. Course Name:

**Computer Applications**

86. Course Code:

87. Semester / Year:

**1st Year / 1st Semester**

88. Description Preparation Date:

3/11/2024

89. Available Attendance Forms:

**In-Person (Lectures + Practical Laboratories)**

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

2/30

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

Name: **Assist lecturer. Hussein Ali Mohammed**

Email:

92. Course Objectives

Course Objectives

- Understand computer fundamentals including hardware and software components.
- Acquire practical skills for proper computer system operation and management.
- Comprehend cybersecurity concepts, data protection, and digital privacy.
- Gain experience in handling software licenses and intellectual property.

93. Teaching and Learning Strategies

Strategy

- Theoretical Lectures .
- Practical Labs
- Interactive Learning: Group discussions .

94. Course Structure

Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods
1	1-1	Computer Fundamentals: Basic concepts, computer lifecycle	Introduction to computers: Startup/shutdown procedures	
2	1-1	Computer advantages, applications, and	File management: Opening/closing files,	

		classifications (by purpose, size, data type)	dialog boxes, proper use of input devices	
3	1-1	Computer components: Hardware and software basics	Desktop customization: Icons, screen resolution	
4	1-1	PC security fundamentals and software licensing	User account creation, system settings adjustment, hardware identification	
5	1-1	Computer safety and software licenses	Handling software licenses (genuine vs. pirated software)	
6	1-1	Digital threats, privacy issues, cybersecurity	Configuring privacy settings	
7	1-1	Software licensing, IP rights, hacking, malware, computer health risks	Cybersecurity: Threat handling, virus types, system backup	
8	1-1	-	-	
9	1-1	-	-	
10	1-1	Operating Systems: Definition, functions, types	Hard drive configuration and partitioning	
11	1-1	-	-	
12	1-1	-	-	
13	1-1	Windows 7 Operating System	Windows 7 installation	
14	1-1	-	-	
15	1-1	Desktop components: Start menu, taskbar	Start menu operations, Run commands, file creation/saving	
		-	-	

#### 95. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (40%)** + **final exam (60%)**
  - **Laboratory practical exams** + **Theoretical exams**

#### 96. Learning and Teaching Resources

**Computer Fundamentals" – Dr. Ali Mohammed**

97. Course Name:

**Human Rights**

98. Course Code:

99. Semester / Year:

**1st Year / 1st Semester**

100. Description Preparation Date:

3/11/2024

101. Available Attendance Forms:

**In-Person (Lectures)**

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

1/15

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

Name: Assistant Lecturer Suhair Abbas Kadhim

Email:

104. Course Objectives

Course Objectives

- Define fundamental human rights concepts and their historical development
- Explain the impact of religions and civilizations on human rights frameworks
- Compare international vs. regional human rights systems

105. Teaching and Learning Strategies

Strategy

- Theoretical Lectures
- Interactive Learning: Group discussions .

106. Course Structure

Week	Hours (Theoretical - Practical)	Theoretical Topics	Teaching/Learning Methods
1	1	Human Rights: Definition, Objectives	
2	1	Historical Evolution: Ancient/Medieval Conceptions	
3	1	Mesopotamian Human Rights Concepts	
4	1	Human Rights in Divine Religions (Focus: Islam)	
5	1	Modern Frameworks: Revolutions & UN System	
6	1	Regional Systems (European/American/Arab Charters)	

7	1	NGOs & National Institutions	
8	1	Constitutional Guarantees vs. Reality	
9	1	Essential vs. Collective Rights	
10	1	Economic/Social vs. Political Rights	
11	1	Emerging Rights (Environment, Solidarity)	
12	1	Rule of Law & Judicial Systems	
13	1	Gender Equality & Anti-Discrimination	
14	1	Regional Organizations (AU, EU, ASEAN)	
15	1	Course Synthesis	

#### 107. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (30%)** + **final exam (70%)**
  - **Theoretical exams**

#### 108. Learning and Teaching Resources

*International Human Rights Law* by  
Daniel Moeckli

109. Course Name:

**English Language**

110. Course Code:

111. Semester / Year:

**1st Year / 1st Semester**

112. Description Preparation Date:

3/11/2024

113. Available Attendance Forms:

**In-Person (Lectures)**

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

1/15

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

Name: Assistant Lecturer. Aya Adil Hashim

Email:

116. Course Objectives

Course Objectives

- Enable students to conduct basic conversations in daily life situations (shopping, travel, formal requests).
- Expand lexical knowledge in key life domains (food, clothing, transportation, common problems).
- Train students to handle practical contexts like form-filling and problem-description fluently.
- Understand formal/informal distinctions and polite phrase usage ("May I" vs. "Can I").

117. Teaching and Learning Strategies

Strategy

- Theoretical Lectures
- Interactive Learning: Group discussions

118. Course Structure

Week	Hours (Theoretical - Practical)	Theoretical Topics	Teaching/Learning Methods
1	1	Everyday English (Directions)	
2	1	Famous people	
3	1	Daily routines	
4	1	Filling forms	

5	1	Requests & offers	
6	1	Problem-solving vocabulary	
7	1	Food & drinks	
8	1	Shopping, Travel ("Summer in Portugal")	
9	1	Clothes, Describing issues	
10	1	Holidays, Planning	
11	1	Transport & travel	
12	1	Sightseeing	
13	1	Rooms & furniture	
14	1	Months, Sports	
15	1	Polite requests ("May I")	

#### 119. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (30%)** + **final exam (70%)**
- **Theoretical exams**

#### 120. Learning and Teaching Resources

*International Human Rights Law* by

Daniel Moeckli

121. Course Name:				
<b>Oral Pathology</b>				
122. Course Code:				
123. Semester / Year:				
<b>1st Year / 2st Semester</b>				
124. Description Preparation Date:				
3/11/2024				
125. Available Attendance Forms:				
<b>In-Person (Lectures + Practical Laboratories)</b>				
126. Number of Credit Hours (Total) / Number of Units (Total)				
4/60				
127. Course administrator's name (mention all, if more than one name)				
Name: <b>Mohammed Hussein Jabar</b>				
Email:				
128. Course Objectives				
Course Objectives	<ul style="list-style-type: none"> <li>• Understand the fundamental pathological principles of oral diseases and oral tissues.</li> <li>• Diagnose common oral diseases using clinical and laboratory methods.</li> <li>• Apply practical skills in diagnosing and treating oral diseases.</li> <li>• Analyze pathological cases and develop appropriate treatment plans.</li> </ul>			
129. Teaching and Learning Strategies				
Strategy	<ul style="list-style-type: none"> <li>• Theoretical Lectures: Use of visual presentations and illustrative diagrams.</li> <li>• Practical Learning</li> <li>• Interactive Learning: Group discussions</li> </ul>			
130. Course Structure				
Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods
1	1-3	Principles of pathology: Cell biology, disease etiology	Review of cellular changes	Lecture + Discussion + Presentation
2	1-3	Intracellular pathological changes	Necrosis & cellular atrophy	
3	1-3	Congestion, thrombosis, hypertrophy	Clotting & vascular spasms	
4	1-3	Classification of inflammation	Identifying inflammation types	

5	1-3	Inflammatory processes	Infection formation mechanism	
6	1-3	Tissue repair mechanisms	Healing patterns observation	
7	1-3	Congenital malformations	Oral soft/hard tissue anomalies	
8	1-3	Oral cavity pathologies (tongue, gums, jaws)	Diagnostic techniques	
9	1-3	Developmental dental anomalies	Hypodontia/supernumerary teeth	
10	1-3	Dental caries: Etiology & progression	Caries risk assessment	
11	1-3	Pulpitis: Pathophysiology	Pulp vitality testing	
12	1-3	Sequelae of pulpitis	Treatment planning	
13	1-3	Odontogenic cyst classification	Cyst identification	
14	1-3	Cyst pathogenesis	Differential diagnosis	
15	1-3	Advanced cyst typology	Comprehensive case reviews	

### 131. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (40%)** + **final exam (60%)**
  - **Laboratory practical exams** + **Theoretical exams**

### 132. Learning and Teaching Resources

*Essentials of Orthodontics* – Proffit  
(7th ed.)

*Clinical Orthodontic Diagnosis* – Bishara

133. Course Name:

**Dental Materials (Dental Clinics)**

134. Course Code:

135. Semester / Year:

**1st Year / 1st Semester**

136. Description Preparation Date:

3/11/2024

137. Available Attendance Forms:

**In-Person (Lectures + Practical Laboratories)**

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

**6/75**

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

Name: **Assistant Lecturer. Salah Mahdi Saleh**

Email:

140. Course Objectives

Course Objectives

- Identify the composition and properties of dental materials (cements, ceramics, acrylics).
- Explain the clinical applications of preventive and restorative materials (fluorides, root canal fillings).
- Classify materials used in dental procedures (surgical, periodontal, prosthetic).

141. Teaching and Learning Strategies

Strategy

- Theoretical Lectures: Use of visual presentations and illustrative diagrams.
- Practical Learning
- Interactive Learning: Group discussions

142. Course Structure

Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods
1	1-5	Dental cements composition	Cement lining application under fillings	Lecture + Discussion + Presentation
2	1-5	Root canal filling materials	Manipulating root canal cements	

3	1-5	Fluoride applications	Demonstrating fluoride materials	
4	1-5	Dental ceramics	Porcelain properties testing	
5	1-5	Acrylic vs. ceramic teeth	Comparative analysis	
6	1-5	Advanced prosthetics	Differentiating tooth materials	
7	1-5	Radiographic materials	X-ray material handling	
8	1-5	Dental instruments	Instrument property testing	
9	1-5	Preventive materials	Dental prevention materials demo	
10	1-5	Biomaterials overview	Material identification	
11	1-5	Surgical materials	Surgical material preparation	
12	1-5	Periodontal materials	Periodontal instrument use	
13	1-5	Scaling/polishing agents	Instrument demonstration	
14	1-5	Dentifrices & cleansers	Denture cleanser preparation	
15	1-5	Comprehensive review	Final skill assessment	

#### 143. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (40%)** + **final exam (60%)**
  - **Laboratory practical exams** + **Theoretical exams**

#### 144. Learning and Teaching Resources

*Essentials of Orthodontics*" – Proffit  
(7th ed.)

*Clinical Orthodontic Diagnosis*" - Bishara

145. Course Name:

**Dental equipments**

146. Course Code:

147. Semester / Year:

**1st Year / 1st Semester**

148. Description Preparation Date:

3/11/2024

149. Available Attendance Forms:

**In-Person (Lectures + Practical Laboratories)**

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

5/75

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

Name: **Hawraa Ahmed**

Email:

152. Course Objectives

Course Objectives

- Master plaque/calculus detection and removal protocols
- Operate dental equipment safely (Cavitron, X-ray, articulators)
- Demonstrate material handling (impressions, gypsum, medicaments)  
Adapt techniques for special populations (pediatric/geriatric)

153. Teaching and Learning Strategies

Strategy

- Theoretical Lectures: Use of visual presentations and illustrative diagrams.
- Practical Learning
- Interactive Learning: Group discussions

154. Course Structure

Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods
1	1-4	Calculus & plaque: Definition, importance of removal	Clinical calculus detection techniques	Lecture + Discussion + Presentation
2	1-4	Plaque examination: Staining methods, manual scaling tools	Plaque disclosure & instrument handling	

3	1-4	Scaling methods: Manual vs. ultrasonic (Cavitron)	Cavitron assembly & operation	
4	1-4	Ultrasonic scaling pros/cons; Polishing materials (pumice)	Polishing cup/brush techniques	
5	1-4	Rubber cup/brush polishing protocols	Patient instruction delive	
6	1-4	Stains: Intrinsic/extrinsic classification	Stain removal demonstrations	
7	1-4	Periodontal medicaments; X-ray film types	X-ray film handling (intra/extraoral)	
8	1-4	X-ray biology & safety protocols	Radiation protection measures	
9	1-4	Prosthodontics overview: Fixed/removable	Impression tray selection	
10	1-4	Gypsum products & mixing techniques	Alginate impression taking	
11	1-4	Articulators & facebows: Types/functions	Bite registration practice	
12	1-4	Fixed prosth instruments & materials	Crown prep impression pouring	
13	1-4	Endodontic instruments & pediatric tools	Root canal file identification	
14	1-4	Orthodontic instrument repertoire	Bracket placement simulation	
15	1-4	Special needs patient management	Communication scenarios	

#### 155. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (40%)** + **final exam (60%)**
  - **Laboratory practical exams** + **Theoretical exams**

#### 156. Learning and Teaching Resources

*Essentials of Orthodontics*" – Proffit  
(7th ed.)

*Clinical Orthodontic Diagnosis*" - Bishara

157. Course Name:

**Dental and Periodontal pathology**

158. Course Code:

159. Semester / Year:

**1st Year / 2st Semester**

160. Description Preparation Date:

3/11/2024

161. Available Attendance Forms:

**In-Person (Lectures + Practical Laboratories)**

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

5/75

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

Name: **Muntadhar Salam Shanshool**

Email:

164. Course Objectives

Course Objectives

- **Diagnose oral soft tissue pathologies through microscopic/histological analysis**
- **Differentiate ulcer types and neoplasms using clinical criteria**
- **Correlate oral manifestations with systemic diseases**
- **Apply digital tools for tooth wear analysis**

165. Teaching and Learning Strategies

Strategy

- **Theoretical Lectures: Use of visual presentations and illustrat diagrams.**
- **Practical Learning**
- **Interactive Learning: Group discussions**

166. Course Structure

Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods
1	1-4	Periodontium anatomy	Pathogenesis of oral soft tissue diseases	Lecture + Discussion + Presentation
2	1-4	Microscopic oral tissue changes	Clinical/microscopic analysis	
3	1-4	Viral oral infections	Viral infection case studies	

4	1-4	Ulcer classification (primary types)	Ulcer type identification
5	1-4	Advanced ulcer typology	Drug-induced vs. allergic u
6	1-4	Neoplasm fundamentals	Neoplasm specimen examination
7	1-4	Pericoronitis & fungal infections	Fungal culture techniques
8	1-4	Leukoplakia classification	Leukoplakia case presentations
9	1-4	Leukoplakia progression	Advanced histopathology review
10	1-4	Benign vs. malignant tumors	Tumor specimen comparison
11	1-4	Tumor differentiation criteria	Diagnostic marker testing
12	1-4	Systemic disease oral manifestations	TB/viral lesion identification
13	1-4	Oral signs of systemic diseases	Multidisciplinary case discussions
14	1-4	Tooth wear: Attrition/abrasion	Etiology analysis of tooth wear
15	1-4	Regressive tooth changes	Clinical wear pattern mapping

#### 167. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (40%)** + **final exam (60%)**
  - **Laboratory practical exams** + **Theoretical exams**

#### 168. Learning and Teaching Resources

*Essentials of Orthodontics*" – Proffit  
(7th ed.)

*Clinical Orthodontic Diagnosis*" - Bishara

169. Course Name:

**Pre-Orthodontic Treatment**

170. Course Code:

171. Semester / Year:

**1st Year / 1st Semester**

172. Description Preparation Date:

3/11/2024

173. Available Attendance Forms:

**In-Person (Lectures + Practical Laboratories)**

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

2/30

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

Name: **Assistant Lecturer Rawnaq Rahman**

Email:

176. Course Objectives

Course Objectives

- Master diagnostic documentation (case sheets, radiographs, study casts)
- Apply biomechanical principles to treatment planning
- Demonstrate patient communication skills for consultations
- Analyze genetic/environmental factors in malocclusion

177. Teaching and Learning Strategies

Strategy

- Theoretical Lectures: Use of visual presentations and illustrative diagrams.
- Practical Learning
- Interactive Learning: Group discussions
- Clinical case problem-solving

178. Course Structure

Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods
1	1-1	Case history documentation	Completing orthodontic case sheets	
2	1-1	Clinical examination protocols	Performing orthodontic examinations	
3	1-1	Diagnostic radiographs overview	Analyzing OPG radiographs	

4	1-1	Orthopantomography principles	Interpreting OPG cases	
5	1-1	Cephalometric radiography	Tracing cephalometric film	
6	1-1	Diagnostic photography	Clinical photo documentation	
7	1-1	Study cast fabrication	Pouring/trimming study models	
8	1-1	Consultation procedures	Mock consultation scenarios	
9	1-1	Public health in orthodontics	Community case discussions	
10	1-1	Tooth movement principles	Force application demonstrations	
11	1-1	Biology of tooth movement	Histology slide analysis	
12	1-1	Mechanics of tooth movement	Appliance force testing	
13	1-1	Oral hygiene instruction	Patient education techniques	
14	1-1	Genetic influences	Pedigree chart analysis	
15	1-1	Genetic review	Comprehensive case review	

#### 179. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (40%)** + **final exam (60%)**
  - **Laboratory practical exams** + **Theoretical exams**

#### 180. Learning and Teaching Resources

***Essentials of Orthodontics*** – Proffit  
(7th ed.)

***Clinical Orthodontic Diagnosis*** - Bishara

181. Course Name:

**Immunology**

182. Course Code:

183. Semester / Year:

**1st Year / 2st Semester**

184. Description Preparation Date:

3/11/2024

185. Available Attendance Forms:

**In-Person (Lectures + Practical Laboratories)**

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

2/30

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

Name: **Assistant Lecturer Zahraa Hussein Abdulatif**

Email:

188. Course Objectives

Course Objectives

- Perform basic serological tests and interpret their results
- Understand the fundamental principles of immunology and immune system functions
- Analyze immune disorders (hypersensitivity, autoimmune diseases)
- Differentiate between types of immunity (humoral and cellular) and their components

189. Teaching and Learning Strategies

Strategy

- Theoretical Lectures: Use of visual presentations and illustrative diagrams.
- Practical Learning
- Interactive Learning: Group discussions

190. Course Structure

Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods
1	1-2	Basic Immunology: Introduction to immunology	Blood Drawing Methods and Materials	

2	1-2	Immunity: Definition and types (innate/adaptive)	Materials for Basic Serology Tests
3	1-2	Immune System Cells & Organs	Specimen Collection/Preparation for Serological Tests
4	1-2	Central vs. Peripheral Immune System	Specimen Preservation Techniques
5	1-2	Functions of the Immune System	Shipment of Serological Specimens
6	1-2	Antigens: Molecular shapes, antigenic determinants	Serial Dilution Techniques
7	1-2	Antibodies: Structure and types (IgA, IgG, etc.)	End Point Titer Determination
8	1-2	Antigen vs. Antibody Differences	Principle of Antigen-Antibody Interaction
9	1-2	Humoral vs. Cellular Immunity	In Vitro Antigen-Antibody Reactions
10	1-2	Phagocytosis & Cell-Mediated Immunity	Factors Affecting Antigen-Antibody Reactions
11	1-2	Role of IgA in Dental Caries (Streptococcus mutans)	Complement Inactivation
12	1-2	Hypersensitivity: Types (I-IV) and mechanisms	HIV: Characteristics & Diagnosis
13	1-2	Autoimmune Diseases: Definitions and types	Laboratory Diagnosis Techniques
14	1-2	Student Reports Discussion	Student Reports Discussion
15	1-2		

#### 191. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (40%)** + **final exam (60%)**
  - **Laboratory practical exams** + **Theoretical exams**

#### 192. Learning and Teaching Resources

**Jawetz, Melnick & Adelberg's Medical Microbiology, 27th Edition (2016).**

193. Course Name:

**Oral Physiology**

194. Course Code:

195. Semester / Year:

**1st Year / 2st Semester**

196. Description Preparation Date:

3/11/2024

197. Available Attendance Forms:

**In-Person (Lectures + Practical Laboratories)**

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

3/45

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

Name: **Lecturer. Noor Mahdi Hasnawi**

Email:

200. Course Objectives

Course Objectives

- Understand the physiological functions of oral structures (salivary glands, TMJ, oral mucosa).
- Analyze the biochemical composition of saliva, dental plaque, and calculus.
- Explain the mechanisms of mastication, swallowing, and digestion in relation to oral health.
- Apply preventive strategies for dental caries and periodontal diseases (e.g., fluoride use, plaque control).
- Demonstrate laboratory techniques for examining oral tissues and secretions.

201. Teaching and Learning Strategies

Strategy

- Theoretical Lectures: Use of visual presentations and illustrative diagrams.
- Practical Learning
- Interactive Learning: Group discussions

202. Course Structure

Week	Hours (Theoretical - Practical)	Theoretical Topics	Practical Topics	Teaching/Learning Methods
1	1-1	Salivary Gland Secretion	Physiology of Oral Cavity Lining Membrane	
2	1-1	Chemical Composition and Functions of Saliva	Muscles of Mastication	
3	1-1	Neurological Control of Salivary Secretion (Digestive Feedback)	Muscles of Facial Expression	
4	1-1	Pathologies of Salivary Secretion	Bone Chemistry	
5	1-1	Chemistry of Pellicle and Dental Plaque	Continued (Pellicle & Plac Analysis)	
6	1-1	Chemistry of Dental Calculus	Dental Plaque Examination	
7	1-1	Dental Caries: Etiology and Process	Dental Calculus Analysis	
8	1-1	Dental Caries Prevention (Fluoride Mechanisms)	Saliva Chemistry Lab	
9	1-1	Oral Health and Nutrition	Continued (Nutritional Impact Lab)	
10	1-1	Mastication Process and Muscles Involved	TMJ Physiology and Movement	
11	1-1	Temporomandibular Joint (TMJ) Biomechanics	Continued (TMJ Functional Analysis)	
12	1-1	TMJ Movement Analysis	Gastrointestinal Tract (GIT) Physiology	
13	1-1	GIT Physiology: Swallowing and Motility	Continued (Swallowing Dynamics)	
14	1-1	GIT Secretions and Digestive Processes	Tongue Physiology	
15	1-1	GIT Absorption Mechanisms	Salivary Gland Physiology Lab	

### 203. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (40%)** + **final exam (60%)**
  - **Laboratory practical exams** + **Theoretical exams**

### 204. Learning and Teaching Resources

**Oral Physiology and Occlusion** by  
**Jeffrey P. Okeson.**

**Essentials of Oral Physiology** by **Robert M.  
Bradley.**

205. Course Name:

**Arabic Language**

206. Course Code:

207. Semester / Year:

**1st Year / 2st Semester**

208. Description Preparation Date:

3/11/2024

209. Available Attendance Forms:

**In-Person (Lectures + Practical Laboratories)**

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

3/45

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

Name: **Assistant Professor Dr. Hayder Abdul-Ali Al-Shawi**

Email:

212. Course Objectives

Course Objectives

- إتقان القواعد النحوية والإملائية الأساسية
- تنمية مهارات الكتابة الأكاديمية والمهنية
- تحسين القدرة على التواصل الإداري الفعال
- تطبيق المهارات اللغوية في المجال الطبي

213. Teaching and Learning Strategies

Strategy

- **Theoretical Lectures: Use of visual presentations and illustrative diagrams.**
- **Practical Learning**
- **Interactive Learning: Group discussions**
- **Clinical case problem-solving**

214. Course Structure

Week	Hours (Theoretical - Practical)	Theoretical Topics
1	1	مقدمة عن الأنظمة اللغوية - التاء المربوطة والطويلة والتاء المفتوحة
2	1	قواعد كتابة الألف الممدودة والمقصورة - الحروف الشمسية والقمرية
3	1	الضاد والطاء - العدد
4	1	كتابة الهمزة
5	1	علامات الترقيم
6	1	الاسم والفعل والتفريق بينهما

7	1	المفاعيل	
8	1	تطبيقات الأنظمة اللغوية الشائعة	
9	1	النون والتنوين - معاني حروف الجر	
10	1	الجوانب الشكلية للخطاب الإداري	
11	1	لغة الخطاب الإداري	
12	1	نماذج من المراسلات الإدارية	
13	1	-	
14	1	مراجعة عامة وتقييم	
15	1	-	

#### 215. Course Evaluation

- **Daily quizzes** along with attendance and punctuality + **activity grade** + **midterm exam (30%)** + **final exam (70%)**
- **Theoretical exams**

#### 216. Learning and Teaching Resources

هاني محمود علم النحو والصرف العربي