Republic of Iraq
Ministry of Higher Education
and Scientific Research
Ashur University
College of Health and Medical Technologies
Department of Dental Technologies

Academic Course Description

Department of Dental Technologies

Academic year 2024-2025

Course Description

Course Name: Oral Histology / Second Stage

Course Code: (Not specified in the provided text)

Semester: First Semester: (15 weeks)

Academic Year: 2024-2025

Date of Description Preparation: 20/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours/Total Units: 90 hours / 3 units

Course Instructor:

Name: M.D. Abdul Wahab Abdul Razzaq Katiya
Email:

Course Objectives:

1. General Objective: To familiarize the student with the structural and functional properties of oral and dental tissues, serving as an introduction to the study and understanding of diseases affecting oral and dental tissues.
2. Specific Objective: To enable students in the dental technologies department to understand the embryonic development of oral and dental tissues.

Learning and Teaching Strategies:

1. Lecture, and discussion lecture
2. Use of visual aids and short educational films
3. Interactive applications

Course Structure:

Week	Hours	Learning Outcomes	Unit Name or Topic	Learning Method	Assessment Method
1	5	The student learns about	Embryological development	Theoretical + Practical	Written tests, Attendance
2	5	The student understands the topic	Development of face	Theoretical + Practical	Written tests, Attendance
3	5	The student understands the topic	Development of oral cavity	Theoretical + Practical	Written tests, Attendance
4	5	The student understands the topic	Development of teeth	Theoretical + Practical	Written tests, Attendance

5	5	The student understands the topic	Amelogenesis	Theoretical + Practical	Written tests, Attendance
6	5	The student understands the topic	Enamel structure	Theoretical + Practical	Written tests, Attendance
7	5	The student understands the topic	Dentinogenesis	Theoretical + Practical	Written tests, Attendance
8	5	The student understands the topic	Dentine structure	Theoretical + Practical	Written tests, Attendance
9	5	The student understands the topic	Pulp	Theoretical + Practical	Written tests, Attendance
10	5	The student understands the topic	Cementogenesis	Theoretical + Practical	Written tests, Attendance
11	5	The student understands the topic	Cementum structure	Theoretical + Practical	Written tests, Attendance
12	5	The student understands the topic	Bone formation	Theoretical + Practical	Written tests, Attendance
13	5	The student understands the topic	Bone structure	Theoretical + Practical	Written tests, Attendance
14	5	The student understands the topic	Periodontal ligament	Theoretical + Practical	Written tests, Attendance

15	5	The student understands the topic	Oral mucosa	Theoretical + Practical	Written tests, Attendance

Course Assessment:

The total grade of 100 for each academic semester is distributed as follows: 40 points for annual effort (based on student assignments such as daily preparation, daily, oral, monthly, and written exams, and reports) + 25 points for the practical final exam + 35 points for the theoretical final exam.
Learning and Teaching Resources:
Required Textbooks (Curricular, if any):
1. "Oral anatomy, histology and embryology, 6th edition"
2. "Essentials of Oral Histology and Embryology, 6th Edition"
Main References (Sources):
Supporting Books and References (Scientific Journals, Reports):
Electronic References, Websites:

Course Description

Course Name: Head and Neck Anatomy / Second Stage

Course Code:

Semester: Second Semester: (15 weeks)

Academic Year: 2024-2025

Date of Description Preparation: 20/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours/Total Units: 90 hours / 4 units

Course Instructor:

Name: M.D. Mayadah Hameed Rasheed

Email: mayadah.hameed@au.edu.iq

Course Objectives:

3. General Objective: To familiarize the student with the details of oral, facial, and maxillofacial anatomy, which falls within their scope of work in dental prosthetics, serving maxillofacial prostheses.
4. Specific Objective: To enable students in the dental technologies department, both practically and theoretically, to study the most important anatomical landmarks relevant to the fabrication of dental and maxillofacial prostheses.

Learning and Teaching Strategies:

5. Lecture, and discussion lecture
6. Use of visual aids and short educational films
7. Interactive applications

Course Structure:

Week	Hours	Learning Outcomes	Unit Name or Topic	Learning Method	Assessment Method
1	6	The student learns about	Introduction to the anatomy of head and neck	Theoretical + Practical	Written tests, Attendance
2	6	The student understands the topic	Anatomical terminology and anatomical position	Theoretical + Practical	Written tests, Attendance
3	6	The student understands the topic	The Skull: definition and description of the skull from the Anterior, superior, lateral & posterior views	Theoretical + Practical	Written tests, Attendance

4	6	The student understands the topic	Cranial bones: Frontal bone: description, parts, and articulation	Theoretical + Practical	Written tests, Attendance
5	6	The student understands the topic	Parietal bones: description, parts, and articulation	Theoretical + Practical	Written tests, Attendance
6	6	The student understands the topic	Sphenoid bone: description, parts, and articulation	Theoretical + Practical	Written tests, Attendance
7	6	The student understands the topic	Cranial bones: Temporal bone: description, parts, and articulation	Theoretical + Practical	Written tests, Attendance
8	6	The student understands the topic	Ethmoid bone: description, parts, and articulation	Theoretical + Practical	Written tests, Attendance
9	6	The student understands the topic	Occipital bone: description, parts, and articulation	Theoretical + Practical	Written tests, Attendance
10	6	The student understands the topic	Facial bones: Maxillary bones: description, parts and articulation	Theoretical + Practical	Written tests, Attendance
11	6	The student understands the topic	Palatine bone: description, parts and articulation	Theoretical + Practical	Written tests, Attendance
12	6	The student understands the topic	Facial bones: Mandible: description, parts and articulation	Theoretical + Practical	Written tests, Attendance
13	6	The student understands the topic	Zygomatic bone: description, parts and articulation	Theoretical + Practical	Written tests, Attendance

14	6	The student understands the topic	Facial bones: Nasal bone, lacrimal bone, inferior nasal concha, vomer	Theoretical + Practical	Written tests, Attendance
15	6	The student understands the topic	Nasal cavity: definition, walls	Theoretical + Practical	Written tests, Attendance

Course Assessment:

The total grade of 100 for each academic semester is distributed as follows: 40 points for annual effort (25 theoretical + 15 practical) based on student assignments such as daily preparation, daily, oral, monthly, and written exams, and reports. Additionally, there are 25 points for the practical final exam and 35 points for the theoretical final exam.

Learning and Teaching Resources:

Required Textbooks (Curricular, if any):

8. Essentials of Anatomy and Physiology
9. Gray's Anatomy for Students
10. Snell clinical anatomy by regions 9th ed.

Main References (Sources):

Supporting Books and References (Scientific Journals, Reports):

Electronic References, Websites:

1. Human Anatomy Atlas 2021 Full 2021.1.68-@EasyAPK
2. https://anatomytool.org/content/anatomy-standard-drawing-bones-neurocranium-anterior-view-no-labels

Course Description
Course Name: Crimes of the Ba'ath Party / Second Stage
Course Code:
Semester: First Semester: (15 weeks)
Academic Year: 2024-2025
Date of Description Preparation: 10/9/2024
Available Attendance Modes: Mandatory attendance
Total Study Hours/Total Units: 30 hours / 2 units
Course Instructor:
Name: M. M. Sara Ayad Ismail Hassan Email: Sara.ayad@au.edu.iq
Course Objectives:
3. General Objective: To introduce the student to the crimes committed by the Ba'ath regime in Iraq. 4. Specific Objective: To introduce the student to the crimes committed by the Ba'ath regime in Iraq, making them aware of what happened, and entrusting them with preventing its recurrence.
Learning and Teaching Strategies:
5. Lectures 6. Interactive lecture 7. Use of data show
Course Structure:

Week	Hours	Required Learning Outcomes	Unit Name or Topic	Learning Method	Assessment Method
1 +2	2	The student learns about	Crimes of the Ba'ath regime according to the Iraqi Higher Criminal Court Law of 2005 Concept of crimes and their divisions Definition of crime linguistically and technically 	Theoretical	Quiz + Attendance

			Types of crimes Crimes of the Ba'ath regime according to the documentation of the Iraqi Higher Criminal Court Law of 2005 Types of international crimes Decisions issued by the Higher Criminal Court		
3 -6	2	The student understands the topic	Psychological and social crimes and their effects, and the most prominent violations of the Ba'ath regime in Iraq Psychological crimes Mechanisms of psychological crimes Effects of psychological crimes Social crimes Militarization of society The Ba'ath regime's stance on religion Violations of Iraqi laws Forms of	Theoretical	Quiz + Attendance

			human rights violations and crimes of authority Some decisions on political and military violations of the Ba'ath regime Locations of prisons and detention centers of the Ba'ath regime		
7-10	2	The student understands the topic	Environmental crimes of the Ba'ath regime in Iraq War and radiation pollution and mine explosions Destruction of cities and villages (scorched earth policy) Drying of the marshes Bulldozing palm groves, trees, and crops	Theoretical	Quiz + Attendance
11-15	2	The student understands the topic	Mass grave crimes Events of the mass extermination graves committed by the Ba'ath regime in Iraq	Theoretical	Quiz + Attendance

			  Chronological classification of mass extermination graves in Iraq for the period 1963-2003.		

Course Assessment:

The total grade of 100 is distributed as follows: 30 points for annual effort based on student assignments such as daily preparation, daily, oral, monthly, and written exams, and reports + 70 points for the theoretical final exam.

Learning and Teaching Resources:

Required Textbooks (Curricular, if any):

8. Salim Matar, Iraqi Environment Encyclopedia, First Edition, 2010.

Main References (Sources):

9. Salim Aqari, Environmental Impacts of the Use of Weapons of Mass Destruction in International Wars.
10. Ayman Abdul Aziz Salama, International Responsibility for Committing Genocide Crimes.

Supporting Books and References (Scientific Journals, Reports):

Electronic References, Websites:

Course Description

Course Name: Computer Applications 1 / Second Stage

Course Code:

Semester: First Semester: (15 weeks)

Academic Year: 2024-2025

Date of Description Preparation: 10/11/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours/Total Units: 45 hours / 2 units

Course Instructor:

Name: M. D. Rabie Ali
Email:

Course Objectives:

11. General Objective: To provide students with skills in using basic office applications, creating office files and documents, utilizing the operating system, and understanding the fundamentals of working in a digital environment.
12. Specific Objective: To equip students with knowledge in managing and using various computer applications.

Learning and Teaching Strategies:

13. Lectures
14. Use of visual aids in the classroom
15. Interactive lectures
16. Use of data show

Course Structure:

Week	Hours	Required Learning Outcomes	Unit Name or Topic	Learning Method	Assessment Method
1	2	The student learns about	Introduction to Excel, its benefits, specifications, concept, and operating method	Theoretical	Quiz + Attendance
2	2	The student understands the topic	Getting acquainted with the main screen, its components,	Theoretical	Quiz + Attendance

			tools, and menu bar		
3	2	The student understands the topic	Data entry and working with tables	Theoretical	Quiz + Attendance
4	2	The student understands the topic	Entering data in cells, types of data entered in cells	Theoretical	Quiz + Attendance
5	2	The student understands the topic	How to create simple calculations (formulas) within cells and apply them to other cells	Theoretical	Quiz + Attendance
6	2	The student understands the topic	How to create simple calculations (formulas) within cells and apply them to other cells	Theoretical	Quiz + Attendance
7	2	The student understands the topic	Using some common functions: Count, Sqrt, Average, Sum, Min, Max	Theoretical	Quiz + Attendance
8	2	The student understands the topic	Cell editing process: copying data, moving it, copying	Theoretical	Quiz + Attendance

			calculations, absolute and relative cells		
9	2	The student understands the topic	Controlling cell display, changing its style through formatting tools	Theoretical	Quiz + Attendance
10	2	The student understands the topic	Dealing with Charts: their components, different elements, and understanding their types	Theoretical	Quiz + Attendance
11	2	The student understands the topic	Methods of creating charts, choosing different chart types, and their concept	Theoretical	Quiz + Attendance
12	2	The student understands the topic	Methods of creating charts, choosing different chart types, and their concept	Theoretical	Quiz + Attendance
13	2	The student understands the topic	Modifying data and charts and performing various edits on them	Theoretical	Quiz + Attendance
14	2	The student understands the topic	Dealing with Lists: conditions	Theoretical	Quiz + Attendance

			for creating a list, sorting lists		
15	2	The student understands the topic	Dealing with Lists: conditions for creating a list, sorting lists	Theoretical	Quiz + Attendance

Course Assessment:

The total grade of 100 is distributed as follows: 40 points for annual effort (25 theoretical + 15 practical) based on student assignments such as daily preparation, daily, oral, monthly, and written exams, and reports. Additionally, there are 25 points for the practical final exam and 35 points for the theoretical final exam.

Learning and Teaching Resources:

Required Textbooks (Curricular, if any):

Main References (Sources): (Not specified in the provided text)

Supporting Books and References (Scientific Journals, Reports):

Electronic References, Websites:

Course Description

Course Name: Basic Partial Denture / Second Stage

Course Code:

Semester: Second Semester: (15 weeks)

Academic Year: 2024-2025

Date of Description Preparation: 20/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours/Total Units: 105 hours / 4 units

Course Instructor:

Name: M. M. Abeer Adnan Nouri
Email: abeeradnan321@Gmail

Course Objectives:

17. General Objective: To familiarize the student with the basic steps involved in the fabrication of acrylic removable partial dentures.
18. Specific Objective: To enable dental technology students to know the basic steps involved in the fabrication of acrylic removable partial dentures.

Learning and Teaching Strategies:

19. Lecture, and discussion lecture
20. Use of visual aids and short educational films
21. Interactive applications

Course Structure:

Week	Hours	Learning Outcomes	Unit Name or Topic	Learning Method	Assessment Method
1	7	The student learns about	Removable Partial Denture (Terms and Components)	Theoretical + Practical	Written tests, Attendance
2	7	The student understands the topic	Kennedy classification.	Theoretical + Practical	Written tests, Attendance
3	7	The student understands the topic	Acrylic Removable Partial Denture	Theoretical + Practical	Written tests, Attendance
4	7	The student understands the topic	Special tray, occlusal rim and design the	Theoretical + Practical	Written tests, Attendance

			trimming of master cat		
5	7	The student understands the topic	Surveying procedure	Theoretical + Practical	Written tests, Attendance
6	7	The student understands the topic	Articulating and Mounting procedure	Theoretical + Practical	Written tests, Attendance
7	7	The student understands the topic	Clasp assembly	Theoretical + Practical	Written tests, Attendance
8	7	The student understands the topic	Selection of artificial teeth	Theoretical + Practical	Written tests, Attendance
9	7	The student understands the topic	Setting of artificial teeth	Theoretical + Practical	Written tests, Attendance
10	7	The student understands the topic	Waxing of acrylic partial denture	Theoretical + Practical	Written tests, Attendance
11	7	The student understands the topic	Flasking procedure	Theoretical + Practical	Written tests, Attendance
12	7	The student understands the topic	Curing, Finishing and Polishing Procedure	Theoretical + Practical	Written tests, Attendance
13	7	The student understands the topic	Selective grinding	Theoretical + Practical	Written tests, Attendance
14	7	The student understands the topic	Repairing of acrylic P.D	Theoretical + Practical	Written tests, Attendance

15	7	The student understands the topic	A flexible removable partial denture	Theoretical + Practical	Written tests, Attendance

Course Assessment:

The total grade of 100 for each academic semester is distributed as follows: 40 points for annual effort (25 theoretical + 15 practical) based on student assignments such as daily preparation, daily, oral, monthly, and written exams, and reports + 25 points for the practical final exam + 35 points for the theoretical final exam.

Learning and Teaching Resources:

Required Textbooks (Curricular, if any):

22. Text book of CD
23. Bouchers prosthodontic treatment for Edentulous patients

Main References (Sources):

Supporting Books and References (Scientific Journals, Reports):

24. Al-Taqni Magazine
25. Baghdad University Journal of Dentistry
26. Al-Mustansiriya Journal of Dentistry

Electronic References, Websites:

1. Ashur University website
2. College of Health and Medical Technologies - Baghdad website

Course Description

Course Name: Basic Complete Denture / Second Stage

Course Code:

Semester: First Semester: (15 weeks)

Academic Year: 2024-2025

Date of Description Preparation: 20/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours/Total Units: 105 hours / 4 units

Course Instructor:

Name: M. M. Abeer Adnan Nouri
Email: abeeradnan321@Gmail

Course Objectives:

3. General Objective: To familiarize the student with the basic steps involved in the fabrication of acrylic complete dentures.
4. Specific Objective: To enable dental technology students to know the basic steps involved in the fabrication of acrylic complete dentures.

Learning and Teaching Strategies:

5. Lecture, and discussion lecture
6. Use of visual aids and short educational films
7. Interactive applications

Course Structure:

Week	Hours	Learning Outcomes	Unit Name or Topic	Learning Method	Assessment Method
1	7	The student learns about	Complete denture terminology: definition & objective	Theoretical + Practical	Written tests, Attendance
2	7	The student understands the topic	Anatomical landmarks of the maxillary edentulous arch	Theoretical + Practical	Written tests, Attendance
3	7	The student understands the topic	Anatomical landmarks of the mandibular edentulous arch	Theoretical + Practical	Written tests, Attendance

4	7	The student understands the topic	Materials used for primary, secondary and boxing impression	Theoretical + Practical	Written tests, Attendance
5	7	The student understands the topic	Special trays, Record base and Occlusal rim: definition, properties & materials used for construction	Theoretical + Practical	Written tests, Attendance
6	7	The student understands the topic	Maxillo-mandibular relationship	Theoretical + Practical	Written tests, Attendance
7	7	The student understands the topic	Articulator and mounting: definition, uses & types	Theoretical + Practical	Written tests, Attendance
8	7	The student understands the topic	Occlusion (balance occlusion)	Theoretical + Practical	Written tests, Attendance
9	7	The student understands the topic	Selection of anterior & posterior teeth	Theoretical + Practical	Written tests, Attendance
10	7	The student understands the topic	Guidelines for artificial teeth arrangement & Arrangement of anterior teeth	Theoretical + Practical	Written tests, Attendance

11	7	The student understands the topic	Arrangement of posterior teeth	Theoretical + Practical	Written tests, Attendance
12	7	The student understands the topic	Waxing, carving & post dam	Theoretical + Practical	Written tests, Attendance
13	7	The student understands the topic	Flasking and de-flasking	Theoretical + Practical	Written tests, Attendance
14	7	The student understands the topic	Packing and curing	Theoretical + Practical	Written tests, Attendance
15	7	The student understands the topic	Finishing and polishing	Theoretical + Practical	Written tests, Attendance

Course Assessment:

The total grade of 100 for each academic semester is distributed as follows: 40 points for annual effort (25 theoretical + 15 practical) based on student assignments such as daily preparation, daily, oral, monthly, and written exams, and reports + 25 points for the practical final exam + 35 points for the theoretical final exam.

Learning and Teaching Resources:

Required Textbooks (Curricular, if any):

8. Textbook of CD
9. Bouchers prosthodontic treatment for Edentulous patients

Main References (Sources):

Supporting Books and References (Scientific Journals, Reports): (Not specified in the provided text)

Electronic References, Websites:

Course Description

Course Name: Oral Physiology / Second Stage

Course Code:

Semester: Second Semester: (15 weeks)

Academic Year: 2024-2025

Date of Description Preparation: 20/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours/Total Units: 90 hours / 4 units

Course Instructor:

Name: M.D. Abdul Wahab Abdul Razzaq Katiya
Email:

Course Objectives:

10. General Objective: To familiarize the student with the structural and functional properties of oral and dental tissues, serving as an introduction to the study and understanding of diseases affecting oral and dental tissues.
11. Specific Objective: To enable students in the dental technologies department to understand the embryonic development of oral and dental tissues.

Learning and Teaching Strategies:

12. Lecture, and discussion lecture
13. Use of visual aids and short educational films
14. Interactive applications

Course Structure:

Week	Hours	Learning Outcomes	Unit Name or Topic	Learning Method	Assessment Method
1	6	The student learns about	Introduction and how the body functions control	Theoretical + Practical	Written tests, Attendance
2	6	The student understands the topic	Physiology of circulatory system: the function of each part	Theoretical + Practical	Written tests, Attendance
3	6	The student understands the topic	Physiology of blood circulation: types of blood circulation	Theoretical + Practical	Written tests, Attendance

4	6	The student understands the topic	Blood: definition and composition	Theoretical + Practical	Written tests, Attendance
5	6	The student understands the topic	Blood: functions	Theoretical + Practical	Written tests, Attendance
6	6	The student understands the topic	Blood: The formed elements of blood and normal values	Theoretical + Practical	Written tests, Attendance
7	6	The student understands the topic	Blood groups: ABO system and RH system	Theoretical + Practical	Written tests, Attendance
8	6	The student understands the topic	Physiology of oral cavity and digestive process: Saliva and salivary glands	Theoretical + Practical	Written tests, Attendance
9	6	The student understands the topic	Saliva: composition and functions of saliva in mastication and speech	Theoretical + Practical	Written tests, Attendance
10	6	The student understands the topic	Physiology of tongue and taste sensation	Theoretical + Practical	Written tests, Attendance
11	6	The student understands the topic	Physiology of the teeth: the role of teeth arrangement in mastication	Theoretical + Practical	Written tests, Attendance
12	6	The student understands the topic	Physiology of muscles of mastication	Theoretical + Practical	Written tests, Attendance
13	6	The student understands the topic	Physiology of the pharynx and	Theoretical + Practical	Written tests, Attendance

			velopharyngeal competence		
14	6	The student understands the topic	Physiology of the soft palate	Theoretical + Practical	Written tests, Attendance
15	6	The student understands the topic	Defects of soft palates	Theoretical + Practical	Written tests, Attendance

Course Assessment:

The total grade of 100 for each academic semester is distributed as follows: 40 points for annual effort (based on student assignments such as daily preparation, daily, oral, monthly, and written exams, and reports) + 25 points for the practical final exam + 35 points for the theoretical final exam.

Learning and Teaching Resources:

15. Required Textbooks (Curricular, if any): Essentials of Anatomy and Physiology

Main References (Sources):

Supporting Books and References (Scientific Journals, Reports):

Electronic References, Websites:

Course Description
Course Name: Dental Materials
Course Code:
Semester:
16. First Semester: Dental Materials (Advanced 1) (15 weeks) 17. Second Semester: Dental Materials (Advanced 2) (15 weeks)
Academic Year: 2024-2025
Date of Description Preparation: 11/9/2024
Available Attendance Modes: Mandatory attendance
Total Study Hours/Total Units:
18. First Course: 105 hours / 4 units 19. Second Course: 105 hours / 4 units
Course Instructors:
20. Name: M.D. Noor Hassan Abdullah 21. Email: noorha443@gmail.com
22. Name: Dr. Hassan Abdul Rahim Karim 23. Email: hassandentist71@yahoo.com
Course Objectives:
24. General Objective: To familiarize students with the basic dental materials used in dental manufacturing sciences. To understand the principles of dental materials science and the terminology used in this field, and how to handle them. 25. Specific Objective: To enable dental technology students to understand the chemical, physical, biological, and mechanical properties of dental materials. To understand the structures and methods of using metals, polishing materials, ceramics, and various types of waxes and acrylic resins used in dentistry.
Learning and Teaching Strategies:
26. Lectures 27. Use of visual aids in the classroom 28. Interactive lectures 29. Use of data show
Course Structure:

Week	Hours	Required Learning Outcomes	Unit Name or Topic	Learning Method	Assessment Method
First Semester / Dental Materials (Advanced 1)					
1	7	The student learns about the topic	Gypsum products: types, properties, and manipulation	Theoretical + Practical	Quiz + Attendance

2	7	The student understands the topic	Dental waxes: types, properties, and manipulation	Theoretical + Practical	Quiz + Attendance
3	7	The student understands the topic	Impression materials: elastic impression materials (Agar, alginate)	Theoretical + Practical	Quiz + Attendance
4	7	The student understands the topic	Non-elastic impression materials (Impression plaster, impression compound, ZOE)	Theoretical + Practical	Quiz + Attendance
5	7	The student understands the topic	Elastomeric impression materials (Polysulfide, silicone, polyether)	Theoretical + Practical	Quiz + Attendance
6	7	The student understands the topic	Investments: definition, composition, properties, and types	Theoretical + Practical	Quiz + Attendance
7	7	The student understands the topic	Metals (precious metals, base metals)	Theoretical + Practical	Quiz + Attendance
8	7	The student understands the topic	Dental amalgam	Theoretical + Practical	Quiz + Attendance
9	7	The student understands the topic	Acrylic resins: types, properties, and uses	Theoretical + Practical	Quiz + Attendance
10	7	The student understands the topic	Denture base resin and soft liners	Theoretical + Practical	Quiz + Attendance
11	7	The student understands the topic	Curing of acrylic resins and problems	Theoretical + Practical	Quiz + Attendance
12	7	The student understands the topic	Denture liners (Relining and rebasing)	Theoretical + Practical	Quiz + Attendance
13	7	The student understands the topic	Heat curing resins	Theoretical + Practical	Quiz + Attendance

14	7	The student understands the topic	Light curing resins	Theoretical + Practical	Quiz + Attendance
15	7	The student understands the topic	Self curing resins	Theoretical + Practical	Quiz + Attendance
Second Semester / Dental Materials (Advanced 2)					
1	7	The student learns about the topic	Dental ceramics: types, properties, and uses	Theoretical + Practical	Quiz + Attendance
2	7	The student understands the topic	Dental ceramics: advantages and disadvantages	Theoretical + Practical	Quiz + Attendance
3	7	The student understands the topic	Porcelain fused to metal restorations: clinical procedures	Theoretical + Practical	Quiz + Attendance
4	7	The student understands the topic	Porcelain fused to metal restorations: laboratory procedures	Theoretical + Practical	Quiz + Attendance
5	7	The student understands the topic	All ceramic restorations: felspathic all ceramic restoration	Theoretical + Practical	Quiz + Attendance
6	7	The student understands the topic	All ceramic restorations: sintered all ceramic restoration	Theoretical + Practical	Quiz + Attendance
7	7	The student understands the topic	All ceramic restorations: heat pressed restoration	Theoretical + Practical	Quiz + Attendance
8	7	The student understands the topic	CAD Cam and machined restoration	Theoretical + Practical	Quiz + Attendance
9	7	The student understands the topic	Hard milling	Theoretical + Practical	Quiz + Attendance
10	7	The student understands the topic	Soft milling	Theoretical + Practical	Quiz + Attendance

11	7	The student understands the topic	Zirconia in dentistry	Theoretical + Practical	Quiz + Attendance
12	7	The student understands the topic	Maxillofacial prosthesis classification	Theoretical + Practical	Quiz + Attendance
13	7	The student understands the topic	Maxillofacial prosthesis materials used	Theoretical + Practical	Quiz + Attendance
14	7	The student understands the topic	3D printer Technologies, types	Theoretical + Practical	Quiz + Attendance
15	7	The student understands the topic	3D printer technologies, materials used	Theoretical + Practical	Quiz + Attendance

Course Assessment:

The total grade of 100 for each academic semester is distributed as follows: 40 points for annual effort (25 theoretical + 15 practical) based on student assignments such as daily preparation, daily, oral, monthly, and written exams, and reports + 25 points for the practical final exam + 35 points for the theoretical final exam.

Learning and Teaching Resources:

Required Textbooks: Phillips' Science of Dental Materials2012
Craig's Restorative Dental Materials 2012
Anderson's applied dental materials

Main References (Sources):

Supporting Books and References (Scientific Journals, Reports):

Electronic References, Websites:

Course Description

Course Name: Crowns and Bridges:
First Course: Basic Crowns (15 weeks)
Second Course: Advanced Crowns (15 weeks)

Course Code: Second Stage

Academic Year: 2024/2025

Date of Description Preparation: 21/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours/Total Units: 210 hours / 4 units

Course Instructor:

Name: M. M. Rana Muwafaq Khudair

Email: dr.ranamj@gmail.com

Course Objectives:

4. To familiarize the student with the materials used in the fabrication of crowns and bridges and how to handle them.
5. To enable dental technology students to fabricate fixed crowns and bridges.

Learning and Teaching Strategies:

6. Lectures
7. Use of visual aids in the classroom
8. Interactive lectures
9. Use of data show

Course Structure:

First Semester / Basic Crowns

Week	Hours	Required Learning Outcomes	Unit Name or Topic	Learning Method	Assessment Method
1	7	The student learns about the topic	Introduction to Crowns and Bridges	Theoretical + Practical	Quiz + Attendance
2	7	The student understands the topic	Types of Crowns	Theoretical + Practical	Quiz + Attendance
3	7	The student understands the topic	Requirements for a Good Crown	Theoretical + Practical	Quiz + Attendance
4	7	The student understands the topic	Design and Preparation of Crowns	Theoretical + Practical	Quiz + Attendance

5	7	The student understands the topic	Materials Used in Crown Fabrication	Theoretical + Practical	Quiz + Attendance
6	7	The student understands the topic	Impression Taking for Crowns	Theoretical + Practical	Quiz + Attendance
7	7	The student understands the topic	Pouring Special Cement for High-Temperature Furnace Around Wax Molds	Theoretical + Practical	Quiz + Attendance
8	7	The student understands the topic	Methods of Pouring High-Temperature Cement	Theoretical + Practical	Quiz + Attendance
9	7	The student understands the topic	Methods of Baking Wax Molds Inside the High-Temperature Furnace	Theoretical + Practical	Quiz + Attendance
10	7	The student understands the topic	Problems Related to Baking Wax Molds Inside the High-Temperature Furnace	Theoretical + Practical	Quiz + Attendance
11	7	The student understands the topic	Methods and Tools Used for Casting Metal Alloy	Theoretical + Practical	Quiz + Attendance
12	7	The student understands the topic	Metal Alloy Casting Devices	Theoretical + Practical	Quiz + Attendance
13	7	The student understands the topic	Steps of Metal Alloy Casting	Theoretical + Practical	Quiz + Attendance
14	7	The student understands the topic	Trimming and Smoothing of Dental Casts After Metal Alloy Casting	Theoretical + Practical	Quiz + Attendance
15	7	The student understands the topic	Problems Related to Metal Alloy Casting and How to Avoid Them	Theoretical + Practical	Quiz + Attendance
Second Course: Advanced Crowns					

1	7	The student learns about the topic	Fabrication of the wax pattern of the incisors teeth	Theoretical + Practical	Quiz + Attendance
2	7	The student understands the topic	Fabrication of the wax pattern of the canine tooth	Theoretical + Practical	Quiz + Attendance
3	7	The student understands the topic	Fabrication of the wax pattern of the premolar teeth	Theoretical + Practical	Quiz + Attendance
4	7	The student understands the topic	Fabrication of the wax pattern of the molar teeth	Theoretical + Practical	Quiz + Attendance
5	7	The student understands the topic	Spruing of the anterior wax pattern	Theoretical + Practical	Quiz + Attendance
6	7	The student understands the topic	Spruing of the posterior wax pattern	Theoretical + Practical	Quiz + Attendance
7	7	The student understands the topic	Investing the wax pattern, equipment	Theoretical + Practical	Quiz + Attendance
8	7	The student understands the topic	Investing the wax pattern procedure	Theoretical + Practical	Quiz + Attendance
9	7	The student understands the topic	Burn out of the wax pattern: procedure	Theoretical + Practical	Quiz + Attendance
10	7	The student understands the topic	Burn out of the wax pattern: problems	Theoretical + Practical	Quiz + Attendance
11	7	The student understands the topic	Casting procedure, equipment	Theoretical + Practical	Quiz + Attendance
12	7	The student understands the topic	The casting machine	Theoretical + Practical	Quiz + Attendance
13	7	The student understands the topic	The casting technique	Theoretical + Practical	Quiz + Attendance

14	7	The student understands the topic	Finishing procedure of the casting	Theoretical + Practical	Quiz + Attendance
15	7	The student understands the topic	Problems associated with the Finishing procedure of the casting	Theoretical + Practical	Quiz + Attendance

Course assessment

The total grade of 100 for each academic semester is distributed as follows: 40 points for annual effort (25 theoretical + 15 practical) based on student assignments such as daily preparation, daily, oral, monthly, and written exams, and reports + 25 points for the practical final exam + 35 points for the theoretical final exam.

Learning and Teaching Resources:

Required Textbooks (Curricular, if any):

Contemporary fixed prosthodontics/ 5th edition.
Shillingburg Fundamentals of fixed prosthodontics.

Main References (Sources):

Supporting Books and References (Scientific Journals, Reports):

Electronic References, Websites:

Course Description

Course Name: Chemistry / Second Stage

Course Code:

Semester:

10. First Semester: Basic Chemistry (15 weeks)
11. Second Semester: Advanced Chemistry (15 weeks)

Academic Year: 2024-2025

Date of Description Preparation: 11/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours/Total Units:

12. First Course: 90 hours / 4 units
13. Second Course: 90 hours / 4 units

Course Instructor:

Name: M. M. Ali Mohammed Abbas
Email: ali.mohammed@au.edu.iq

Course Objectives:

14. General Objective: To familiarize students with the basics of chemical structures of most dental materials and how to handle them.
15. Specific Objective: To enable dental technology students to understand the molecular and structural composition of dental materials.

Learning and Teaching Strategies:

16. Lectures
17. Use of visual aids in the classroom
18. Interactive lectures
19. Use of data show

Course Structure:

First Semester / Basic Chemistry

Week	Hours	Required Learning Outcomes	Unit Name or Topic	Learning Method	Assessment Method
1	6	The student learns about	Introduction to General Chemistry (Matter).	Theoretical + Practical	Quiz + Attendance

			Classification of matter.		
2	6	The student understands the topic	Atom, atomic number, mass number, atomic mass and isotopes.	Theoretical + Practical	Quiz + Attendance
3	6	The student understands the topic	Periodic table.	Theoretical + Practical	Quiz + Attendance
4	6	The student understands the topic	Chemical bonds.	Theoretical + Practical	Quiz + Attendance
5	6	The student understands the topic	Method of analysis, solutions, standard solutions.	Theoretical + Practical	Quiz + Attendance
6	6	The student understands the topic	Molarity, molality, normality and dilution.	Theoretical + Practical	Quiz + Attendance
7	6	The student understands the topic	Chemical reactions, equilibrium constant, reaction rout, catalyst.	Theoretical + Practical	Quiz + Attendance
8	6	The student understands the topic	Solubility and ionization.	Theoretical + Practical	Quiz + Attendance

9	6	The student understands the topic	Neutralization analysis, acid and base theory.	Theoretical + Practical	Quiz + Attendance
10	6	The student understands the topic	PH, buffers and end point.	Theoretical + Practical	Quiz + Attendance
11	6	The student understands the topic	Spectroscopy (Optical spectroscopy).	Theoretical + Practical	Quiz + Attendance
12	6	The student understands the topic	Beers law.	Theoretical + Practical	Quiz + Attendance
13	6	The student understands the topic	Lipids.	Theoretical + Practical	Quiz + Attendance
14	6	The student understands the topic	Proteins.	Theoretical + Practical	Quiz + Attendance
15	6	The student understands the topic	Enzymes and vitamins.	Theoretical + Practical	Quiz + Attendance
Second Semester / Advanced Chemistry					

1	6	The student learns about	Alcohols, their properties and reactions.	Theoretical + Practical	Quiz + Attendance
2	6	The student understands the topic	Ethers, their properties and reactions.	Theoretical + Practical	Quiz + Attendance
3	6	The student understands the topic	Aldehydes and ketones, their properties and reactions.	Theoretical + Practical	Quiz + Attendance
4	6	The student understands the topic	Carboxylic acids and their derivatives, their properties and their reactions.	Theoretical + Practical	Quiz + Attendance
5	6	The student understands the topic	Phenols and their properties and their reactions.	Theoretical + Practical	Quiz + Attendance
6	6	The student understands the topic	Amines, aromatic hydrocarbons and polynuclear aromatic compounds.	Theoretical + Practical	Quiz + Attendance
7	6	The student understands the topic	Introduction to biochemistry (carbohydrates).	Theoretical + Practical	Quiz + Attendance
8	6	The student understands the topic	Amino acids and proteins.	Theoretical + Practical	Quiz + Attendance
9	6	The student understands the topic	Introduction to polymer chemistry.	Theoretical + Practical	Quiz + Attendance
10	6	The student understands the topic	Polymers, classification and their properties.	Theoretical + Practical	Quiz + Attendance

11	6	The student understands the topic	Reactions of polymer.	Theoretical + Practical	Quiz + Attendance
12	6	The student understands the topic	Natural polymers and their uses.	Theoretical + Practical	Quiz + Attendance
13	6	The student understands the topic	The mechanics of elastic solids.	Theoretical + Practical	Quiz + Attendance
14	6	The student understands the topic	Stress-Strain curve.	Theoretical + Practical	Quiz + Attendance
15	6	The student understands the topic	Green chemistry.	Theoretical + Practical	Quiz + Attendance

Course Assessment:

The total grade of 100 for each academic semester is distributed as follows: 40 points for annual effort (25 theoretical + 15 practical) based on student assignments such as daily preparation, daily, oral, monthly, and written exams, and reports + 25 points for the practical final exam + 35 points for the theoretical final exam.

Learning and Teaching Resources:

Required Textbooks (Curricular, if any): Organic Chemstry, C E Houseroft and A G Sharp Sec. Ed. 2005

Main References (Sources):

Supporting Books and References (Scientific Journals, Reports):

Electronic References, Websites:

Course Description

Course Name: Dental Equipment / First Stage

Course Code:

Semester:

20. First Semester: Dental Equipment (Basic) (15 weeks)
21. Second Semester: Dental Equipment (Advanced) (15 weeks)

Academic Year: 2024-2025

Date of Description Preparation: September 11, 2024

Attendance Type: Mandatory

Total Credit Hours/Units:

22. First Course: 105 hours / 4 units
23. Second Course: 105 hours / 4 units

24. Course Coordinator:

25. Name: Asst. Prof. Noor Hassan Abdullah
26. Email: noorha443@gmail.com

Course Objectives:

27. To introduce the student to dental devices and technologies, their components, operation, and maintenance.
28. To enable dental technologies students to use, maintain, and service dental devices.

Learning and Teaching Strategies:

29. Lectures, use of visual aids in the classroom, interactive lectures, use of data show.

Course Structure:

First Semester / Basic Dental Equipment

Week	Hours	Required Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
1	7	The student identifies	Introduction. Dental laboratories, The work in the lab,	Theoretical + Practical	Quiz + Attendance

			The principle of the ideal lab		
2	7	The student understands the topic	Hand instruments uses in the Dental laboratories	Theoretical + Practical	Quiz + Attendance
3	7	The student understands the topic	Dental Impression Trays	Theoretical + Practical	Quiz + Attendance
4	7	The student understands the topic	The burner uses in Prosthodontic Dentistry	Theoretical + Practical	Quiz + Attendance
5	7	The student understands the topic	Dental Pliers	Theoretical + Practical	Quiz + Attendance
6	7	The student understands the topic	Articulators, Face Bow and Die – lock tray	Theoretical + Practical	Quiz + Attendance
7	7	The student understands the topic	Dental Surveyors	Theoretical + Practical	Quiz + Attendance
8	7	The student understands the topic	Dental Packing & Duplication tools, and Dental Press	Theoretical + Practical	Quiz + Attendance

9	7	The student understands the topic	Dental Trimmer and Vibrator	Theoretical + Practical	Quiz + Attendance
10	7	The student understands the topic	Wax extraction unit	Theoretical + Practical	Quiz + Attendance
11	7	The student understands the topic	Polymerization devices (Water Bath devices, hydraulic flask and microwave oven)	Theoretical + Practical	Quiz + Attendance
12	7	The student understands the topic	Curing Light device and Injector flexible machine	Theoretical + Practical	Quiz + Attendance
13	7	The student understands the topic	Dental Brush, Burs and Disc	Theoretical + Practical	Quiz + Attendance
14	7	The student understands the topic	Laboratory Engines and Headpiece	Theoretical + Practical	Quiz + Attendance
15	7	The student understands the topic	Dental lathe polishing machine	Theoretical + Practical	Quiz + Attendance

Second Semester / Advanced Dental Equipment

Week	Hours	Required Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
1	7	The student identifies	Agar-ager melting machine and Flask cooling unit	Theoretical + Practical	Quiz + Attendance
2	7	The student understands the topic	Burn-out Furnace and casting ring	Theoretical + Practical	Quiz + Attendance
3	7	The student understands the topic	Conventional Centrifuge casting machine.	Theoretical + Practical	Quiz + Attendance
4	7	The student understands the topic	Electric and Induction Centrifuge casting machine.	Theoretical + Practical	Quiz + Attendance
5	7	The student understands the topic	Ultrasonic cleaning machine, and Mechanical mixer (vacuum)	Theoretical + Practical	Quiz + Attendance
6	7	The student understands the topic	Sand blast machine	Theoretical + Practical	Quiz + Attendance
7	7	The student understands the topic	Dental Ceramic Furnace	Theoretical + Practical	Quiz + Attendance

8	7	The student understands the topic	Soldering and welding	Theoretical + Practical	Quiz + Attendance
9	7	The student understands the topic	Dental Biostar	Theoretical + Practical	Quiz + Attendance
10	7	The student understands the topic	Dental-Arch Trimmer	Theoretical + Practical	Quiz + Attendance
11	7	The student understands the topic	Dental Pindex machine	Theoretical + Practical	Quiz + Attendance
12	7	The student understands the topic	Electronic spatula for wax modelling	Theoretical + Practical	Quiz + Attendance
13	7	The student understands the topic	Induction wax modelling and Dipping wax unit	Theoretical + Practical	Quiz + Attendance
14	7	The student understands the topic	General measurement instruments and Hopper duplicator	Theoretical + Practical	Quiz + Attendance
15	7	The student understands the topic	CAD-CAM production methods	Theoretical + Practical	Quiz + Attendance

Course Assessment:

The total grade for each semester is 100 points, distributed as follows:
30. 40 points for annual effort based on student assignments (daily, oral, monthly, and written exams, and reports) 31. 25 points for final practical exam 32. 35 points for final theoretical exam
Learning and Teaching Resources:
Required Textbooks:
33. *Dental Devices and Laboratories" by Dr. Faez Fouad Dawood (1985)*
Supporting Books and References (Scientific Journals, Reports):
34. Journal of Dentistry / University of Baghdad 35. Journal of Dentistry / Al-Mustansiriya University
36. Website of the College of Health and Medical Technologies, Middle Technical University
Electronic References, Websites:

Course Description
Course Title: English Language / First Year
Course Code:
Semester: First (15 weeks)
Academic Year: 2024–2025
Date of Syllabus Preparation: 11/9/2025
Attendance Type: Mandatory
Total Study Hours / Units: 30 hours / 2 units
Course Coordinator:
Name: Assistant Lecturer Mustafa Yahya Email: Mustafa.yahya@au.edu.iq
Course Objectives
37. General Objective: 38. To teach English to students of health and medical specialties. 39. Specific Objective: 40. To focus on the English language skills required by health and medical curricula.
Teaching and Learning Strategies
41. Use of the whiteboard and presentation slides 42. Engaging students in lectures 43. Answering students' questions 44. Interactive explanation and discussion of material 45. Asking questions to enhance participation
Course Structure

Week	Hours	Learning Outcome	Topic / Unit	Teaching Method	Assessment Method
1	2	Student identifies	Medical Terminology: Language of medicine, spelling, pronunciation, reading, vocabulary, grammar, oral and writing skills, pronunciation exercises, reviews, self-assessment	Theoretical	Quiz + Attendance
2	2	Student understands		Theoretical	Quiz + Attendance
3	2	Student understands		Theoretical	Quiz + Attendance
4	2	Student understands	Suffixes: Terms, reading, vocabulary, grammar, case reports, oral and writing skills, pronunciation, review, self-assessment	Theoretical	Quiz + Attendance
5	2	Student understands		Theoretical	Quiz + Attendance
6	2	Student understands		Theoretical	Quiz + Attendance
7	2	Student understands	Prefixes: Medical terms, reading, vocabulary, grammar, oral and writing skills, pronunciation, review, self-assessment	Theoretical	Quiz + Attendance
8	2	Student understands		Theoretical	Quiz + Attendance
9	2	Student understands		Theoretical	Quiz + Attendance
10	2	Student understands	Body Structure: Systems, planes, directional terms,	Theoretical	Quiz + Attendance

11	2	Student understands	positions, cavities, reading, vocabulary, grammar, oral and writing skills, review, self-assessment	Theoretical	Quiz + Attendance
12	2	Student understands		Theoretical	Quiz + Attendance
13	2	Student understands	Body Systems: Reading, vocabulary, grammar, oral and writing skills, pronunciation, review, self-assessment	Theoretical	Quiz + Attendance
14	2	Student understands		Theoretical	Quiz + Attendance
15	2	Student understands		Theoretical	Quiz + Attendance

Course Evaluation

46. Total Grade: 100 Marks
    1. 30 Marks: Year-round performance based on tasks such as daily preparation, quizzes, oral and written monthly exams, and reports.
    2. 70 Marks: Final written exam.

Learning Resources

47. Prescribed Textbook:
48. *Headway Upper Intermediate*
49. Main References:
50. *Mind Your Language*
51. Recommended Supporting Books:
52. *English Grammar in Use*
53. Online References:
54. *Writing Better English*

Course Description

Course Title: Dental Anatomy

Course Code:

Semester I: Basic Dental Anatomy (15 weeks)

Semester II: Advanced Dental Anatomy (15 weeks)

Academic Year: 2024–2025

Date of Description Preparation: 11/09/2024

Attendance Mode: Mandatory

Total Study Hours / Units:

55. First Semester: 105 hours / 4 units
56. Second Semester: 105 hours / 4 units

Course Coordinator:

Dr. Hassan Abdul Rahim Karim

Email: hassandentist71@yahoo.com

Course Objectives

57. General Objective:
58. Introduce students to the scientific terminology related to dental anatomy and provide them with anatomical knowledge of the teeth.
59. Specific Objective:
60. Through the scientific component, students learn to draw and carve teeth to benefit from this skill in their technical field.

Teaching and Learning Strategies

61. Lectures
62. Use of visual aids in the classroom
63. Interactive lectures
64. Use of data show (projector)

Course Structure

First Semester / Basic Dental Anatomy

Week	Hours	Intended Learning Outcome	Topic	Learning Method	Assessment
1	7	Student is introduced to	Introduction of dental anatomy	Theoretical + Practical	Quiz + Attendance
2	7	Student understands	Anatomy of tooth structure	Theoretical + Practical	Quiz + Attendance

3	7	Student understands	Numbering system of the teeth	Theoretical + Practical	Quiz + Attendance
4	7	Student understands	Physiology of teeth (Function) and tooth form	Theoretical + Practical	Quiz + Attendance
5	7	Student understands	Fundamentals of tooth form	Theoretical + Practical	Quiz + Attendance
6	7	Student understands	Proximal contact area: importance and function	Theoretical + Practical	Quiz + Attendance
7	7	Student understands	Physiology of human teeth	Theoretical + Practical	Quiz + Attendance
8	7	Student understands	Anatomical landmarks (anterior teeth)	Theoretical + Practical	Quiz + Attendance
9	7	Student understands	Anatomical landmarks (posterior teeth)	Theoretical + Practical	Quiz + Attendance
10	7	Student understands	Maxillary central incisor	Theoretical + Practical	Quiz + Attendance
11	7	Student understands	Maxillary lateral incisor	Theoretical + Practical	Quiz + Attendance
12	7	Student understands	Mandibular central incisor	Theoretical + Practical	Quiz + Attendance
13	7	Student understands	Mandibular lateral incisor	Theoretical + Practical	Quiz + Attendance
14	7	Student understands	Maxillary canine	Theoretical + Practical	Quiz + Attendance
15	7	Student understands	Mandibular canine	Theoretical + Practical	Quiz + Attendance

Second Semester / Advanced Dental Anatomy

Week	Hours	Intended Learning Outcome	Topic	Learning Method	Assessment
1	7	Student is introduced to	Maxillary 1st premolar: description and anatomical landmarks	Theoretical + Practical	Quiz + Attendance
2	7	Student understands	Maxillary 1st premolar: buccal, lingual, mesial, distal, and occlusal aspects	Theoretical + Practical	Quiz + Attendance

3	7	Student understands	Maxillary 2nd premolar: description and comparison with 1st premolar	Theoretical + Practical	Quiz + Attendance
4	7	Student understands	Mandibular 1st premolar: description and anatomical aspects	Theoretical + Practical	Quiz + Attendance
5	7	Student understands	Mandibular 2nd premolar: description and anatomical aspects	Theoretical + Practical	Quiz + Attendance
6	7	Student understands	Maxillary 1st molar: buccal, lingual, mesial, distal, occlusal aspects	Theoretical + Practical	Quiz + Attendance
7	7	Student understands	Maxillary 1st molar: description and landmarks	Theoretical + Practical	Quiz + Attendance
8	7	Student understands	Maxillary 2nd molar: comparison with 1st molar	Theoretical + Practical	Quiz + Attendance
9	7	Student understands	Maxillary 3rd molar: comparison with 1st and 2nd molars	Theoretical + Practical	Quiz + Attendance
10	7	Student understands	Mandibular 1st molar: description and landmarks	Theoretical + Practical	Quiz + Attendance
11	7	Student understands	Mandibular 1st molar: anatomical aspects	Theoretical + Practical	Quiz + Attendance
12	7	Student understands	Mandibular 2nd molar: comparison with 1st molar	Theoretical + Practical	Quiz + Attendance
13	7	Student understands	Mandibular 3rd molar: variations and comparison with 2nd molar	Theoretical + Practical	Quiz + Attendance
14	7	Student understands	Occlusion: definition, types, and features	Theoretical + Practical	Quiz + Attendance
15	7	Student understands	Review of posterior teeth	Theoretical + Practical	Quiz + Attendance
Course Evaluation					

Total score: 100 marks per semester, distributed as follows:

65. 40 marks for continuous assessment (daily preparation, quizzes, oral and written exams, reports, etc.)
66. 25 marks for final practical exam
67. 35 marks for final theoretical exam

Learning Resources

68. Prescribed Textbooks:

69. Main References:

1. Atlas of Dental Anatomy

70. Recommended Supporting Materials:

1. *Dental Anatomy, Physiology, and Occlusion*
2. *Dental Laboratory Technology: Dental Anatomy* by John B. Sowter
3. *Dental Morphology* by G.C. Downes

71. Electronic References / Websites:
    1. Ashur University website
    2. Website of the College of Health and Medical Technologies – Baghdad

Course Description

Course Name: Principles of Computer 1 / First Stage

Course Code:

Semester: First Semester: (15 weeks)

Academic Year: 2024-2025

Date of Description Preparation: 10/11/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours/Total Units: 45 hours / 2 units

Course Instructor:

Name: Shwan Maki Mohammed

Email:

Course Objectives:

72. General Objective: To provide students with skills in using basic office applications, creating office files and documents, utilizing the operating system, and understanding the fundamentals of working in a digital environment.
73. Specific Objective: To equip students with knowledge in managing and using various computer applications.

Learning and Teaching Strategies:

74. Lectures
75. Use of visual aids in the classroom
76. Interactive lectures
77. Use of data show

Course Structure:

Week	Hours	Required Learning Outcomes	Unit Name or Topic	Learning Method	Assessment Method
1	2	The student learns about	Writing extensive texts and training the student to perform these activities	Theoretical	Quiz + Attendance
2	2	The student understands the topic	Training the student to create texts with different formats and print them	Theoretical	Quiz + Attendance

3	2	The student understands the topic	Practical exercises on texts within the document	Theoretical	Quiz + Attendance
4	2	The student understands the topic	Giving names of companies or students and training the student to search for and replace a specific name	Theoretical	Quiz + Attendance
5	2	The student understands the topic	Training the student on page layout, display tab, and writing texts	Theoretical	Quiz + Attendance
6	2	The student understands the topic	Giving practical examples of inserting objects and training on writing texts more professionally	Theoretical	Quiz + Attendance
7	2	The student understands the topic	Giving practical examples of the insert tab page group	Theoretical	Quiz + Attendance
8	2	The student understands the topic	Giving practical examples of the Tables group	Theoretical	Quiz + Attendance
9	2	The student understands the topic	Giving other practical examples of the Tables group	Theoretical	Quiz + Attendance

10	2	The student understands the topic	Training the student on illustrative graphics	Theoretical	Quiz + Attendance
11	2	The student understands the topic	Inserting a specific image and assigning the student to perform those activities	Theoretical	Quiz + Attendance
12	2	The student understands the topic	Training the student on writing texts that include currency symbols, special characters, scientific symbols, and more	Theoretical	Quiz + Attendance
13	2	The student understands the topic	Training the student on writing equations that include addition, multiplication, exponentiation, and matrices in different forms	Theoretical	Quiz + Attendance
14	2	The student understands the topic	Training the student on creating different tables with data entry	Theoretical	Quiz + Attendance
15	2	The student understands the topic	Training on opening a new file and saving it on the desktop	Theoretical	Quiz + Attendance

Course Assessment:
The total grade of 100 is distributed as follows: 40 points for annual effort (25 theoretical + 15 practical) based on student assignments such as daily preparation, daily, oral, monthly, and written exams, and reports. Additionally, there are 25 points for the practical final exam and 35 points for the theoretical final exam.
Learning and Teaching Resources:
Required Textbooks (Curricular, if any):
Main References (Sources):
Supporting Books and References (Scientific Journals, Reports):
Electronic References, Websites:

Course Description

Course Title: Human Rights and Democracy / First Year

Course Code:

Semester: First (15 Weeks)

Academic Year: 2024–2025

Date of Description Preparation: September 10, 2024

Attendance Format: Mandatory

Total Study Hours / Units: 30 hours / 2 units

Course Instructor:

Assistant Lecturer Sara Ayad Ismail Hassan
Email: Sara.ayad@au.edu.iq

Course Objectives

78. General Objective:
79. The student will learn about the historical development of human rights, different forms of democracy, and various types of freedoms during the first semester.
80. Specific Objective:
81. The student will understand the historical development of human rights, the role of international organizations in protecting and respecting these rights, types of democracies, their impact on third-world countries, and the future of freedom.
82. It also aims to equip students in the Department of Dental Technology with knowledge of human rights and the principles of democracy.

Teaching and Learning Strategies

83. Lectures
84. Use of visual aids in the classroom
85. Interactive lectures
86. Use of data show/projector

Course Structure

Week	Hours	Learning Outcomes	Unit / Topic	Learning Method	Assessment Method
1	2	Student understands	Concept of Human Rights: definitions of human rights, rights, and humans	Theoretical	Quiz + Attendance
2	2	Student understands	Main characteristics of human rights	Theoretical	Quiz + Attendance
3	2	Student understands	Types of human rights: by importance, by individuals, by subject	Theoretical	Quiz + Attendance

4	2	Student understands	Categories of human rights: 87. First generation: civil and political rights. 88. Second generation: economic, social, and cultural rights 89. Third generation: environmental, cultural, and developmental rights	Theoretical	Quiz + Attendance
5	2	Student understands	Human rights in ancient civilizations: Mesopotamian, Indian, Chinese, Ancient Egyptian, Greek, and Roman civilizations	Theoretical	Quiz + Attendance
6	2	Student understands	Human rights in the Middle Ages	Theoretical	Quiz + Attendance
7	2	Student understands	Human rights in Islam and other divine religions	Theoretical	Quiz + Attendance
8	2	Student understands	Human rights in Renaissance societies: 1. Magna Carta (1215), Petition of Right (1628), Habeas Corpus Act (1679), Bill of Rights, 2. Thinkers' contributions (Hobbes, Locke, Rousseau, Voltaire, Montesquieu, etc.), 3. Declaration of Independence, French Revolution and Declaration of the Rights of Man	Theoretical	Quiz + Attendance
9	2	Student understands	Human rights in modern times: 1.October Socialist Revolution in Russia (1917), League of Nations Charter, 2.Universal Declaration of Human Rights (1948)	Theoretical	Quiz + Attendance
10	2	Student understands	Modern developments:	Theoretical	Quiz + Attendance

			1.UN Charter (1954), International Human Rights Covenants, Regional Human Rights Charters		
11	2	Student understands	Non-governmental organizations and human rights: International Red Cross, Amnesty International, Human Rights Watch, National Human Rights Organizations	Theoretical	Quiz + Attendance
12	2	Student understands	National and international human rights protections: 2. Constitutions and laws, Press freedom and public opinion, 3. Civil society organizations, Regional organizations (Arab League, EU, OAS), 4. UN and its specialized agencies	Theoretical	Quiz + Attendance
13	2	Student understands	Water and environmental awareness in Iraq: • General concept of awareness, Methods of awareness, • Dimensions and uses of water awareness	Theoretical	Quiz + Attendance
14	2	Student understands	Challenges to water awareness in Iraq and proposed solutions for water scarcity	Theoretical	Quiz + Attendance
15	2	Student understands	Concept of equality: • Historical development, Modern ideas of equality, • Gender equality, Equality regardless of beliefs	Theoretical	Quiz + Attendance
Course Evaluation					

5.	Total Score: 100 Marks 1. 30 Marks for ongoing assessment (daily preparation, quizzes, oral and written midterms, and reports) 2. 70 Marks for the final written exam
Learning Resources	
6.	Prescribed Textbooks:
7.	Main References:
8.	Recommended Supporting Materials:
9.	Electronic Resources / Websites:

Course Description
Course Name
Occupational Safety / First Stage
Course Code
First Semester: (15 Weeks)
Academic year
2024-2025
Date of preparation of this description
10/11/2024
Attendance Forms / Exemption
Mandatory Attendance
Total study hours (total) / number of units (total)
30 Hours / 2 Units
Course instructor
Name: Dr. Noor Hassan Abdullah Email: noorha443@gmail.com
Course Objectives:
General Objective: To define the student to the occupational hazards and their impact on general health. Specific Objective: To enable the student to identify occupational hazards in laboratories and workshops.
Teaching and Learning Strategies
10. Lectures 11. Use of Teaching Aids 12. Discussions and Interactive Lectures 13. Use of Data Show
Course Content

Week	Hours	Learning Outcomes	Unit/Module Name	Teaching Method	Assessment Method
1	2	The student understands	14. Introduction & terms used in occupational safety 15. The staff of the occupational health center	Theoretical	Quiz+ Attendance
2	2	The student understands	16. Work hazards in an industrial environment in general work	Theoretical	Quiz+ Attendance

			17. Physical hazards		
3	2	The student understands	18. Noise, and protection from noise 19. Source of noise in general work	Theoretical	Quiz+ Attendance
4	2	The student understands	20. Prevention from the heat in general work 21. Chemical hazards in general work	Theoretical	Quiz+ Attendance
5	2	The student understands	22. The most important route of entry of chemical 23. Elimination of chemical substances from the body 24. Type of toxicity 25. Chronic toxicity	Theoretical	Quiz+ Attendance
6	2	The student understands	26. Occupational cancer 27. Respiratory disease associated with occupational cancer 28. Occupational Asthma / properties prevention / treatment	Theoretical	Quiz+ Attendance
7	2	The student understands	Introduction to Biosafety and Security 29. Key components of Biorisk Management 30. Components of safety in all laboratories 31. Universal safety precautions Biosafety barriers in laboratories 32. Personal protective equipment(PPE) Facility Design	Theoretical	Quiz+ Attendance
8	2	The student understands	Biosafety level 33. Risk Assessment Strategy 34. Hazard groups, biosafety levels, practices and equipment Standard practices required in biology laboratories Biological Agents	Theoretical	Quiz+ Attendance

			35. Routs of infection 36. Basis for control Measures 37. Hazard group classification system A Biosafety cabinet (BSC)		
9	2	The student understands	Biorisk and biohazards 38. Control of substances hazardous to health 39. Assessing risk for work with human blood and tissues hazards 40. Control measures for work with human blood and tissue Containment level	Theoretical	Quiz+ Attendance
10	2	The student understands	Biorisk management system 41. Assess the capability of the laboratory staff to control hazards 42. Relation of risk groups to biosafety levels , practices of and equipment 43. Mitigation Control Measures 44. Sustainability of the bio-risk management system Strengthening biorisk management	Theoretical	Quiz+ Attendance
11	2	The student understands	Types of biological wastes 45. Categories of biological wastes 46. Decontamination of biological wastes Transportation of biological wastes 47. International Transport Regulations The Basic Triple Packaging System	Theoretical	Quiz+ Attendance

12	2	The student understands	Accident response 48. spill cleanup procedure 49. Investigation of an accident inside the laboratory Overview of biological safety and security equipment	Theoretical	Quiz+ Attendance
13	2	The student understands	Introduction to Biosecurity 50. Risks Characterization in biosecurity 51. Vulnerability assessment13 Component o14f Laboratory Biose15curity	Theoretical	Quiz+ Attendance
14	2	The student understands	biosafety Practical part biosafety rules simulation 3D https://www.labster.com/3d-biosafety-simulution	Theoretical	Quiz+ Attendance
15	2	The student understands	Biosafety training	Theoretical	Quiz+ Attendance

Course Evaluation:
Grade distribution out of 100 (30 continuous assessments: daily preparation, weekly exams, midterm, final, and 70 theoretical).
Teaching and Learning Resources
Required Course Textbooks (Syllabus and References)
Main References: Phillips' Science of Dental Materials 2012, Craig's Restorative Dental Materials 2012, Anderson's Applied Dental Materials
Supplementary Books and References (Scientific Journals, Reports)
Electronic References, Internet Websites

Course Description
Course Title: Arabic Language / First Year
Course Code:
Semester: Second (15 weeks)
Academic Year: 2024–2025
Date of Syllabus Preparation: 10/11/2024
Attendance Format: Mandatory Attendance
Total Study Hours / Units: 30 hours / 2 units
Course Coordinator:
Name: Assistant Lecturer Shwan Maki Mohammed Email:
Course Objectives
52. General Objective: 53. To educate students in the rules of Arabic grammar and Arabic literature. 54. Specific Objective: 55. To provide students with a comprehensive understanding of Arabic grammar and literary elements.
Teaching and Learning Strategies
56. Lectures
57. Use of visual aids in the classroom
58. Interactive lectures
59. Use of data show presentations
Course Structure

Week	Hours	Learning Outcome	Topic / Unit	Learning Method	Assessment Method
1	2	Student identifies	Introduction to language errors – tied, long, and open "ta"	Theoretical	Quiz + Attendance
2	2	Student understands	Rules of writing extended and short alif – Solar and Lunar letters	Theoretical	Quiz + Attendance
3	2	Student understands	Letters "Ḍād" and "Ẓāʾ"	Theoretical	Quiz + Attendance
4	2	Student understands	Writing of hamza	Theoretical	Quiz + Attendance
5	2	Student understands	Punctuation marks	Theoretical	Quiz + Attendance
6	2	Student understands	Noun and verb and the difference between them	Theoretical	Quiz + Attendance
7	2	Student understands	Verbal objects	Theoretical	Quiz + Attendance
8	2	Student understands	Numbers	Theoretical	Quiz + Attendance

9	2	Student understands	Applications of common linguistic errors	Theoretical	Quiz + Attendance
10	2	Student understands	Applications of common linguistic errors	Theoretical	Quiz + Attendance
11	2	Student understands	Noonation and meanings of prepositions	Theoretical	Quiz + Attendance
12	2	Student understands	Formal aspects of administrative correspondence	Theoretical	Quiz + Attendance
13	2	Student understands	Language of administrative correspondence	Theoretical	Quiz + Attendance
14	2	Student understands	Language of administrative correspondence	Theoretical	Quiz + Attendance
15	2	Student understands	Examples of administrative correspondences	Theoretical	Quiz + Attendance

Course Evaluation

60. Total Grade: 100 Marks

1. 30 Marks: Continuous assessment based on tasks such as daily preparation, quizzes, oral and written monthly exams, and reports.
2. 70 Marks: Final written exam.

Learning Resources

61. Prescribed Textbooks (if any):
62. Main References: “Clear Grammar in the Rules of the Arabic Language” by Mustafa Amin
63. Recommended Supporting Books (Journals, Reports):
64. Electronic Resources / Websites:

course description:

Course Name: General Physics

Course Code:

Academic Year: 2024-2025, Second Semester

Date of Description Preparation: 2024/10/21

Available Attendance Modes: In-person

Total Study Hours/ Units: 90/4

Course Instructor:

Name: Hassan Khalid Issa

Email: Hassan.khalid@au.edu.iq

Course Objectives:

65. Introduce students to the general principles of physics.

66. Enable students to conduct analytical scientific physics experiments.

Learning and Teaching Strategies:

67. Lectures and discussions to reinforce ideas.

68. Experiments and laboratories, and report preparation.

Course Structure:

Week	Hours	Required Learning Outcomes	Unit Name or Topic	Learning Method	Assessment Method
1	2	The student understands the material	Review of general physics, concept and laws	Theoretical + Practical	Quiz + Attendance
2	2	The student understands the material	Atomic structure	Theoretical + Practical	Quiz + Attendance
3	2	The student understands the material	Ohm's law, series and parallel circuits	Theoretical + Practical	Quiz + Attendance
4	2	The student understands the material	Capacitor, series and parallel capacitors	Theoretical + Practical	Quiz + Attendance

5	2	The student understands the material	Electromotive force (e.m.f)	Theoretical + Practical	Quiz + Attendance
6	2	The student understands the material	The mechanical properties of solid materials (Rheological properties)	Theoretical + Practical	Quiz + Attendance
7	2	The student understands the material	The physical properties of solid materials (adhesion and cohesion)	Theoretical + Practical	Quiz + Attendance
8	2	The student understands the material	The physical properties of solid materials (thermal properties)	Theoretical + Practical	Quiz + Attendance
9	2	The student understands the material	The physical properties of solid materials (electrical properties)	Theoretical + Practical	Quiz + Attendance
10	2	The student understands the material	The physical properties of solid materials (surface physico-chemistry)	Theoretical + Practical	Quiz + Attendance
11	2	The student understands the material	The physical properties of solid materials (surface texture)	Theoretical + Practical	Quiz + Attendance

12	2	The student understands the material	The physical properties of solid materials (optical properties)	Theoretical + Practical	Quiz + Attendance
13	2	The student understands the material	The biological properties of solid materials (Biocompatibility)	Theoretical + Practical	Quiz + Attendance
14	2	The student understands the material	The biological properties of solid materials (Biofilm formation and bioadhesion)	Theoretical + Practical	Quiz + Attendance
15	2	The student understands the material	The chemical properties of solid materials	Theoretical + Practical	Quiz + Attendance

Course Assessment:

Grades are distributed out of 100 based on student assignments such as daily preparation, daily and oral exams, monthly and written exams, and reports:

69. Attendance and Reports: 10 points
70. Short Quizzes: 5 points
71. Midterm (Theoretical): 25 points
72. Final Exam: 60 points (divided into 25 points practical and 35 points theoretical)

Learning and Teaching Resources:

Required Textbooks:

73. Medical Physics, John Cameron
74. Other non-curricular supporting books

Main References (Sources):

Supporting Books and References (Scientific Journals, Reports):

Electronic References, Websites: None

Course Description

Course Name: Dental Materials / First Stage

Course Code:

Semester:

75. First Semester: Dental Materials (Basic) (15 weeks)
76. Second Semester: Dental Materials (Intermediate) (15 weeks)

Academic Year: 2024-2025

Date of Description Preparation: September 11, 2024

Attendance Type: Mandatory

Total Credit Hours/Units:

77. First Course: 105 hours / 4 units
78. Second Course: 105 hours / 4 units

79. Course Coordinator:

80. Name: Asst. Prof. Noor Hassan Abdullah
81. Email: noorha443@gmail.com

Course Objectives:

82. To familiarize students with the materials used in dental technology and how to handle them.
83. To enable dental technology students to study and use all common laboratory materials in the preparation and manufacture of dental and maxillofacial prostheses, in addition to studying their physical, chemical, and biological properties.

Learning and Teaching Strategies:

84. Lectures
85. Use of visual aids in the classroom
86. Interactive lectures
87. Use of data show

Course Structure:

First Semester / Basic Dental Materials

Week	Hours	Required Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
1	7	The student identifies	Basics of materials science	Theoretical + Practical	Quiz + Attendance

2	7	The student understands the topic	Requirements and evaluation of dental materials	Theoretical + Practical	Quiz + Attendance
3	7	The student understands the topic	The structure of the solid materials and interatomic bonds	Theoretical + Practical	Quiz + Attendance
4	7	The student understands the topic	The mechanical properties of the solid materials (Part I)	Theoretical + Practical	Quiz + Attendance
5	7	The student understands the topic	The mechanical properties of the solid materials (Part II)	Theoretical + Practical	Quiz + Attendance
6	7	The student understands the topic	The mechanical properties of the solid materials (Rheological properties)	Theoretical + Practical	Quiz + Attendance
7	7	The student understands the topic	The physical properties of the solid materials (adhesion and cohesion)	Theoretical + Practical	Quiz + Attendance
8	7	The student understands the topic	The physical properties of the solid materials (thermal properties)	Theoretical + Practical	Quiz + Attendance

9	7	The student understands the topic	The physical properties of the solid materials (electrical properties)	Theoretical + Practical	Quiz + Attendance
10	7	The student understands the topic	The physical properties of the solid materials (surface physico-chemistry)	Theoretical + Practical	Quiz + Attendance
11	7	The student understands the topic	The physical properties of the solid materials (surface texture)	Theoretical + Practical	Quiz + Attendance
12	7	The student understands the topic	The physical properties of the solid materials (optical properties)	Theoretical + Practical	Quiz + Attendance
13	7	The student understands the topic	The biological properties of the solid materials (Biocompatibility)	Theoretical + Practical	Quiz + Attendance
14	7	The student understands the topic	The biological properties of the solid materials (Biofilm formation and bioadhesion)	Theoretical + Practical	Quiz + Attendance
15	7	The student understands the topic	The chemical properties of the solid materials	Theoretical + Practical	Quiz + Attendance

Week	Hours	Required Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
1	7	The student identifies	Polymers in dentistry (Basic structure of polymer)	Theoretical + Practical	Quiz + Attendance
2	7	The student understands the topic	Polymers in dentistry (polymerization and crosslinking reactions)	Theoretical + Practical	Quiz + Attendance
3	7	The student understands the topic	Resins, artificial teeth materials	Theoretical + Practical	Quiz + Attendance
4	7	The student understands the topic	Acrylic resin material (denture base materials)	Theoretical + Practical	Quiz + Attendance
5	7	The student understands the topic	Classification and properties of dental acrylic resin materials	Theoretical + Practical	Quiz + Attendance
6	7	The student understands the topic	Denture liner materials	Theoretical + Practical	Quiz + Attendance
7	7	The student understands the topic	Wax (composition and properties)	Theoretical + Practical	Quiz + Attendance

8	7	The student understands the topic	Dental wax (Thermal, physical, and chemical properties)	Theoretical + Practical	Quiz + Attendance
9	7	The student understands the topic	Dental wax (types and uses)	Theoretical + Practical	Quiz + Attendance
10	7	The student understands the topic	Gypsum products (chemistry and composition)	Theoretical + Practical	Quiz + Attendance
11	7	The student understands the topic	Gypsum products (types and uses)	Theoretical + Practical	Quiz + Attendance
12	7	The student understands the topic	Gypsum products (setting reaction and properties)	Theoretical + Practical	Quiz + Attendance
13	7	The student understands the topic	Dental abrasives (definition and concept)	Theoretical + Practical	Quiz + Attendance
14	7	The student understands the topic	Dental abrasives types	Theoretical + Practical	Quiz + Attendance
15	7	The student understands the topic	Dental abrasives (procedure and application)	Theoretical + Practical	Quiz + Attendance

Course Assessment:

The total grade for each semester is 100 points, distributed as follows:

88. 40 points for annual effort based on student assignments (daily, oral, monthly, and written exams, and reports) 89. 25 points for final practical exam 90. 35 points for final theoretical exam
Learning and Teaching Resources:
Required Textbooks:
91. *Phillips' Science of Dental Materials 2012* 92. *Craig's Restorative Dental Material* (5th edition) 93. *Anderson's Applied Dental Materials*
Supporting Books and References (Scientific Journals, Reports):
94. Journal of Dentistry / University of Baghdad 95. Journal of Dentistry / Al-Mustansiriya University
96. Website of the College of Health and Medical Technologies, Middle Technical University
Electronic References, Websites:

Course Name: Oral Diseases / Third Level

Course Code:

First Semester: (15 weeks), 2024-2025

Date of Description Preparation: 20/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours/Total Units: 45 / 2

Course Instructor: Mayadah Hameed Rasheed, Email: mayadah.hameed@au.edu.iq

Course Objectives:

97. General Objective: To familiarize students with oral and dental diseases and how to prepare and examine slides using a microscope.

98. Specific Objective: To enable students to identify and microscopically diagnose oral and dental diseases in the laboratory.

Learning and Teaching Strategies:

99. Lectures and discussion lectures

100. Use of visual aids and short educational films

101. Interactive applications

Course Structure:

Week	Hours	Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	3	Student identifies	Oral pathology	Theoretical + Practical	Written exams, Attendance
Second	3	Student understands the topic	Microscopy and slide preparation	Theoretical + Practical	Written exams, Attendance
Third	3	Student understands the topic	Biopsy, definition, types, technique	Theoretical + Practical	Written exams, Attendance
Fourth	3	Student understands the topic	Dental caries, definition, classification, clinical	Theoretical + Practical	Written exams, Attendance

			feature, radiological		
Fifth	3	Student understands the topic	feature	Theoretical + Practical	Written exams, Attendance
Sixth	3	Student understands the topic	Pulp disease, acute pulpitis	Theoretical + Practical	Written exams, Attendance
Seventh	3	Student understands the topic	Pulp disease, dental granuloma	Theoretical + Practical	Written exams, Attendance
Eighth	3	Student understands the topic	Periapical pathology & changes	Theoretical + Practical	Written exams, Attendance
Ninth	3	Student understands the topic	Cyst of the Jaw	Theoretical + Practical	Written exams, Attendance
Tenth	3	Student understands the topic	White lesions	Theoretical + Practical	Written exams, Attendance
Eleventh	3	Student understands the topic	Ulceration oral lesions	Theoretical + Practical	Written exams, Attendance
Twelfth	3	Student understands the topic	Developmental disturbance of oral mucosa	Theoretical + Practical	Written exams, Attendance
Thirteenth	3	Student understands the topic	Developmental disturbance of the tongue	Theoretical + Practical	Written exams, Attendance

Fourteenth	3	Student understands the topic	Developmental disturbance of teeth	Theoretical + Practical	Written exams, Attendance
Fifteenth	3	Student understands the topic	Bone diseases	Theoretical + Practical	Written exams, Attendance

Course Assessment:

The grade distribution is out of 100 for each semester:

102. 40 marks for annual effort (based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports)
103. 25 marks for practical final exam
104. 35 marks for theoretical final exam

Learning and Teaching Resources:

105. Required Textbooks: Burkett oral Medicine 2020
106. Main References: Not specified
107. Supporting Books and References (Scientific journals, reports): Not specified
108. Electronic References, Internet Sites: Not specified

Course Name: Oral Bacteria / Third Level

Course Code:

Second Semester: (15 weeks), 2024-2025

Date of Description Preparation: 20/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours/Total Units: 75 / 3

Course Instructor:
Noor Hassan Abdulla,
Email: **noorha443@gmail.com**

Course Objectives:

109. General Objective: To familiarize students with the nature and components of bacteria causing oral and dental diseases, and how to prepare and examine slides using a microscope.
110. Specific Objective: To enable students to identify and microscopically diagnose the nature and components of bacteria causing oral and dental diseases in the laboratory.

Learning and Teaching Strategies:

111. Lectures and discussion lectures

112. Use of visual aids and short educational films

113. Interactive applications

Course Structure:

Week	Hours	Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	5	Student identifies	Oral bacteriology	Theoretical + Practical	Written exams, Attendance
Second	5	Student understands the topic	The cellular structure of bacteria	Theoretical + Practical	Written exams, Attendance
Third	5	Student understands the topic	Dent Bacterial classification	Theoretical + Practical	Written exams, Attendance
Fourth	5	Student understands the topic	Bacterial growth phases and curve	Theoretical + Practical	Written exams, Attendance

Fifth	5	Student understands the topic	Grams stain steps and procedures	Theoretical + Practical	Written exams, Attendance
Sixth	5	Student understands the topic	Basic requirements of Bacteria	Theoretical + Practical	Written exams, Attendance
Seventh	5	Student understands the topic	Oral microbiology and oral environments	Theoretical + Practical	Written exams, Attendance
Eighth	5	Student understands the topic	Dental plaque, definition, clinical feature, developments	Theoretical + Practical	Written exams, Attendance
Ninth	5	Student understands the topic	Oral streptococci, types, morphology, characteristics, selective	Theoretical + Practical	Written exams, Attendance
Tenth	5	Student understands the topic	media	Theoretical + Practical	Written exams, Attendance
Eleventh	5	Student understands the topic	Mutans streptococci, types, morphology, characteristics, selective	Theoretical + Practical	Written exams, Attendance

Twelfth	5	Student understands the topic	media	Theoretical + Practical	Written exams, Attendance
Thirteenth	5	Student understands the topic	The role of Bacteria in dental caries (cariogenic bacteria)	Theoretical + Practical	Written exams, Attendance
Fourteenth	5	Student understands the topic	The role of streptococcus in the development of dental caries	Theoretical + Practical	Written exams, Attendance
Fifteenth	5	Student understands the topic	The role of bacteria in periodontal disease	Theoretical + Practical	Written exams, Attendance

Course Assessment:

The grade distribution is out of 100 for each semester: 40 marks for annual effort (based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports) + 25 marks for practical final exam + 35 marks for theoretical final exam.

Learning and Teaching Resources:

114. Required Textbooks: Book of Cawson's Essentials of Oral Pathology and Oral Medicine. Seventh Edition. By R.A. Cawson & E.W. Odell.

115. Main References: Not specified.

116. Supporting Books and References (Scientific journals, reports): Not specified.

117. Electronic References, Internet Sites: Not specified.

Course Description

Course Name: Removable Partial Denture (Intermediate) / Third Level

Course Code:

First Semester: (15 weeks), 2024-2025

Date of Description Preparation: 20/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours (Total)/Total Units (Total): 90/4

Course Instructor:

Name: M.M. Noor Ahmed Jassim
Email: nooralatool@yahoo.com

Course Objectives:

General Objective: To familiarize the student with the basic steps involved in the fabrication of acrylic partial dentures.

Specific Objective: To enable dental technology students to understand the basic steps involved in the fabrication of acrylic partial dentures.

Learning and Teaching Strategies:

118. Lectures and discussion lectures
119. Use of visual aids and short educational films
120. Interactive applications

Course Structure:

Week	Hours	Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	6	Student identifies	The ideal component of the chrome-cobalt removable partial denture	Theoretical + Practical	Written exams, Attendance
Second	6	Student understands the topic	Maxillary major connector	Theoretical + Practical	Written exams, Attendance
Third	6	Student understands the topic	Mandibular major connector	Theoretical + Practical	Written exams, Attendance
Fourth	6	Student understands the topic	Minor retainer	Theoretical + Practical	Written exams, Attendance
Fifth	6	Student understands the topic	Direct retainer	Theoretical + Practical	Written exams, Attendance

Sixth	6	Student understands the topic	Indirect retainer	Theoretical + Practical	Written exams, Attendance
Seventh	6	Student understands the topic	Rest and rest seat	Theoretical + Practical	Written exams, Attendance
Eighth	6	Student understands the topic	Denture base	Theoretical + Practical	Written exams, Attendance
Ninth	6	Student understands the topic	Support for the distal extension denture base	Theoretical + Practical	Written exams, Attendance
Tenth	6	Student understands the topic	Establishment of occlusal relationship for R.P.D.	Theoretical + Practical	Written exams, Attendance
Eleventh	6	Student understands the topic	Duplicating of the master cast (Refractory cast)	Theoretical + Practical	Written exams, Attendance
Twelfth	6	Student understands the topic	Wax pattern	Theoretical + Practical	Written exams, Attendance
Thirteenth	6	Student understands the topic	Spruing and investing	Theoretical + Practical	Written exams, Attendance
Fourteenth	6	Student understands the topic	Burnout and Casting	Theoretical + Practical	Written exams, Attendance
Fifteenth	6	Student understands the topic	Finishing and polishing	Theoretical + Practical	Written exams, Attendance

Course Assessment:

The grade distribution is out of 100 for each semester: 40 marks for annual effort (25 theoretical + 15 practical) based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports + 25 marks for practical final exam + 35 marks for theoretical final exam.

Learning and Teaching Resources:

121. Required Textbooks:

122. Main References:

1. Removable Partial Prosthodontics by McCRACKEN
2. Essential of removable partial denture by K. Bhasker

123. Supporting Books and References (Scientific journals, reports):

1.	Journal of Dentistry / University of Baghdad
2.	Journal of Dentistry / Al-Mustansiriya University
124.	Electronic References, Internet Sites:
1.	Ashur University website
2.	College of Health and Medical Technologies - Baghdad website

Course Name: Basic Maxillofacial Prosthetics / Third Level

Course Code:

Second Semester: (15 weeks), 2024-2025

Date of Description Preparation: 20/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours/Total Units: 105 / 4

Course Instructor:
Noor Ahmed Jassim,
Email: **nooralatool@yahoo.com**

Course Objectives:

125. To familiarize the student with the general concept of maxillofacial prosthetics.
126. To teach the student about the types of prosthetic and therapeutic devices specific to maxillofacial prosthetics.
127. To teach the student how to evaluate cases of congenital and acquired deformities and participate in the treatment plan for maxillofacial prosthetics.
128. To teach the student how to overcome errors and find solutions for them in the laboratory during the manufacturing of prosthetic and therapeutic devices specific to maxillofacial prosthetics.
129. To enable the student to use artificial materials specific to maxillofacial prosthetics.

Learning and Teaching Strategies:

130. Lectures and discussion lectures
131. Use of visual aids and short educational films
132. Interactive applications

Course Structure:

Week	Hours	Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	7	Student identifies	Maxillofacial prosthesis work	Theoretical + Practical	Written exams, Attendance
Second	7	Student understands the topic	Facial skin, wrinkles, and structures or landmarks	Theoretical + Practical	Written exams, Attendance
Third	7	Student understands the topic	Prosthetic treatment of maxillofacial defects	Theoretical + Practical	Written exams, Attendance
Fourth	7	Student understands the topic	Materials used for maxillofacial restoration construction	Theoretical + Practical	Written exams, Attendance

Fifth	7	Student understands the topic	Cleft lip and palate (anatomy, impression and cast construction)	Theoretical + Practical	Written exams, Attendance
Sixth	7	Student understands the topic	Cleft lip and palate (feeding plate construction)	Theoretical + Practical	Written exams, Attendance
Seventh	7	Student understands the topic	Maxillary cleft (anatomy of the palate)	Theoretical + Practical	Written exams, Attendance
Eighth	7	Student understands the topic	Obturator (Anatomy Impression and cast construction)	Theoretical + Practical	Written exams, Attendance
Ninth	7	Student understands the topic	Obturator construction	Theoretical + Practical	Written exams, Attendance
Tenth	7	Student understands the topic	Ocular prosthesis	Theoretical + Practical	Written exams, Attendance
Eleventh	7	Student understands the topic	Orbital prosthesis	Theoretical + Practical	Written exams, Attendance
Twelfth	7	Student understands the topic	Auricular prosthesis	Theoretical + Practical	Written exams, Attendance
Thirteenth	7	Student understands the topic	Nasal prosthesis	Theoretical + Practical	Written exams, Attendance
Fourteenth	7	Student understands the topic	Nasal and meatus opening devices	Theoretical + Practical	Written exams, Attendance
Fifteenth	7	Student understands the topic	Retention for maxillofacial prosthesis	Theoretical + Practical	Written exams, Attendance

Course Assessment:

The grade distribution is out of 100 for each semester: 40 marks for annual effort (25 theoretical + 15 practical) based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports + 25 marks for practical final exam + 35 marks for theoretical final exam.

Learning and Teaching Resources:
Required Textbooks:
1. Scully, C. (2012). Oral and maxillofacial medicine: the basis of diagnosis and treatment. Elsevier Health Sciences. 2. Textbook of prosthodontics.
Main References: Not specified.
Supporting Books and References (Scientific journals, reports): **133.** Al-Teqni Journal, **134.** Baghdad University Dental Journal, **135.** Al-Mustansiriya Dental Journal.
Electronic References, Internet Sites: Ashur University website, College of Health and Medical Technologies - Baghdad website.

Course Name: Orthodontics / Third Level

Semesters:
First Semester: Basic Orthodontics / 15 weeks;
Second Semester: Intermediate Orthodontics / 15 weeks

Course Code:

Semester/Year: 2024-2025

Date of Description Preparation: 12/11/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours/Total Units: 160 / 7

Course Instructor:

Name: Abeer Adnan
Email: abeeradnan321@Gmail,com

Course Objectives:

136. To teach students the general concept of orthodontics.
137. To teach students about the components of acrylic orthodontic appliances.
138. To guide students on how to work in the orthodontic (acrylic) manufacturing laboratory.
139. To teach students how to overcome errors and find solutions for them in the laboratory during the manufacturing of orthodontic appliances.

Learning and Teaching Strategies:

140. Gaining sufficient skill in manufacturing various types of orthodontic appliances and how to handle the laboratory equipment used.
141. Additionally, the ability to identify the materials used in orthodontics.
142. Understanding the types of jaw relationships.
143. How to deal with the types of wire used in orthodontics.
144. Waxing orthodontic appliances, carving wax, converting appliances to acrylic, trimming, and polishing.

Course Structure:

First Course / Basic Orthodontics:

Week	Hours	Required Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
1	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Six keys to normal occlusion	Theoretical + Practical	Written exams, Attendance, Practical application

2	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Adams clasp construction	Theoretical + Practical	Written exams, Attendance, Practical application
3	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Hawley labial arch, Robert retractor, and Fitted labial arch	Theoretical + Practical	Written exams, Attendance, Practical application
4	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Buccal canine retractor and modification	Theoretical + Practical	Written exams, Attendance, Practical application
5	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Finger spring and Modified finger spring	Theoretical + Practical	Written exams, Attendance, Practical application
6	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Z-Spring and Recurved Z-spring	Theoretical + Practical	Written exams, Attendance, Practical application
7	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Myofunctional appliance construction	Theoretical + Practical	Written exams, Attendance, Practical application
8	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Anchorage and fixed orthodontic appliance	Theoretical + Practical	Written exams, Attendance, Practical application
9	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Introduction and malocclusion	Theoretical + Practical	Written exams, Attendance,

					Practical application
10	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Orthodontic wires properties and removable orthodontic appliance	Theoretical + Practical	Written exams, Attendance, Practical application
11	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Soldering & welding	Theoretical + Practical	Written exams, Attendance, Practical application
12	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Open bite, Deep bite, and Space maintainers in orthodontics	Theoretical + Practical	Written exams, Attendance, Practical application
13	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Crossbite in orthodontics	Theoretical + Practical	Written exams, Attendance, Practical application
14	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Bad habits and Habit breaker	Theoretical + Practical	Written exams, Attendance, Practical application
15	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Bite plane and Retainers	Theoretical + Practical	Written exams, Attendance, Practical application

Second Course / Intermediate Orthodontics:

Week	Hours	Required Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
1	2 hours theoretical, 5	Student understands	Six keys to normal occlusion	Theoretical + Practical	Written exams, Attendance,

	hours practical	the material and applies it			Practical application
2	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Adams clasp construction	Theoretical + Practical	Written exams, Attendance, Practical application
3	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Hawley labial arch, Robert retractor, and Fitted labial arch	Theoretical + Practical	Written exams, Attendance, Practical application
4	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Buccal canine retractor and modification	Theoretical + Practical	Written exams, Attendance, Practical application
5	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Finger spring and Modified finger spring	Theoretical + Practical	Written exams, Attendance, Practical application
6	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Z-Spring and Recurved Z-spring	Theoretical + Practical	Written exams, Attendance, Practical application
7	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Myofunctional appliance construction	Theoretical + Practical	Written exams, Attendance, Practical application
8	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Anchorage and fixed orthodontic appliance	Theoretical + Practical	Written exams, Attendance, Practical application
9	2 hours theoretical, 5	Student understands	Introduction and malocclusion	Theoretical + Practical	Written exams,

	hours practical	the material and applies it			Attendance, Practical application
10	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Orthodontic wires properties and removable orthodontic appliance	Theoretical + Practical	Written exams, Attendance, Practical application
11	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Soldering & welding	Theoretical + Practical	Written exams, Attendance, Practical application
12	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Open bite, Deep bite, and Space maintainers in orthodontics	Theoretical + Practical	Written exams, Attendance, Practical application
13	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Crossbite in orthodontics	Theoretical + Practical	Written exams, Attendance, Practical application
14	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Bad habits and Habit breaker	Theoretical + Practical	Written exams, Attendance, Practical application
15	2 hours theoretical, 5 hours practical	Student understands the material and applies it	Bite plane and Retainers	Theoretical + Practical	Written exams, Attendance, Practical application

Course Assessment:

The grade distribution is out of 100 for each semester: 40 marks for annual effort (based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports) + 25 marks for practical final exam + 35 marks for theoretical final exam.

Learning and Teaching Resources:

145. Required Textbooks:

1.	Text book of orthodontic
146.	Main References:
1.	Textbook of prosthodontic
147.	Supporting Books and References (Scientific journals, reports):
1. **2.** **3.**	Al-Teqni Journal Baghdad University Dental College Journal Al-Mustansiriya University Dental College Journal
148.	Electronic References, Internet Sites:
1. **2.**	Ashur University website College of Health and Medical Technologies - Baghdad website

Course Name: Crowns and Bridges / Third Level

Course Code: Crown and Bridge

Semesters:
First Semester: Basic Bridges / 15 weeks;
Second Semester: Advanced Bridges / 15 weeks

Semester/Year: 2024/2520

Date of Description Preparation: 22/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours (Total)/Total Units (Total): First Semester = 90/4, Second Semester = 105/4

Course Instructor:

Name: Rana Muwaffaq Khudair
Email: **dr.ranamj@gmail.com**

Course Objectives:

149. To familiarize the student with the materials used in the manufacture of crowns and bridges and how to deal with them.
150. To enable students in the dental technologies department to manufacture fixed crowns and bridges.

Learning and Teaching Strategies:

151. Lectures
152. Use of visual aids inside the hall
153. Interactive lecture
154. Use of data show

Course Structure:

First Semester / Basic Bridges:

Week	Hours	Required Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	6	Student identifies the topic	Fixed partial dentures design, types & indications.	Theoretical + Practical	Quiz + Attendance
Second	6	Student understands the topic	Pontic design.	Theoretical + Practical	Quiz + Attendance
Third	6	Student understands the topic	Connectors for a fixed partial denture	Theoretical + Practical	Quiz + Attendance

Fourth	6	Student understands the topic	A framework design for metal ceramic restoration	Theoretical + Practical	Quiz + Attendance
Fifth	6	Student understands the topic	Methods of waxing framework (coping)	Theoretical + Practical	Quiz + Attendance
Sixth	6	Student understands the topic	The procedure of waxing framework (coping)	Theoretical + Practical	Quiz + Attendance
Seventh	6	Student understands the topic	Spruning procedure, investing	Theoretical + Practical	Quiz + Attendance
Eighth	6	Student understands the topic	Alloys and metal selection for metal ceramic restoration	Theoretical + Practical	Quiz + Attendance
Ninth	6	Student understands the topic	Casting ring and liner, Burn out and casting	Theoretical + Practical	Quiz + Attendance
Tenth	6	Student understands the topic	Provisional crown & bridge materials & techniques.	Theoretical + Practical	Quiz + Attendance
Eleventh	6	Student understands the topic	Preparation of metal copy for metal ceramic restoration (anterior)	Theoretical + Practical	Quiz + Attendance
Twelfth	6	Student understands the topic	Preparation of metal copy for metal ceramic restoration (posterior)	Theoretical + Practical	Quiz + Attendance
Thirteenth	6	Student understands the topic	Bonding of ceramic to metal	Theoretical + Practical	Quiz + Attendance
Fourteenth	6	Student understands the topic	Provisional restoration: introduction, types	Theoretical + Practical	Quiz + Attendance
Fifteenth	6	Student understands the topic	Provisional restoration: materials and techniques	Theoretical + Practical	Quiz + Attendance

Second Semester / Advanced Bridges:

Week	Hours	Required Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	6	Student understands the topic	Laboratory failure of the bridge	Theoretical + Practical	Quiz + Attendance
Second	6	Student understands the topic	Soldering and welding	Theoretical + Practical	Quiz + Attendance
Third	6	Student understands the topic	Types of ceramic according to composition and temperature	Theoretical + Practical	Quiz + Attendance
Fourth	6	Student understands the topic	Step-by-step procedure of porcelain build-up (1)	Theoretical + Practical	Quiz + Attendance
Fifth	6	Student understands the topic	Step-by-step procedure of porcelain build-up (2)	Theoretical + Practical	Quiz + Attendance
Sixth	6	Student understands the topic	Step-by-step procedure of porcelain build-up (3)	Theoretical + Practical	Quiz + Attendance
Seventh	6	Student understands the topic	All ceramic restoration: types	Theoretical + Practical	Quiz + Attendance

Eighth	6	Student understands the topic	All ceramic restoration techniques	Theoretical + Practical	Quiz + Attendance
Ninth	6	Student understands the topic	Retainer for a removable partial denture: types and indications	Theoretical + Practical	Quiz + Attendance
Tenth	6	Student understands the topic	Retainer for a removable partial denture: technique	Theoretical + Practical	Quiz + Attendance
Eleventh	6	Student understands the topic	Resin bonded bridge: types	Theoretical + Practical	Quiz + Attendance
Twelfth	6	Student understands the topic	Resin bonded bridge: procedure of fabrication	Theoretical + Practical	Quiz + Attendance
Thirteenth	6	Student understands the topic	Implant-supported fixed prosthesis: types	Theoretical + Practical	Quiz + Attendance
Fourteenth	6	Student understands the topic	Implant-supported fixed prosthesis: procedure	Theoretical + Practical	Quiz + Attendance

Fifteenth	6	Student understands the topic	Clinical Failure in bridge	Theoretical + Practical	Quiz + Attendance

Course Assessment:

The grade distribution is out of 100 for each semester: 40 marks for annual effort (based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports) + 25 marks for practical final exam + 35 marks for theoretical final exam.

Learning and Teaching Resources:

155. Required Textbooks: Not specified

156. Main References:

1. Contemporary fixed prosthodontics / 5th edition.

2. Shillingburg Fundamentals of fixed prosthodontics.

157. Supporting Books and References (Scientific journals, reports):

1. Journal of Dentistry / University of Baghdad

2. Journal of Dentistry / Al-Mustansiriya University

3. The electronic website of the College of Health and Medical Technologies

158. Electronic References, Internet Sites: Not specified

The grade distribution is out of 100 for each semester: 40 marks for annual effort (based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports) + 25 marks for practical final exam + 35 marks for theoretical final exam.

Learning and Teaching Resources:

- Required Textbooks: Text book of orthodontic
- Main References: Textbook of prosthodontic
- Supporting Books and References (Scientific journals, reports):
  - Al-Teqni Journal
  - College of Dentistry Journal / University of Baghdad
  - College of Dentistry Journal / Al-Mustansiriya University
- Electronic References, Internet Sites:
  - Ashur University website
  - College of Health and Medical Technologies - Baghdad website

Here is the English translation of the provided document:

Course Description

Course Name: Computer Applications / Third Level

Semesters: First Semester: Computer Applications 1 / 15 weeks

Second Semester: Computer Applications 2 / 15 weeks

Course Code:

Semester/Year: 2024/2520

Date of Description Preparation: 22/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours (Total)/Total Units (Total): First Semester = 45/2, Second Semester = 45/2

Course Instructor(s) (if more than one name is mentioned):

Name: Dr. Rabee Ali

Email: [Not provided in document]

Name: Ahmed Rasheed

Course Objectives:

159. To introduce students to the general principles of computer applications.
160. To enable students to deal with basic computer applications, specifically Microsoft Excel.

Learning and Teaching Strategies:

161. Lectures
162. Use of visual aids inside the classroom
163. Interactive lectures
164. Use of data show

Course Structure:

First Semester / Computer Applications 1

Week	Hours	Required Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	6	Student identifies the topic	Introduction to Excel, its benefits, specifications, concept, and operation method	Theoretical + Practical	Quiz + Attendance
Second	6	Student understands the topic	Introduction to the main screen, its components, tools, and menu bar	Theoretical + Practical	Quiz + Attendance
Third	6	Student understands the topic	Cell concept, basic data types, and how to enter them	Theoretical + Practical	Quiz + Attendance
Fourth	6	Student understands the topic	How to save a workbook, close the file, and close the program	Theoretical + Practical	Quiz + Attendance
Fifth	6	Student understands the topic	Opening a saved file, entering data, performing simple calculations, and cell formatting methods	Theoretical + Practical	Quiz + Attendance
Sixth	6	Student understands the topic	Introduction to different ways of collecting data or groups of cells and sorting data	Theoretical + Practical	Quiz + Attendance
Seventh	6	Student understands the topic	Using some common functions: Count, Sqrt, Average, Sum, Min, Max	Theoretical + Practical	Quiz + Attendance

Eighth	6	Student understands the topic	Cell revision process: copying data, moving data, copying formulas, absolute and relative cells	Theoretical + Practical	Quiz + Attendance
Ninth	6	Student understands the topic	Controlling cell display, changing its style through formatting tools	Theoretical + Practical	Quiz + Attendance
Tenth	6	Student understands the topic	Dealing with Charts, their components and different elements, and identifying their types	Theoretical + Practical	Quiz + Attendance
Eleventh	6	Student understands the topic	Methods of creating charts, choosing different chart types, and their concepts	Theoretical + Practical	Quiz + Attendance
Twelfth	6	Student understands the topic	Modifying data and charts and performing various revisions on them	Theoretical + Practical	Quiz + Attendance
Thirteenth	6	Student understands the topic	Dealing with Lists, conditions for creating a list, sorting lists	Theoretical + Practical	Quiz + Attendance
Fourteenth	6	Student understands the topic	Filtering lists, especially automatic and advanced filtering	Theoretical + Practical	Quiz + Attendance
Fifteenth	6	Student understands the topic	How to add or delete rows or columns, how to print a worksheet as data and charts	Theoretical + Practical	Quiz + Attendance

Second Semester / Computer Applications 2

Week	Hours	Required Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	6	Student understands the topic	SPSS Statistical Program: concept, operation, data analysis steps	Theoretical + Practical	Quiz + Attendance
Second	6	Student understands the topic	Main screen components, data entry, saving and retrieving files, direct data types	Theoretical + Practical	Quiz + Attendance
Third	6	Student understands the topic	Sorting and swapping data, defining statistical procedures, inserting a variable or case, merging files	Theoretical + Practical	Quiz + Attendance
Fourth	6	Student understands the topic	Descriptive analysis: statistical data summary, data exploration, reports by row or column	Theoretical + Practical	Quiz + Attendance
Fifth	6	Student understands the topic	Comparing means, comparing variables, linear regression	Theoretical + Practical	Quiz + Attendance
Sixth	6	Student understands the topic	Performing non-parametric tests such as Chi-square	Theoretical + Practical	Quiz + Attendance
Seventh	6	Student understands the topic	Quality control applications	Theoretical + Practical	Quiz + Attendance
Eighth	6	Student understands the topic	Dealing with charts and others	Theoretical + Practical	Quiz + Attendance

Ninth	6	Student understands the topic	Dealing with statistical applications such as cross-tabulations	Theoretical + Practical	Quiz + Attendance
Tenth	6	Student understands the topic	One-way ANOVA model, basic statistical tables	Theoretical + Practical	Quiz + Attendance
Eleventh	6	Student understands the topic	PowerPoint Program: concept, benefits, operation, main screen components, concept of presentations	Theoretical + Practical	Quiz + Attendance
Twelfth	6	Student understands the topic	Building a new presentation from ready-made templates, saving the file, performing the presentation, modifying and saving changes, planning to build a presentation	Theoretical + Practical	Quiz + Attendance
Thirteenth	6	Student understands the topic	How to add drawings using drawing tools, inserting a new slide (text or drawings), adding notes, entering titles, modifying text, controlling its format	Theoretical + Practical	Quiz + Attendance
Fourteenth	6	Student understands the topic	Controlling slide colors and background, adding ready-made clip art or media and images, zooming in and out, adding charts or tables from Excel	Theoretical + Practical	Quiz + Attendance
Fifteenth	6	Student understands the topic	Adding data from Excel, dealing with display commands	Theoretical + Practical	Quiz + Attendance

Note: Some column headers and rows were combined or slightly rephrased for clarity in English.

Course Description

Course Name: Research Methods / Third Level

Course Code: RES20302

Semester/Year: 2024/2025 (Second Course)

Date of Description Preparation: 1/12/2024

Available Attendance Modes: Mandatory in-person attendance

Total Study Hours (Total): 15 / Total Units (Total): 1

Course Instructor:

Name: M. M. Hassan Abdul Rahim Karim
Email: hassandentist71@yahoo.com

Course Objectives:

165. To introduce students to how to conduct research, especially the practical aspect.

166. To enable students to write research papers and theses.

Learning and Teaching Strategies:

167. Lectures
168. Use of visual aids inside the hall
169. Interactive lecture
170. Use of data show

Course Structure:

Week	Hours	Required Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	1	Student understands the material	Principles of research	Theoretical	Daily exam + Attendance
Second	1	Student understands the material	Scientific methods	Theoretical	Daily exam + Attendance
Third	1	Student understands the material	Designing the research plan	Theoretical	Daily exam + Attendance
Fourth	1	Student understands the material	Variables	Theoretical	Daily exam + Attendance
Fifth	1	Student understands the material	Data collection methods	Theoretical	Daily exam + Attendance
Sixth	1	Student understands the material	Data analysis	Theoretical	Daily exam + Attendance

Seventh	1	Student understands the material	Ethical considerations in research	Theoretical	Daily exam + Attendance
Eighth	1	Student understands the material	Clinical trials	Theoretical	Daily exam + Attendance
Ninth	1	Student understands the material	Research problem formation	Theoretical	Daily exam + Attendance
Tenth	1	Student understands the material	Research proposal writing	Theoretical	Daily exam + Attendance
Eleventh	1	Student understands the material	Pilot study	Theoretical	Daily exam + Attendance
Twelfth	1	Student understands the material	Research elements (Introduction)	Theoretical	Daily exam + Attendance
Thirteenth	1	Student understands the material	Research elements (Literature review)	Theoretical	Daily exam + Attendance
Fourteenth	1	Student understands the material	Research elements (materials and methods)	Theoretical	Daily exam + Attendance
Fifteenth	1	Student understands the material	Research elements (Results, discussion, and conclusion)	Theoretical	Daily exam + Attendance

Course Assessment:

The grade distribution is out of 100: 30 marks for annual effort (based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports) + 70 marks for theoretical final exam.

Learning and Teaching Resources:

171. Required Textbooks (Curriculum if available): Not specified

172. Main References (Sources):

Handbook of Research Methodology, A Compendium for Scholars & Researchers (Based on revised syllabus of research methodology of various universities)[1] by Dr. Shanti Bhushan Mishra & Dr. Shashi Alok, EDUCREATION PUBLISHING (Since 2017)

173. Supporting Books and References (Scientific journals, reports): Not specified

174. Electronic References, Internet Sites: Not specified

Course Description

Course Name: Complete Denture (Intermediate) / Third Level

Course Code:

First Semester: (15 weeks),

2024-2025

Date of Description Preparation: 20/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours (Total)/Total Units (Total): 90/4

Course Instructor:

Name: M. M. Noor Ahmed Jassim,
Email: nooralatool@yahoo.com

Course Objectives:

175. General Objective: To familiarize the student with the materials used in the fabrication of complete dentures and how to deal with them.
176. Specific Objective: To enable dental technology students to fabricate complete dentures.

Learning and Teaching Strategies:

177. Lectures and discussion lectures
178. Use of visual aids and short educational films
179. Interactive applications

Course Structure:

Week	Hours	Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	6	Student identifies	Retention, stability and support	Theoretical + Practical	Written exams, Attendance
Second	6	Student understands the topic	Mandibular movements	Theoretical + Practical	Written exams, Attendance
Third	6	Student understands the topic	Eccentric occlusion and Lingulized occlusion	Theoretical + Practical	Written exams, Attendance
Fourth	6	Student understands the topic	Arrangement of maxillary and mandibular teeth in Cl. II & Cl. III	Theoretical + Practical	Written exams, Attendance
Fifth	6	Student understands the topic	Neutral zone	Theoretical + Practical	Written exams
Sixth	6	Student understands the topic	Clinical remounting and laboratory remounting of complete denture	Theoretical + Practical	Written exams, Attendance

Seventh	6	Student understands the topic	Denture delivery	Theoretical + Practical	Written exams, Attendance
Eighth	6	Student understands the topic	Relining of complete denture	Theoretical + Practical	Written exams, Attendance
Ninth	6	Student understands the topic	Rebasing of complete denture	Theoretical + Practical	Written exams, Attendance
Tenth	6	Student understands the topic	Duplication of complete denture	Theoretical + Practical	Written exams, Attendance
Eleventh	6	Student understands the topic	Immediate complete denture: part 1	Theoretical + Practical	Written exams, Attendance
Twelfth	6	Student understands the topic	Immediate complete Denture: part 2	Theoretical + Practical	Written exams, Attendance
Thirteenth	6	Student understands the topic	Overdenture	Theoretical + Practical	Written exams, Attendance
Fourteenth	6	Student understands the topic	Single complete denture opposing natural or artificial teeth	Theoretical + Practical	Written exams, Attendance
Fifteenth	6	Student understands the topic	Digital system for complete denture procedure	Theoretical + Practical	Written exams, Attendance

Course Assessment:

The grade distribution is out of 100 for each semester: 40 marks for annual effort (25 theoretical + 15 practical) based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports + 25 marks for practical final exam + 35 marks for theoretical final exam.

Learning and Teaching Resources:

180. Required Textbooks: Not specified

181. Main References:

1. McCRACKEN Removable Partial Prosthodontics
2. Essential of removable partial denture by K. Bhasker

182. Supporting Books and References (Scientific journals, reports):

1. Journal of Dentistry / University of Baghdad
2. Journal of Dentistry / Al-Mustansiriya University

183. Electronic References, Internet Sites:

1.	Ashur University website
2.	College of Health and Medical Technologies - Baghdad website

Course Description

Course Name: Orthodontics / Fourth Level

Course Code:

Study Duration: Annual,

2024-2025

Date of Description Preparation: 20/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours (Total)/Total Units (Total): 150/7

Course Instructor:

Name: M.M. Noor Ahmed Jassim
Email: **nooralatool@yahoo.com**

Course Objectives:

184. To teach students the general concept of orthodontics.

185. To teach students about the components of orthodontic appliances (acrylic).

186. To guide students on how to work in the orthodontic (acrylic) manufacturing laboratory.

187. To teach students how to overcome errors and find solutions for them in the laboratory during the manufacturing of orthodontic appliances.

Learning and Teaching Strategies:

188. Lectures and discussion lectures

189. Use of visual aids and short educational films

190. Practical applications

Course Structure:

Week	Hours	Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	5	Student identifies	Orthodontic terms.	Theoretical + Practical	Written and practical exams, Attendance
Second	5	Student understands the topic	Development of normal occlusion.	Theoretical + Practical	Written and practical

					exams, Attendance
Third	5	Student understands the topic	Malocclusion: types & classification.	Theoretical + Practical	Written and practical exams, Attendance
Fourth	5	Student understands the topic	Impression and cast construction for orthodontic appliance.	Theoretical + Practical	Written and practical exams, Attendance
Fifth	5	Student understands the topic	Orthodontic wires.	Theoretical + Practical	Written and practical exams, Attendance
Sixth	5	Student understands the topic	Clasps: types and function.	Theoretical + Practical	Written and practical exams, Attendance
Seventh	5	Student understands the topic	Adams clasp.	Theoretical + Practical	Written and practical exams, Attendance
Eighth	5	Student understands the topic	Ball end clasp.	Theoretical + Practical	Written and practical

					exams, Attendance
Ninth	5	Student understands the topic	Southend clasp.	Theoretical + Practical	Written and practical exams, Attendance
Tenth	5	Student understands the topic	Buccal canine retractor.	Theoretical + Practical	Written and practical exams, Attendance
Eleventh	5	Student understands the topic	Labial bow.	Theoretical + Practical	Written and practical exams, Attendance
Twelfth	5	Student understands the topic	Springs: types.	Theoretical + Practical	Written and practical exams, Attendance
Thirteenth	5	Student understands the topic	Z-spring.	Theoretical + Practical	Written and practical exams, Attendance
Fourteenth	5	Student understands the topic	Finger spring.	Theoretical + Practical	Written and practical exams, Attendance

Fifteenth	5	Student understands the topic	Screw for orthodontic appliance.	Theoretical + Practical	Written and practical exams, Attendance
Sixteenth	5	Student understands the topic	Myofunctional appliance.	Theoretical + Practical	Written and practical exams, Attendance
Seventeenth	5	Student understands the topic	Bite plane.	Theoretical + Practical	Written and practical exams, Attendance
Eighteenth	5	Student understands the topic	Bite plane for anterior deep bite.	Theoretical + Practical	Written and practical exams, Attendance
Nineteenth	5	Student understands the topic	Bite plane for posterior crossbite.	Theoretical + Practical	Written and practical exams, Attendance
Twentieth	5	Student understands the topic	Construction of orthodontic appliance.	Theoretical + Practical	Written and practical exams, Attendance

Twenty-First	5	Student understands the topic	Acrylic processing for orthodontic appliance.	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Second	5	Student understands the topic	Finishing and polishing of orthodontic appliance.	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Third	5	Student understands the topic	Repair of orthodontic appliance.	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Fourth	5	Student understands the topic	Retainers.	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Fifth	5	Student understands the topic	Retainers.	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Sixth	5	Student understands the topic	Space maintainers.	Theoretical + Practical	Written and practical exams, Attendance

Twenty-Seventh	5	Student understands the topic	Bad habits.	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Eighth	5	Student understands the topic	Habit breaker.	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Ninth	5	Student understands the topic	Fixed orthodontic appliance.	Theoretical + Practical	Written and practical exams, Attendance
Thirtieth	5	Student understands the topic	Fixed orthodontic appliance.	Theoretical + Practical	Written and practical exams, Attendance

Course Assessment:

The grade distribution is out of 100: 40 marks for annual effort (25 theoretical + 15 practical) based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports + 25 marks for practical final exam + 35 marks for theoretical final exam.

Learning and Teaching Resources:

191. Required Textbooks:

1. An Introduction to Orthodontics, 4th Edition by Laura Mitchell

192. Main References: Not specified

193. Supporting Books and References (Scientific journals, reports):

1. Journal of Dentistry / University of Baghdad

2. Journal of Dentistry / Al-Mustansiriya University

194. Electronic References, Internet Sites:

1. Ashur University website

2. College of Health and Medical Technologies - Baghdad website

Course Description

Course Name: Crowns and Bridges / Fourth Level

Course Code: Crown and Bridge

Semester/Year: 2024-2025

Date of Description Preparation: 11/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours (Total)/Total Units (Total): 180/8

Course Instructor(s) (if more than one name is mentioned):

Name: M.M. Noor Ahmed Jassim
Email: **nooralatool@yahoo.com**

Course Objectives:

195. To familiarize the student with the materials used in the manufacture of crowns and bridges and how to deal with them.
196. To enable students in the dental technologies department to manufacture fixed crowns and bridges.

Learning and Teaching Strategies:

197. Lectures
198. Use of visual aids inside the hall
199. Interactive lecture
200. Use of data show
201. Practical application

Course Structure:

Week	Hours	Required Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	6	Student identifies the topic	Introduction on crown and bridge.	Theoretical + Practical	Quiz + Attendance
Second	6	Student understands the topic	Principles of tooth preparation	Theoretical + Practical	Quiz + Attendance
Third	6	Student understands the topic	Biological considerations	Theoretical + Practical	Quiz + Attendance

Fourth	6	Student understands the topic	Periodontal considerations	Theoretical + Practical	Quiz + Attendance
Fifth	6	Student understands the topic	Impression materials for crown & bridge.	Theoretical + Practical	Quiz + Attendance
Sixth	6	Student understands the topic	Die system and methods for its fabrication.	Theoretical + Practical	Quiz + Attendance
Seventh	6	Student understands the topic	Waxing of metal coping.	Theoretical + Practical	Quiz + Attendance
Eighth	6	Student understands the topic	Spruing of metal coping.	Theoretical + Practical	Quiz + Attendance
Ninth	6	Student understands the topic	Investing & casting of metal coping.	Theoretical + Practical	Quiz + Attendance
Tenth	6	Student understands the topic	Finishing & polishing of metal coping.	Theoretical + Practical	Quiz + Attendance
Eleventh	6	Student understands the topic	All ceramic restoration / types.	Theoretical + Practical	Quiz + Attendance
Twelfth	6	Student understands the topic	All ceramic restoration / types.	Theoretical + Practical	Quiz + Attendance

Thirteenth	6	Student understands the topic	All ceramic restoration / technique.	Theoretical + Practical	Quiz + Attendance
Fourteenth	6	Student understands the topic	All ceramic restoration / technique.	Theoretical + Practical	Quiz + Attendance
Fifteenth	6	Student understands the topic	Porcelain build-up / technique.	Theoretical + Practical	Quiz + Attendance
Sixteenth	6	Student understands the topic	Porcelain build-up / technique.	Theoretical + Practical	Quiz + Attendance
Seventeenth	6	Student understands the topic	Porcelain build-up / technique.	Theoretical + Practical	Quiz + Attendance
Eighteenth	6	Student understands the topic	All ceramic fixed restoration / technique.	Theoretical + Practical	Quiz + Attendance
Nineteenth	6	Student understands the topic	All ceramic fixed restoration / technique.	Theoretical + Practical	Quiz + Attendance
Twentieth	6	Student understands the topic	All ceramic fixed restoration / technique.	Theoretical + Practical	Quiz + Attendance
Twenty-First	6	Student understands the topic	All ceramic fixed	Theoretical + Practical	Quiz + Attendance

			restoration / technique.		
Twenty-Second	6	Student understands the topic	All ceramic fixed restoration / technique.	Theoretical + Practical	Quiz + Attendance
Twenty-Third	6	Student understands the topic	Provisional crown & bridge / materials.	Theoretical + Practical	Quiz + Attendance
Twenty-Fourth	6	Student understands the topic	Provisional crown & bridge / technique.	Theoretical + Practical	Quiz + Attendance
Twenty-Fifth	6	Student understands the topic	Soldering and welding in crown and bridge.	Theoretical + Practical	Quiz + Attendance
Twenty-Sixth	6	Student understands the topic	Retainers for removable partial denture.	Theoretical + Practical	Quiz + Attendance
Twenty-Seventh	6	Student understands the topic	Resin bonded bridge / mechanical one.	Theoretical + Practical	Quiz + Attendance
Twenty-Eighth	6	Student understands the topic	Resin bonded bridge / chemical one.	Theoretical + Practical	Quiz + Attendance

Twenty-Ninth	6	Student understands the topic	Failure of crown & bridge / clinical.	Theoretical + Practical	Quiz + Attendance
Thirtieth	6	Student understands the topic	Failure of crown & bridge / laboratory failure.	Theoretical + Practical	Quiz + Attendance

Course Assessment:

The grade distribution is out of 100: 40 marks for annual effort (25 theoretical + 15 practical) based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports + 25 marks for practical final exam + 35 marks for theoretical final exam.

Learning and Teaching Resources:

202. Required Textbooks (Curriculum if available): Not specified

203. Main References (Sources):

1. Contemporary fixed prosthodontics / 5th edition.

2. Shillingburg Fundamentals of fixed prosthodontics.

204. Supporting Books and References (Scientific journals, reports):

1. Journal of Dentistry / University of Baghdad

2. Journal of Dentistry / Al-Mustansiriya University

3. The electronic website of the College of Health and Medical Technologies

205. Electronic References, Internet Sites: Not specified

Course Description
Course Name: Implants / Fourth Level
Course Code:
Study Duration: Annual,
2024-2025
Date of Description Preparation: 20/9/2024
Available Attendance Modes: Mandatory attendance
Total Study Hours (Total)/Total Units (Total): 150/7
Course Instructor:
Name: Dr. Abdul Wahab Abdul Razzaq Katea
Email:
Course Objectives:
206. To familiarize the student with the materials used in dental implants and how to deal with them. 207. To enable dental technology students to fabricate dental implant prostheses.
Learning and Teaching Strategies:
208. Lectures and discussion lectures 209. Use of visual aids and short educational films
Course Structure:

Week	Hours	Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	5	Student identifies	Introduction implant terminology and historical background	Theoretical + Practical	Written and practical exams, Attendance
Second	5	Student understands the topic	Indications and contraindications for dental implants	Theoretical + Practical	Written and practical exams, Attendance

Third	5	Student understands the topic	Osseous integration and factors affecting Osseo integration	Theoretical + Practical	Written and practical exams, Attendance
Fourth	5	Student understands the topic	Dental implant components	Theoretical + Practical	Written and practical exams, Attendance
Fifth	5	Student understands the topic	Dental implant classifications	Theoretical + Practical	Written and practical exams, Attendance
Sixth	5	Student understands the topic	Surgical procedures for dental implant placement	Theoretical + Practical	Written and practical exams, Attendance
Seventh	5	Student understands the topic	Implant impression techniques	Theoretical + Practical	Written and practical exams, Attendance
Eighth	5	Student understands the topic	Implant impression materials	Theoretical + Practical	Written and practical

					exams, Attendance
Ninth	5	Student understands the topic	Abutments: types and uses	Theoretical + Practical	Written and practical exams, Attendance
Tenth	5	Student understands the topic	Abutment selection	Theoretical + Practical	Written and practical exams, Attendance
Eleventh	5	Student understands the topic	Crown over dental implant	Theoretical + Practical	Written and practical exams, Attendance
Twelfth	5	Student understands the topic	Bridge over dental implant	Theoretical + Practical	Written and practical exams, Attendance
Thirteenth	5	Student understands the topic	Provisional restoration over dental implant	Theoretical + Practical	Written and practical exams, Attendance

Fourteenth	5	Student understands the topic	Provisional restoration over dental implant	Theoretical + Practical	Written and practical exams, Attendance
Fifteenth	5	Student understands the topic	Cementation over dental implant	Theoretical + Practical	Written and practical exams, Attendance
Sixteenth	5	Student understands the topic	Cementation over dental implant	Theoretical + Practical	Written and practical exams, Attendance
Seventeenth	5	Student understands the topic	Porcelain over dental implant	Theoretical + Practical	Written and practical exams, Attendance
Eighteenth	5	Student understands the topic	Porcelain over dental implant	Theoretical + Practical	Written and practical exams, Attendance
Nineteenth	5	Student understands the topic	Full arch prosthesis over dental implants	Theoretical + Practical	Written and practical

					exams, Attendance
Twentieth	5	Student understands the topic	Full arch prosthesis over dental implants	Theoretical + Practical	Written and practical exams, Attendance
Twenty-First	5	Student understands the topic	Maxillary overdenture over dental implants	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Second	5	Student understands the topic	Mandibular overdenture over dental implants	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Third	5	Student understands the topic	Ceramic crowns over dental implants	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Fourth	5	Student understands the topic	Ceramic crowns over dental implants	Theoretical + Practical	Written and practical exams, Attendance

Twenty-Fifth	5	Student understands the topic	Intra osseous versus transosseous implant	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Sixth	5	Student understands the topic	Sinus lift and inferior dental nerve reposition	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Seventh	5	Student understands the topic	Sinus lift and inferior dental nerve reposition	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Eighth	5	Student understands the topic	Occlusion for dental implant	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Ninth	5	Student understands the topic	Ceramic bridge over natural teeth and implants	Theoretical + Practical	Written and practical exams, Attendance
Thirtieth	5	Student understands the topic	Full ceramic over dental implant	Theoretical + Practical	Written and practical

					exams, Attendance

Course Assessment:

The grade distribution is out of 100: 40 marks for annual effort (25 theoretical + 15 practical) based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports + 25 marks for practical final exam + 35 marks for theoretical final exam.

Learning and Teaching Resources:

210. Required Textbooks: Not specified

211. Main References: Not specified

212. Supporting Books and References (Scientific journals, reports):

1. Journal of Dentistry / University of Baghdad

2. Journal of Dentistry / Al-Mustansiriya University

213. Electronic References, Internet Sites: Not specified

Course Description
Course Name: Maxillofacial Prosthetics / Fourth Level
Course Code:
Study Duration: Annual,
2024-2025
Date of Description Preparation: 20/9/2024
Available Attendance Modes: Mandatory attendance
Total Study Hours (Total)/Total Units (Total): 150/7
Course Instructor:
Name: M.M. Noor Ahmed Jassim Email: nooralatool@yahoo.com
Course Objectives:
214. To familiarize the student with the general concept of maxillofacial prosthetics. 215. To teach the student about the types of prosthetic and therapeutic devices specific to maxillofacial prosthetics. 216. To teach the student how to evaluate cases of congenital and acquired deformities and participate in the treatment plan for maxillofacial prosthetics. 217. To teach the student how to overcome errors and find solutions for them in the laboratory during the manufacturing of prosthetic and therapeutic devices specific to maxillofacial prosthetics. 218. To enable the student to use artificial materials specific to maxillofacial prosthetics.
Learning and Teaching Strategies:
219. Lectures and discussion lectures 220. Use of visual aids and short educational films 221. Practical applications
Course Structure:

Week	Hours	Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	5	Student identifies	Ocular prosthesis	Theoretical + Practical	Written and practical exams, Attendance

Second	5	Student understands the topic	Orbital prosthesis	Theoretical + Practical	Written and practical exams, Attendance
Third	5	Student understands the topic	Auricular prosthesis	Theoretical + Practical	Written and practical exams, Attendance
Fourth	5	Student understands the topic	Fabrication of auricular prosthesis	Theoretical + Practical	Written and practical exams, Attendance
Fifth	5	Student understands the topic	Nasal prosthesis	Theoretical + Practical	Written and practical exams, Attendance
Sixth	5	Student understands the topic	Fabrication of nasal prosthesis	Theoretical + Practical	Written and practical exams, Attendance
Seventh	5	Student understands the topic	Maxillectomy prosthesis	Theoretical + Practical	Written and practical

					exams, Attendance
Eighth	5	Student understands the topic	Mandibulectomy prosthesis	Theoretical + Practical	Written and practical exams, Attendance
Ninth	5	Student understands the topic	Surgical obturator	Theoretical + Practical	Written and practical exams, Attendance
Tenth	5	Student understands the topic	Speech aid prosthesis	Theoretical + Practical	Written and practical exams, Attendance
Eleventh	5	Student understands the topic	Palatal lift prosthesis	Theoretical + Practical	Written and practical exams, Attendance
Twelfth	5	Student understands the topic	Velopharyngeal obturator	Theoretical + Practical	Written and practical exams, Attendance

Thirteenth	5	Student understands the topic	Radiation prostheses	Theoretical + Practical	Written and practical exams, Attendance
Fourteenth	5	Student understands the topic	Oral stents	Theoretical + Practical	Written and practical exams, Attendance
Fifteenth	5	Student understands the topic	Trismus appliance	Theoretical + Practical	Written and practical exams, Attendance
Sixteenth	5	Student understands the topic	Implant-supported maxillofacial prosthesis	Theoretical + Practical	Written and practical exams, Attendance
Seventeenth	5	Student understands the topic	Extraoral implants	Theoretical + Practical	Written and practical exams, Attendance
Eighteenth	5	Student understands the topic	Ear prosthesis retained by	Theoretical + Practical	Written and practical

			osseointegrated implants		exams, Attendance
Nineteenth	5	Student understands the topic	Ear prosthesis retained by spectacles	Theoretical + Practical	Written and practical exams, Attendance
Twentieth	5	Student understands the topic	Ear prosthesis retained by adhesive	Theoretical + Practical	Written and practical exams, Attendance
Twenty-First	5	Student understands the topic	Eye prosthesis retained by osseointegrated implants	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Second	5	Student understands the topic	Eye prosthesis retained by spectacles	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Third	5	Student understands the topic	Eye prosthesis retained by adhesive	Theoretical + Practical	Written and practical exams, Attendance

Twenty-Fourth	5	Student understands the topic	Nose prosthesis retained by osseointegrated implants	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Fifth	5	Student understands the topic	Nose prosthesis retained by spectacles	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Sixth	5	Student understands the topic	Nose opening device	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Seventh	5	Student understands the topic	Orthognathic surgery	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Eighth	5	Student understands the topic	Prosthetic part of cranioplasty	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Ninth	5	Student understands the topic	Retention of facial prosthesis	Theoretical + Practical	Written and practical

					exams, Attendance
Thirtieth	5	Student understands the topic	Psychological management of the maxillofacial prosthetic patient	Theoretical + Practical	Written and practical exams, Attendance

Course Assessment:

The grade distribution is out of 100: 40 marks for annual effort (25 theoretical + 15 practical) based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports + 25 marks for practical final exam + 35 marks for theoretical final exam.

Learning and Teaching Resources:

222. Required Textbooks:

1. Maxillofacial Prosthetics A Multidisciplinary Approach, by John Beumer

2. Textbook of Prosthodontics, by Nallaswamy, et al.

223. Main References: Not specified

224. Supporting Books and References (Scientific journals, reports):

1. Journal of Baghdad University

2. Journal of Al-Mustansiriya University

225. Electronic References, Internet Sites:

1. Ashur University website

2. College of Health and Medical Technologies - Baghdad website

Course Description
Course Name: Professional Conduct / Fourth Level
Course Code: Professional ethic
Semester/Year: 2024-2025
Date of Description Preparation: 11/9/2024
Available Attendance Modes: Mandatory attendance
Total Study Hours (Total)/Total Units (Total): 60/2
Course Instructor(s) (if more than one name is mentioned):
Name: M.M. Rana Muwaffaq Khodeir
Email: **dr.ranamj@gmail.com**
Course Objectives:
226. To familiarize the student with the importance of professional conduct in the field of dental technologies. 227. To enable dental technology students to interact with patients.
Learning and Teaching Strategies:
228. Lectures 229. Use of visual aids inside the hall 230. Interactive lecture 231. Use of data show
Course Structure:

Week	Hours	Required Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	2	Student identifies the topic	Personality and its importance in	Theoretical	Attendance + Written exams

			dealing with patients.		
Second	2	Student understands the topic	External appearance and its importance for those working in the medical field.	Theoretical	Attendance + Written exams
Third	2	Student understands the topic	Personal hygiene.	Theoretical	Attendance + Written exams
Fourth	2	Student understands the topic	Clinic hygiene.	Theoretical	Attendance + Written exams
Fifth	2	Student understands the topic	Dealing with the patient inside the clinic.	Theoretical	Attendance + Written exams
Sixth	2	Student understands the topic	Patient comfort.	Theoretical	Attendance + Written exams

Seventh	2	Student understands the topic	Dealing with children.	Theoretical	Attendance + Written exams
Eighth	2	Student understands the topic	Children's behavior in the clinic.	Theoretical	Attendance + Written exams
Ninth	2	Student understands the topic	Dealing with patients with special needs.	Theoretical	Attendance + Written exams
Tenth	2	Student understands the topic	Dealing with elderly patients.	Theoretical	Attendance + Written exams
Eleventh	2	Student understands the topic	Professional secrets.	Theoretical	Attendance + Written exams
Twelfth	2	Student understands the topic	Professional confidentiality.	Theoretical	Attendance + Written exams
Thirteenth	2	Student understands the topic	Dental ethics.	Theoretical	Attendance + Written exams

Fourteenth	2	Student understands the topic	Rights and duties.	Theoretical	Attendance + Written exams
Fifteenth	2	Student understands the topic	Dealing with colleagues.	Theoretical	Attendance + Written exams
Sixteenth	2	Student understands the topic	Teamwork.	Theoretical	Attendance + Written exams
Seventeenth	2	Student understands the topic	Professional errors.	Theoretical	Attendance + Written exams
Eighteenth	2	Student understands the topic	Common errors.	Theoretical	Attendance + Written exams
Nineteenth	2	Student understands the topic	Error management.	Theoretical	Attendance + Written exams
Twentieth	2	Student understands the topic	Patient psychological preparation.	Theoretical	Attendance + Written exams

Twenty-First	2	Student understands the topic	Types of personalities.	Theoretical	Attendance + Written exams
Twenty-Second	2	Student understands the topic	Etiquette for caring for a sick child.	Theoretical	Attendance + Written exams
Twenty-Third	2	Student understands the topic	Etiquette for caring for disfigured patients.	Theoretical	Attendance + Written exams
Twenty-Fourth	2	Student understands the topic	Responding to patient complaints.	Theoretical	Attendance + Written exams
Twenty-Fifth	2	Student understands the topic	Dealing with pain.	Theoretical	Attendance + Written exams
Twenty-Sixth	2	Student understands the topic	How to treat a child during pain.	Theoretical	Attendance + Written exams

Twenty-Seventh	2	Student understands the topic	Dealing with medical materials.	Theoretical	Attendance + Written exams
Twenty-Eighth	2	Student understands the topic	How to deal with laboratory medical devices used.	Theoretical	Attendance + Written exams
Twenty-Ninth	2	Student understands the topic	Medical law.	Theoretical	Attendance + Written exams
Thirtieth	2	Student understands the topic	Professional responsibility.	Theoretical	Attendance + Written exams

Course Assessment:

The grade distribution is out of 100: 30 marks for annual effort (based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports) + 70 marks for theoretical final exam.

Learning and Teaching Resources:

232. Required Textbooks (Curriculum if available): Not specified

233. Main References (Sources):

1. Professional Ethics in Health Care: A Guide for Dental Professionals by Robert J. Michalski.

234.	Supporting Books and References (Scientific journals, reports): Not specified
235.	Electronic References, Internet Sites: Not specified

Course Description
Course Name: Partial Denture / Fourth Level
Course Code:
Study Duration: Annual,
2024-2025
Date of Description Preparation: 20/9/2024
Available Attendance Modes: Mandatory attendance
Total Study Hours (Total)/Total Units (Total): 180 / 8
Course Instructor:
Name: Prof. Mohammed Mudhafar Mohammed Ali
Email: **dr.moh.moudh@au.edu.iq**
Course Objectives:

236. To teach students the general concept of partial dentures.

237. To teach students about the components of acrylic partial dentures.

238. To guide students on how to work in the acrylic partial denture manufacturing laboratory.

239. To teach students how to overcome errors and find solutions for them in the laboratory during the manufacturing of partial dentures.

Learning and Teaching Strategies:

240. Lectures and discussion lectures

241. Use of visual aids and short educational films

242. Practical applications

Course Structure:

Week	Hours	Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	6	Student identifies	Partially edentulous arch.	Theoretical + Practical	Written and practical exams, Attendance
Second	6	Student understands the topic	Major connector: lower.	Theoretical + Practical	Written and practical

					exams, Attendance
Third	6	Student understands the topic	Major connector: upper.	Theoretical + Practical	Written and practical exams, Attendance
Fourth	6	Student understands the topic	Minor connector.	Theoretical + Practical	Written and practical exams, Attendance
Fifth	6	Student understands the topic	Direct retainer.	Theoretical + Practical	Written and practical exams, Attendance
Sixth	6	Student understands the topic	Indirect retainer.	Theoretical + Practical	Written and practical exams, Attendance
Seventh	6	Student understands the topic	Rest and rest seat.	Theoretical + Practical	Written and practical exams, Attendance
Eighth	6	Student understands the topic	Impression materials for R.P.D.	Theoretical + Practical	Written and practical exams, Attendance

Ninth	6	Student understands the topic	Impression tray for R.P.D.	Theoretical + Practical	Written and practical exams, Attendance
Tenth	6	Student understands the topic	Master cast and surveying.	Theoretical + Practical	Written and practical exams, Attendance
Eleventh	6	Student understands the topic	Design for R.P.D.	Theoretical + Practical	Written and practical exams, Attendance
Twelfth	6	Student understands the topic	Wax pattern for R.P.D.	Theoretical + Practical	Written and practical exams, Attendance
Thirteenth	6	Student understands the topic	Spruing and investing for R.P.D.	Theoretical + Practical	Written and practical exams, Attendance
Fourteenth	6	Student understands the topic	Burnout and casting for R.P.D.	Theoretical + Practical	Written and practical exams, Attendance

Fifteenth	6	Student understands the topic	Components of a removable partial denture.	Theoretical + Practical	Written and practical exams, Attendance
Sixteenth	6	Student understands the topic	Framework of a removable partial denture.	Theoretical + Practical	Written and practical exams, Attendance
Seventeenth	6	Student understands the topic	Metal finish line.	Theoretical + Practical	Written and practical exams, Attendance
Eighteenth	6	Student understands the topic	Framework try-in.	Theoretical + Practical	Written and practical exams, Attendance
Nineteenth	6	Student understands the topic	Jaw relation for R.P.D.	Theoretical + Practical	Written and practical exams, Attendance
Twentieth	6	Student understands the topic	Tooth arrangement for R.P.D.	Theoretical + Practical	Written and practical exams, Attendance

Twenty-First	6	Student understands the topic	Wax-up try-in for R.P.D.	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Second	6	Student understands the topic	Processing of R.P.D.	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Third	6	Student understands the topic	Delivery of R.P.D.	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Fourth	6	Student understands the topic	Finishing & polishing.	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Fifth	6	Student understands the topic	Soldering and welding.	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Sixth	6	Student understands the topic	Principles of setting teeth.	Theoretical + Practical	Written and practical exams, Attendance

Twenty-Seventh	6	Student understands the topic	Sectional denture part 1.	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Eighth	6	Student understands the topic	Sectional denture part 2.	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Ninth	6	Student understands the topic	Relining.	Theoretical + Practical	Written and practical exams, Attendance
Thirtieth	6	Student understands the topic	Post insertion complications.	Theoretical + Practical	Written and practical exams, Attendance

Course Assessment:

The grade distribution is out of 100: 40 marks for annual effort (25 theoretical + 15 practical) based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports + 25 marks for practical final exam + 35 marks for theoretical final exam.

Learning and Teaching Resources:

243. Required Textbooks:

1. Removable Partial Prosthodontics, 13th Edition by McCRACKEN

244. Main References:

1. Removable Partial Prosthodontics by McCRACKEN

2. Essential of removable partial denture by K. Bhasker

245. Supporting Books and References (Scientific journals, reports):

1. Journal of Dentistry / University of Baghdad

2. Journal of Dentistry / Al-Mustansiriya University

246.	Electronic References, Internet Sites:
1.	Ashur University website
2.	College of Health and Medical Technologies - Baghdad website

Course Description

Course Name: Complete Denture / Fourth Level

Course Code:

Study Duration: Annual,

2024-2025

Date of Description Preparation: 20/9/2024

Available Attendance Modes: Mandatory attendance

Total Study Hours (Total)/Total Units (Total): 180 / 8

Course Instructor:

Name: Prof. Mohammed Mudhafar Mohammed Ali

Email: **dr.moh.moudh@au.edu.iq**

Course Objectives:

247. To teach students the general concept of complete dentures.
248. To teach students about the components of complete acrylic dentures.
249. To guide students on how to work in the complete acrylic denture manufacturing laboratory.

250. To teach students how to overcome errors and find solutions for them in the laboratory during the manufacturing of complete dentures.

Learning and Teaching Strategies:

251. Lectures and discussion lectures
252. Use of visual aids and short educational films
253. Practical applications

Course Structure:

Week	Hours	Learning Outcomes	Unit/Topic Name	Learning Method	Assessment Method
First	6	Student identifies	Anatomical landmarks of upper complete denture	Theoretical + Practical	Written and practical exams, Attendance
Second	6	Student understands the topic	Anatomical landmarks of lower complete denture	Theoretical + Practical	Written and practical exams, Attendance

Third	6	Student understands the topic	Primary impression	Theoretical + Practical	Written and practical exams, Attendance
Fourth	6	Student understands the topic	Secondary impression	Theoretical + Practical	Written and practical exams, Attendance
Fifth	6	Student understands the topic	Mandibular movements	Theoretical + Practical	Written and practical exams, Attendance
Sixth	6	Student understands the topic	Jaw relation for complete denture	Theoretical + Practical	Written and practical exams, Attendance
Seventh	6	Student understands the topic	Clinical remounting	Theoretical + Practical	Written and practical exams, Attendance
Eighth	6	Student understands the topic	Laboratory remounting	Theoretical + Practical	Written and practical exams, Attendance
Ninth	6	Student understands the topic	Arrangement of artificial teeth	Theoretical + Practical	Written and practical exams, Attendance
Tenth	6	Student understands the topic	Esthetics for complete denture	Theoretical + Practical	Written and practical

					exams, Attendance
Eleventh	6	Student understands the topic	Phonetics for complete denture	Theoretical + Practical	Written and practical exams, Attendance
Twelfth	6	Student understands the topic	Try-in for complete denture	Theoretical + Practical	Written and practical exams, Attendance
Thirteenth	6	Student understands the topic	Processing of complete denture	Theoretical + Practical	Written and practical exams, Attendance
Fourteenth	6	Student understands the topic	Delivery of complete denture	Theoretical + Practical	Written and practical exams, Attendance
Fifteenth	6	Student understands the topic	Finishing and polishing	Theoretical + Practical	Written and practical exams, Attendance
Sixteenth	6	Student understands the topic	Relining of complete denture	Theoretical + Practical	Written and practical exams, Attendance
Seventeenth	6	Student understands the topic	Rebasing of complete denture	Theoretical + Practical	Written and practical exams, Attendance

Eighteenth	6	Student understands the topic	Repair of complete denture	Theoretical + Practical	Written and practical exams, Attendance
Nineteenth	6	Student understands the topic	Single complete denture	Theoretical + Practical	Written and practical exams, Attendance
Twentieth	6	Student understands the topic	Single complete denture opposing natural or restored teeth	Theoretical + Practical	Written and practical exams, Attendance
Twenty-First	6	Student understands the topic	Single complete denture opposing natural or restored teeth	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Second	6	Student understands the topic	Single complete denture opposing natural or restored teeth	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Third	6	Student understands the topic	Duplication of complete denture	Theoretical + Practical	Written and practical exams, Attendance

Twenty-Fourth	6	Student understands the topic	Immediate complete denture	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Fifth	6	Student understands the topic	Immediate complete denture	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Sixth	6	Student understands the topic	Overdenture	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Seventh	6	Student understands the topic	Overdenture	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Eighth	6	Student understands the topic	Dental Implant	Theoretical + Practical	Written and practical exams, Attendance
Twenty-Ninth	6	Student understands the topic	Post insertion problems	Theoretical + Practical	Written and practical exams, Attendance
Thirtieth	6	Student understands the topic	Post insertion problems	Theoretical + Practical	Written and practical exams, Attendance

Course Assessment:

The grade distribution is out of 100: 40 marks for annual effort (25 theoretical + 15 practical) based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports + 25 marks for practical final exam + 35 marks for theoretical final exam.

Learning and Teaching Resources:	
254.	Required Textbooks:
1.	Complete Denture Prosthodontics by Sharry J.
2.	Boucher's Prosthodontic Treatment for Edentulous Patients
255.	Main References: Not specified
256.	Supporting Books and References (Scientific journals, reports):
1.	Journal of Dentistry / University of Baghdad
2.	Journal of Dentistry / Al-Mustansiriya University
257.	Electronic References, Internet Sites:
1.	Ashur University website
2.	College of Health and Medical Technologies - Baghdad website