



**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 2026-2025**

Introduction

An educational program is a coordinated and organized package of courses that includes procedures and experiences organized as course outlines. The main purpose is to build and refine graduates' skills, making them qualified to meet the demands of the labor market. It is reviewed and evaluated annually through internal and external auditing procedures and programs, such as the external examiner program.

The academic program description provides a brief summary of the main features of the program and its courses, outlining the skills that students will acquire based on the program's objectives. The importance of this description lies in the fact that it is the cornerstone for obtaining programmatic accreditation, and it is written by the teaching staff under the supervision of the scientific committees in the scientific departments.

This guide includes a description of the academic program after its course outlines were updated in light of the developments in the educational system in Iraq, specifically for colleges of health and medical technology/dental manufacturing department, based on the twinning system with them.

In this regard, we can only emphasize the importance of writing a description of academic programs and course outlines to ensure the smooth running of the educational process.

Concepts and Terminology

- **Academic Program Description:** Provides a concise summary of its vision, mission, and objectives, including a precise description of the targeted learning outcomes according to specific learning strategies.
- **Course Description:** Provides a concise summary of the most important features of the course and the learning outcomes that the student is expected to achieve, demonstrating whether he or she has made the most of the available learning opportunities. It is derived from the program description.
- **Program Vision:** An ambitious picture for the future of the academic program to be an advanced, inspiring, motivating, realistic, and applicable program.
- **Program Mission:** Briefly clarifies the objectives and necessary activities to achieve them, and also determines the paths and directions of the program's development.
- **Program Objectives:** Statements that describe what the academic program intends to achieve during a specific period of time and are measurable and observable.
- **Curriculum Structure:** All courses/subjects included in the academic program according to the adopted learning system (semester for the first, second, and third stages, and annual for the fourth stage) with the number of credit hours.
- **Learning Outcomes:** A compatible set of knowledge, skills, and values that the student has acquired after successfully completing the academic program. The learning outcomes for each course must be defined in a way that achieves the program's objectives.
- **Teaching and Learning Strategies:** The strategies used by a faculty member to develop student teaching and learning, which are plans followed to reach learning goals. That is, it describes all classroom and non-classroom activities to achieve the program's learning outcomes.

Academic Program Description Form

- **University Name:** Ashur University
- **College/Institute:** College of Health and Medical Technologies
- **Scientific Department:** Department of Dental Manufacturing Technologies
- **Academic or Professional Program Name:** Bachelor's
- **Name of Final Certificate:** Bachelor's in Dental Manufacturing Technologies
- **Academic System:** Semester for the first, second, and third stages, and annual for the fourth stage
- **Date of Description Preparation:** 2/3/2025
- **Date of File Completion:** 2/3/2025

Lec. Dr. Mayyadah Hamid Rashid
Head of the Department of Dental
Manufacturing Technologies

Prof. Dr. Nazar
Scientific Assistant

The file was reviewed by the Quality Assurance and University Performance Division
Director of the Quality Assurance and University Performance Division

Prof. Dr. Faleh Hassan Al-Mousawi
Dean of the College

Vision, Mission, and Objectives

Vision

To work on making the Department of Dental Manufacturing Technologies at Ashur University College one of the leading and distinguished departments in preparing highly skilled technical staff in the field of specialization to provide health community services in the field of dental manufacturing and orthodontics, and the installation of artificial alternatives for teeth and other parts of the mouth.

Mission

To prepare specialized graduates to provide medical and health services to the community in the field of dental manufacturing and orthodontics, as well as the manufacturing of fixed and removable dental orthodontic alternatives and maxillofacial prostheses through the scientific knowledge and practical experience gained during the four academic stages that the student spends in this department.

Objectives

1. To prepare specialized technical staff in the field of designing, manufacturing, and installing artificial alternatives for teeth and other parts of the mouth.
2. To provide the community with graduates who have theoretical scientific knowledge and practical experience in the field of dental manufacturing technology.
3. To provide the student with experience that keeps pace with the development that occurs in the field of dental manufacturing and its technologies.
4. To prepare a graduate who has extensive and detailed knowledge of all modern techniques in the field of dental implants.
5. To provide students with sufficient skill to make the necessary updates regarding dental manufacturing technology.
6. To expand vertically by creating a postgraduate program to obtain master's and doctoral degrees in this field.
7. The department strives and makes every effort to achieve international quality standards according to the available capabilities.

Program Accreditation: Not available

Other External Influences: Not available

Program Structure

Program Structure	Number of Courses	Credit Hour	Percentage	Notes
Institution Requirements				
College Requirements				
Department Requirements	47	178	100%	Core course (specialized + assistant)
Summer Training	Two months			
Other				

*Notes can include whether the course is core or elective

Course Description					
Course Name: Dental Equipment / First Stage					
Course Code:					
Semester:					
1. First Semester: Dental Equipment (Basic) (15 weeks)					
2. Second Semester: Dental Equipment (Advanced) (15 weeks)					
Academic Year: 2024-2025					
Date of Description Preparation: 11/ 11/2025					
Attendance Type: Mandatory					
Total Credit Hours/Units:					
3. First Course: 105 hours / 4 units					
4. Second Course: 105 hours / 4 units					
5. Course Coordinator:					
6. Name: Asst. lec. Zahraa salah					
7. Email: zahraasalah28@yahoo.com					
Course Objectives:					
1. To introduce the student to dental devices and technologies, their components, operation, and maintenance.					
2. To enable dental technologies students to use, maintain, and service dental devices.					
Learning and Teaching Strategies:					
1. 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
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Course Assessment:

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

1. 40 points for annual effort based on student assignments (daily, oral, monthly, and written exams, and reports)
2. 25 points for final practical exam
3. 35 points for final theoretical exam

Learning and Teaching Resources:

Required Textbooks:

1. *Dental Devices and Laboratories" by Dr. Faez Fouad Dawood (1985)*

Supporting Books and References (Scientific Journals, Reports):

1. Journal of Dentistry / University of Baghdad
2. Journal of Dentistry / Al-Mustansiriya University
3. 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: 2026–2025
Date of Syllabus Preparation: 11/11/2025
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
<ol style="list-style-type: none"> 4. General Objective: 5. To teach English to students of health and medical specialties. 6. Specific Objective: 7. To focus on the English language skills required by health and medical curricula.
Teaching and Learning Strategies
<ol style="list-style-type: none"> 8. Use of the whiteboard and presentation slides 9. Engaging students in lectures 10. Answering students' questions 11. Interactive explanation and discussion of material 12. 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

13. 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

14. Prescribed Textbook:

15. *Headway Upper Intermediate*

16. Main References:

17. *Mind Your Language*

18. Recommended Supporting Books:

19. *English Grammar in Use*

20. Online References:

21. *Writing Better English*

Course Description	
Course Title:	Dental Anatomy/ 1 st stage
Course Code:	
Semester I:	Basic Dental Anatomy (15 weeks)
Semester II:	Advanced Dental Anatomy (15 weeks)
Academic Year:	2026–2025
Date of Description Preparation:	11/11/2026
Attendance Mode:	Mandatory
Total Study Hours / Units:	
22.	First Semester: 105 hours / 4 units
23.	Second Semester: 105 hours / 4 units
Course Coordinator:	
Name:	assist. Lec. Rana muafaq
Email:	dr.ranamj@gmail.com
Course Objectives	
24.	General Objective:
25.	Introduce students to the scientific terminology related to dental anatomy and provide them with anatomical knowledge of the teeth.
26.	Specific Objective:
27.	Through the scientific component, students learn to draw and carve teeth to benefit from this skill in their technical field.
Teaching and Learning Strategies	
28.	Lectures
29.	Use of visual aids in the classroom
30.	Interactive lectures
31.	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:

32. 40 marks for continuous assessment (daily preparation, quizzes, oral and written exams, reports, etc.)
33. 25 marks for final practical exam
34. 35 marks for final theoretical exam

Learning Resources

35. Prescribed Textbooks:

36. Main References:

1. Atlas of Dental Anatomy

37. 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

38. 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: 2026-2025					
Date of Description Preparation: 10/11/2025					
Available Attendance Modes: Mandatory attendance					
Total Study Hours/Total Units: 45 hours / 2 units					
Course Instructor:					
Name: assist. Lec. Shwan Maki Mohammed					
Email: :shwanmakki25@gmail.com					
Course Objectives:					
39. 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.					
40. Specific Objective: To equip students with knowledge in managing and using various computer applications.					
Learning and Teaching Strategies:					
41. Lectures					
42. Use of visual aids in the classroom					
43. Interactive lectures					
44. 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): 1) Graham Brown, David Watson, "Cambridge IGCSE information and Communication Technology", 3rd Edition (2020) 2) Alan Evans, Kendall Martin, Mary Anne? oatsy, "Technology in Action Complete", 16th Edition (2020). 3) Ahmed Banafa, "Introduction to Artificial Intelligence (AI)", 1st Edition (2024).					
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: 2025–2026					
Date of Description Preparation: 11/ 10/2025					
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					
45. General Objective:					
46. The student will learn about the historical development of human rights, different forms of democracy, and various types of freedoms during the first semester.					
47. Specific Objective:					
48. 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.					
49. 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					
50. Lectures					
51. Use of visual aids in the classroom					
52. Interactive lectures					
53. 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: 54. First generation: civil and political rights. 55. Second generation: economic, social, and cultural rights 56. 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	
<p style="text-align: right;">Prescribed Textbooks:</p> <p style="text-align: center;">-مصادر مادة حقوق الانسان الانسان والديمقراطية: (ي القانون الدولي ل العام ,حقوق الانسان ,دار الثقافة للن رش والتوزي ع ,عمان ,الاردن, علوان عبد الكريم ,الوسيط ز ف 2006 -ي النظم السياسية ,ديوان المطبوعات الجامعية ,الجزائر, محا ضرات ز ف عواد تيس ي 1975. (عمارة محمد ,الاسلام وحقوق الانسان , ز ضورات لا حقوق ,عالم المعرفة ,الكويت , 1985العتار ,فؤاد ,الانظمة السياسية والقانون الدستوري ,دار النهضة العربية ,القاهرة , 199</p>	
6.	Main References:
7.	Recommended Supporting Materials:
8.	Electronic Resources / Websites:

Course Description					
Course Name					
Occupational Safety / First Stage					
Course Code					
First Semester: (15 Weeks)					
Academic year					
2026-2025					
Date of preparation of this description					
10/11/2025					
Attendance Forms / Exemption					
Mandatory Attendance					
Total study hours (total) / number of units (total)					
30 Hours / 2 Units					
Course instructor					
Course Instructor: M.D. Abdul Wahab Abdul Razzaq Katiya					
Email: Abdul Wahab Abdul @ 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					
9. Lectures					
10. Use of Teaching Aids					
11. Discussions and Interactive Lectures					
12. Use of Data Show					
Course Content					
Week	Hours	Learning Outcomes	Unit/Module Name	Teaching Method	Assessment Method
1	2	The student understands	13. Introduction & terms used in occupational safety 14. The staff of the occupational health center	Theoretical	Quiz+ Attendance
2	2	The student understands	15. Work hazards in an industrial environment in general work	Theoretical	Quiz+ Attendance

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

			<p>34. Routs of infection</p> <p>35. Basis for control Measures</p> <p>36. Hazard group classification system</p> <p>A Biosafety cabinet (BSC)</p>		
9	2	The student understands	<p>Biorisk and biohazards</p> <p>37. Control of substances hazardous to health</p> <p>38. Assessing risk for work with human blood and tissues hazards</p> <p>39. Control measures for work with human blood and tissue</p> <p>Containment level</p>	Theoretical	Quiz+ Attendance
10	2	The student understands	<p>Biorisk management system</p> <p>40. Assess the capability of the laboratory staff to control hazards</p> <p>41. Relation of risk groups to biosafety levels , practices of and equipment</p> <p>42. Mitigation Control Measures</p> <p>43. Sustainability of the bio-risk management system</p> <p>Strengthening biorisk management</p>	Theoretical	Quiz+ Attendance
11	2	The student understands	<p>Types of biological wastes</p> <p>44. Categories of biological wastes</p> <p>45. Decontamination of biological wastes</p> <p>Transportation of biological wastes</p> <p>46. International Transport Regulations</p> <p>The Basic Triple Packaging System</p>	Theoretical	Quiz+ Attendance

12	2	The student understands	Accident response 47. spill cleanup procedure 48. 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 49. Risks Characterization in biosecurity 50. Vulnerability assessment Component of Laboratory Biosecurity	Theoretical	Quiz+ Attendance
14	2	The student understands	biosafety Practical part biosafety rules simulation 3D https://www.labster.com/3d-biosafety-simulation	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:	2026–2025
Date of Syllabus Preparation:	10/11/2025
Attendance Format:	Mandatory Attendance
Total Study Hours / Units:	30 hours / 2 units
Course Coordinator:	
Name:	Assistant Lecturer Shwan Maki Mohammed
Email:	shwanmakki25@gmail.com
Course Objectives	
51.	General Objective:
52.	To educate students in the rules of Arabic grammar and Arabic literature.
53.	Specific Objective:
54.	To provide students with a comprehensive understanding of Arabic grammar and literary elements.
Teaching and Learning Strategies	
55.	Lectures
56.	Use of visual aids in the classroom
57.	Interactive lectures
58.	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 "Zā'"	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

59. 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

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

course description:

Course Name: General Physics / 1st stgsge

Course Code:

Academic Year: 2026-2025, Second Semester

Date of Description Preparation: 2025/10/21

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:

64. Introduce students to the general principles of physics.

65. Enable students to conduct analytical scientific physics experiments.

Learning and Teaching Strategies:

66. Lectures and discussions to reinforce ideas.

67. 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:

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

Learning and Teaching Resources:

Required Textbooks:

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

Main References (Sources): 1) Young, H. D., & Freedman, R. A. (2020). University Physics with Modern Physics (15th ed.). Pearson.
 2) Halliday, D., Resnick, R., & Walker, J. (2013). Fundamentals of Physics (10th ed.). Wiley.
 3) Serway, R. A., & Jewett, J. W. (2018). Physics for Scientists and Engineers (10th ed.). Cengage Learning.

4) Morin, D. (2008). Introduction to Classical Mechanics: With Problems and Solutions.
Cambridge University

Supporting Books and References (Scientific Journals, Reports):

Electronic References, Websites: None

Course Description					
Course Name: Dental Materials / First Stage					
Course Code:					
Semester:					
74. First Semester: Dental Materials (Basic) (15 weeks)					
75. 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:					
76. First Course: 105 hours / 4 units					
77. Second Course: 105 hours / 4 units					
78. Course Coordinator:					
79. Name: Asst. lec. Inas hadi kareem					
80. Email: enas.hadi@au.edu.iq					
Course Objectives:					
81. To familiarize students with the materials used in dental technology and how to handle them.					
82. 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:					
83. Lectures					
84. Use of visual aids in the classroom					
85. Interactive lectures					
86. 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

Second Semester / Intermediate Dental Materials

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:

87.	40 points for annual effort based on student assignments (daily, oral, monthly, and written exams, and reports)
88.	25 points for final practical exam
89.	35 points for final theoretical exam
Learning and Teaching Resources:	
Required Textbooks:	
90.	<i>Phillips' Science of Dental Materials 2012</i>
91.	<i>Craig's Restorative Dental Material</i> (5th edition)
92.	<i>Anderson's Applied Dental Materials</i>
Supporting Books and References (Scientific Journals, Reports):	
93.	Journal of Dentistry / University of Baghdad
94.	Journal of Dentistry / Al-Mustansiriya University
95.	Website of the College of Health and Medical Technologies, Middle Technical University
Electronic References, Websites:	

Course Description					
Course Name: Oral Histology / Second Stage					
Course Code: (Not specified in the provided text)					
Semester: First Semester: (15 weeks)					
Academic Year: 2026-2025					
Date of Description Preparation: 20/11/2025					
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: Abdul Wahab Abdul @ gmail .com					
Course Objectives:					
96. 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.					
97. Specific Objective: To enable students in the dental technologies department to understand the embryonic development of oral and dental tissues.					
Learning and Teaching Strategies:					
98. Lecture, and discussion lecture					
99. Use of visual aids and short educational films					
100. 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
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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):

101. "Oral anatomy, histology and embryology, 6th edition"

102. "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: 2026-2025					
Date of Description Preparation: 20/10/2025					
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:					
103. 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.					
104. 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:					
105. Lecture, and discussion lecture					
106. Use of visual aids and short educational films					
107. 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):

- 108. Essentials of Anatomy and Physiology
- 109. Gray's Anatomy for Students
- 110. Snell clinical anatomy by regions 9th ed.

Main References (Sources):

Supporting Books and References (Scientific Journals, Reports):

Electronic References, Websites:

- 111. Human Anatomy Atlas 2021 Full [2021.1.68-@EasyAPK](#)
- 112. <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: 2026-2025					
Date of Description Preparation: 10/10/2025					
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:					
113. General Objective: To introduce the student to the crimes committed by the Ba'ath regime in Iraq.					
114. 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:					
115. Lectures					
116. Interactive lecture					
117. 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

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

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

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

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

Main References (Sources):

- 119. Salim Aqari, Environmental Impacts of the Use of Weapons of Mass Destruction in International Wars.
- 120. 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: 2026-2025					
Date of Description Preparation: 10/11/2025					
Available Attendance Modes: Mandatory attendance					
Total Study Hours/Total Units: 45 hours / 2 units					
Course Instructor:					
Name: assist. Lec. Shwan Maki Mohammed					
Email: shwanmakki25@gmail.com					
Course Objectives:					
121. 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.					
122. Specific Objective: To equip students with knowledge in managing and using various computer applications.					
Learning and Teaching Strategies:					
123. Lectures					
124. Use of visual aids in the classroom					
125. Interactive lectures					
126. 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,	Theoretical	Quiz + Attendance

			its components, 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,	Theoretical	Quiz + Attendance

			copying 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 for creating a list, sorting lists	Theoretical	Quiz + Attendance
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): 1) Graham Brown, David Watson, "Cambridge IGCSE information and Communication Technology", 3rd Edition (2020)
 2) Alan Evans, Kendall Martin, Mary Anne? oatsy, "Technology in Action Complete", 16th Edition (2020).
 3) Ahmed Banafa, "Introduction to Artificial Intelligence (AI)", 1st Edition (2024).

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: 2026-2025					
Date of Description Preparation: 20/11/2025					
Available Attendance Modes: Mandatory attendance					
Total Study Hours/Total Units: 105 hours / 4 units					
Course Instructor:					
Name: assist lec. Abeer Adnan Nouri					
Email: abeeradnan321@Gmail					
Course Objectives:					
127. General Objective: To familiarize the student with the basic steps involved in the fabrication of acrylic removable partial dentures.					
128. 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:					
129. Lecture, and discussion lecture					
130. Use of visual aids and short educational films					
131. 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
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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):

- 132. Text book of CD
- 133. Bouchers prosthodontic treatment for Edentulous patients

Main References (Sources):

Supporting Books and References (Scientific Journals, Reports):

- 134. Al-Taqni Magazine
- 135. Baghdad University Journal of Dentistry
- 136. Al-Mustansiriya Journal of Dentistry

Electronic References, Websites:

- 137. Ashur University website
- 138. 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: 2025-2026					
Date of Description Preparation: 20/10/2025					
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:					
139. General Objective: To familiarize the student with the basic steps involved in the fabrication of acrylic complete dentures.					
140. Specific Objective: To enable dental technology students to know the basic steps involved in the fabrication of acrylic complete dentures.					
Learning and Teaching Strategies:					
141. Lecture, and discussion lecture					
142. Use of visual aids and short educational films					
143. 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):

144. Textbook of CD

145. 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: Abdul Wahab Abdul @gmail .com					
Course Objectives:					
146. 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.					
147. Specific Objective: To enable students in the dental technologies department to understand the embryonic development of oral and dental tissues.					
Learning and Teaching Strategies:					
148. Lecture, and discussion lecture					
149. Use of visual aids and short educational films					
150. 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:

151. 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/ 2 nd stage					
Course Code:					
Semester:					
152. First Semester: Dental Materials (Advanced 1) (15 weeks)					
153. Second Semester: Dental Materials (Advanced 2) (15 weeks)					
Academic Year: 2026-2025					
Date of Description Preparation: 11/11/2025					
Available Attendance Modes: Mandatory attendance					
Total Study Hours/Total Units:					
154. First Course: 105 hours / 4 units					
155. Second Course: 105 hours / 4 units					
Course Instructors:					
156. Name: assist. Lec. Inas hadi kareem					
157. Email: enas.hadi@au.edu.iq					
Course Objectives:					
158. 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.					
159. 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:					
160. Lectures					
161. Use of visual aids in the classroom					
162. Interactive lectures					
163. 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

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:

4. Required Textbooks: Phillips' Science of Dental Materials 2012
5. Craig's Restorative Dental Materials 2012
6. 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: 2026/2025					
Date of Description Preparation: 21/11/2025					
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:					
167. To familiarize the student with the materials used in the fabrication of crowns and bridges and how to handle them.					
168. To enable dental technology students to fabricate fixed crowns and bridges.					
Learning and Teaching Strategies:					
169. Lectures					
170. Use of visual aids in the classroom					
171. Interactive lectures					
172. 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:					
173. First Semester: Basic Chemistry (15 weeks)					
174. 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:					
175. First Course: 90 hours / 4 units					
176. Second Course: 90 hours / 4 units					
Course Instructor:					
Name: assist lec. mustafaa					
Email: @au.edu.iq					
Course Objectives:					
177. General Objective: To familiarize students with the basics of chemical structures of most dental materials and how to handle them.					
178. Specific Objective: To enable dental technology students to understand the molecular and structural composition of dental materials.					
Learning and Teaching Strategies:					
179. Lectures					
180. Use of visual aids in the classroom					
181. Interactive lectures					
182. 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 route, 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 Chemistry, C E Housecroft and A G Sharp Sec. Ed. 2005

Main References (Sources):

Supporting Books and References (Scientific Journals, Reports):

Electronic References, Websites:

Course Name: Oral pathology / third stage					
Course Code:					
First Semester: (15 weeks), 2026-2025					
Date of Description Preparation: 20/11/2025					
Available Attendance Modes: Mandatory attendance					
Total Study Hours/Total Units: 45 / 2					
Name: M.D. Mayadah Hameed Rasheed					
Email: mayadah.hameed@au.edu.iq					
Course Objectives:					
183. General Objective: To familiarize students with oral and dental diseases and how to prepare and examine slides using a microscope.					
184. Specific Objective: To enable students to identify and microscopically diagnose oral and dental diseases in the laboratory.					
Learning and Teaching Strategies:					
185. Lectures and discussion lectures					
186. Use of visual aids and short educational films					
187. 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 feature, radiological	Theoretical + Practical	Written exams, Attendance
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:

- 188.** 40 marks for annual effort (based on assigned tasks such as daily preparation, daily, oral, monthly, and written exams, and reports)
- 189.** 25 marks for practical final exam
- 190.** 35 marks for theoretical final exam

Learning and Teaching Resources:

- 191. Required Textbooks: Burkett oral Medicine 2020
- 192. Main References: Not specified
- 193. Supporting Books and References (Scientific journals, reports): Not specified
- 194. Electronic References, Internet Sites: Not specified

Course Name: Oral Bacteria / Third Level					
Course Code:					
Second Semester: (15 weeks), 2026-2025					
Date of Description Preparation: 20/11/2025					
Available Attendance Modes: Mandatory attendance					
Total Study Hours/Total Units: 75 / 3					
Name: M.D. Mayadah Hameed Rasheed					
Email: mayadah.hameed@au.edu.iq					
Course Objectives:					
195. 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.					
196. 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:					
197. Lectures and discussion lectures					
198. Use of visual aids and short educational films					
199. 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,	Theoretical + Practical	Written exams, Attendance

			characteristics, selective		
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:

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

201. Main References: Not specified.

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

203. Electronic References, Internet Sites: Not specified.

Course Description					
Course Name: Removable Partial Denture (Intermediate) / Third Level					
Course Code:					
First Semester: (15 weeks), 2026-2025					
Date of Description Preparation: 20/11/2025					
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:					
204. Lectures and discussion lectures					
205. Use of visual aids and short educational films					
206. 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:

207. Required Textbooks:

208. Main References:

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

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

1.	Journal of Dentistry / University of Baghdad
2.	Journal of Dentistry / Al-Mustansiriya University
210.	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), 2026-2025					
Date of Description Preparation: 20/11/2025					
Available Attendance Modes: Mandatory attendance					
Total Study Hours/Total Units: 105 / 4					
Course Instructor: Noor Ahmed Jassim, Email: nooralatool@yahoo.com					
Course Objectives:					
211. To familiarize the student with the general concept of maxillofacial prosthetics.					
212. To teach the student about the types of prosthetic and therapeutic devices specific to maxillofacial prosthetics.					
213. To teach the student how to evaluate cases of congenital and acquired deformities and participate in the treatment plan for maxillofacial prosthetics.					
214. 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.					
215. To enable the student to use artificial materials specific to maxillofacial prosthetics.					
Learning and Teaching Strategies:					
216. Lectures and discussion lectures					
217. Use of visual aids and short educational films					
218. 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):
219. Al-Teqni Journal,
220. Baghdad University Dental Journal,
221. 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: 2026-2025					
Date of Description Preparation: 12/11/2025					
Available Attendance Modes: Mandatory attendance					
Total Study Hours/Total Units: 160 / 7					
Course Instructor:					
Name: Abeer Adnan					
Email: abeeradnan321@Gmail.com					
Name: assist lect. Ahmad					
Email:					
Course Objectives:					
222. To teach students the general concept of orthodontics.					
223. To teach students about the components of acrylic orthodontic appliances.					
224. To guide students on how to work in the orthodontic (acrylic) manufacturing laboratory.					
225. 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:					
226. Gaining sufficient skill in manufacturing various types of orthodontic appliances and how to handle the laboratory equipment used.					
227. Additionally, the ability to identify the materials used in orthodontics.					
228. Understanding the types of jaw relationships.					
229. How to deal with the types of wire used in orthodontics.					
230. 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	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

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,

	hours practical	the material and applies it			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

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:	
231.	Required Textbooks:
1.	Text book of orthodontic
232.	Main References:
1.	Textbook of prosthodontic
233.	Supporting Books and References (Scientific journals, reports):
1.	Al-Teqni Journal
2.	Baghdad University Dental College Journal
3.	Al-Mustansiriya University Dental College Journal
234.	Electronic References, Internet Sites:
1.	Ashur University website
2.	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: 2026/2025					
Date of Description Preparation: 22/11/2025					
Available Attendance Modes: Mandatory attendance					
Total Study Hours (Total)/Total Units (Total): First Semester = 90/4, Second Semester = 105/4					
Course Instructor:					
Name: assist. Lec. Zahraa salah wahab					
Email: zahraasalah28@yahoo.com					
Course Objectives:					
235. To familiarize the student with the materials used in the manufacture of crowns and bridges and how to deal with them.					
236. To enable students in the dental technologies department to manufacture fixed crowns and bridges.					
Learning and Teaching Strategies:					
237. Lectures					
238. Use of visual aids inside the hall					
239. Interactive lecture					
240. 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:					
241. Required Textbooks: Not specified					
242. Main References:					
1. Contemporary fixed prosthodontics / 5th edition.					
2. Shillingburg Fundamentals of fixed prosthodontics.					
243. 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					
244. 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					

Course Description					
Course Name: Research Methods / Third Level					
Course Code: RES20302					
Semester/Year: 2026/2025 (Second Course)					
Date of Description Preparation: 1/12/2025					
Available Attendance Modes: Mandatory in-person attendance					
Total Study Hours (Total): 15 / Total Units (Total): 1					
Course Instructor:					
Name: assist lect. Inas hadi kareem					
Email:enas.hadi@au.edu.com					
Course Objectives:					
245. To introduce students to how to conduct research, especially the practical aspect.					
246. To enable students to write research papers and theses.					
Learning and Teaching Strategies:					
247. Lectures					
248. Use of visual aids inside the hall					
249. Interactive lecture					
250. 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:

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

252. 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)

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

254. Electronic References, Internet Sites: Not specified

Course Description					
Course Name: Complete Denture (Intermediate) / Third Level					
Course Code:					
First Semester: (15 weeks), 2026-2025					
Date of Description Preparation: 20/11/2025					
Available Attendance Modes: Mandatory attendance					
Total Study Hours (Total)/Total Units (Total): 90/4					
Course Instructor:					
Name: assist. Lec. Abeer Adnan Nouri Email: abeeradnan321@Gmail.com					
Course Objectives:					
255. General Objective: To familiarize the student with the materials used in the fabrication of complete dentures and how to deal with them.					
256. Specific Objective: To enable dental technology students to fabricate complete dentures.					
Learning and Teaching Strategies:					
257. Lectures and discussion lectures					
258. Use of visual aids and short educational films					
259. 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:

260. Required Textbooks: Not specified

261. Main References:

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

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

1.	Journal of Dentistry / University of Baghdad
2.	Journal of Dentistry / Al-Mustansiriya University
263.	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, 2026-2025					
Date of Description Preparation: 20/9/2025					
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					
Name : assist . lec. Ahmad					
Email					
Course Objectives:					
<p>264. To teach students the general concept of orthodontics.</p> <p>265. To teach students about the components of orthodontic appliances (acrylic).</p> <p>266. To guide students on how to work in the orthodontic (acrylic) manufacturing laboratory.</p> <p>267. To teach students how to overcome errors and find solutions for them in the laboratory during the manufacturing of orthodontic appliances.</p>					
Learning and Teaching Strategies:					
<p>268. Lectures and discussion lectures</p> <p>269. Use of visual aids and short educational films</p> <p>270. Practical applications</p>					
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
Second course					
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:

271. Required Textbooks:

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

272. Main References: Not specified

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

1.	Journal of Dentistry / University of Baghdad
2.	Journal of Dentistry / Al-Mustansiriya University
274.	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: 2026-2025					
Date of Description Preparation: 11/11/2025					
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: assist lec. Inas hadi kareem					
Email: enas.hadi@au.edu.iq					
Course Objectives:					
275. To familiarize the student with the materials used in the manufacture of crowns and bridges and how to deal with them.					
276. To enable students in the dental technologies department to manufacture fixed crowns and bridges.					
Learning and Teaching Strategies:					
277. Lectures					
278. Use of visual aids inside the hall					
279. Interactive lecture					
280. Use of data show					
281. 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
Second course					
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 restoration / technique.	Theoretical + Practical	Quiz + Attendance
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:

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

283. Main References (Sources):

1. Contemporary fixed prosthodontics / 5th edition.

2. Shillingburg Fundamentals of fixed prosthodontics.

284. 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

285. Electronic References, Internet Sites: Not specified

Course Description					
Course Name: Implants / Fourth Level					
Course Code:					
Study Duration: courses/ 1 st course					
2026-2025					
Date of Description Preparation: 20/11/2025					
Available Attendance Modes: Mandatory attendance					
Total Study Hours (Total)/Total Units (Total): 150/7					
Course Instructor:					
Name: Dr. Abdul Wahab Abdul Razzaq Katea					
Email: Abdul Wahab Abdul@ gmail .com					
Course Objectives:					
286. To familiarize the student with the materials used in dental implants and how to deal with them.					
287. To enable dental technology students to fabricate dental implant prostheses.					
Learning and Teaching Strategies:					
288. Lectures and discussion lectures					
289. 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	Theoretical + Practical	Written and practical

			Osseo integration		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

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:

290. Required Textbooks: Not specified

291. Main References: Not specified

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

1. Journal of Dentistry / University of Baghdad

2. Journal of Dentistry / Al-Mustansiriya University

293. Electronic References, Internet Sites: Not specified

Course Description					
Course Name: Maxillofacial Prosthetics / Fourth Level					
Course Code:					
Study Duration: courses					
2026-2025					
Date of Description Preparation: 20/11/2025					
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:					
294. To familiarize the student with the general concept of maxillofacial prosthetics.					
295. To teach the student about the types of prosthetic and therapeutic devices specific to maxillofacial prosthetics.					
296. To teach the student how to evaluate cases of congenital and acquired deformities and participate in the treatment plan for maxillofacial prosthetics.					
297. 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.					
298. To enable the student to use artificial materials specific to maxillofacial prosthetics.					
Learning and Teaching Strategies:					
299. Lectures and discussion lectures					
300. Use of visual aids and short educational films					
301. 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
Second courses					
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 osseointegrated implants	Theoretical + Practical	Written and practical 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, Attendanc e
Twenty- Fourth	5	Student understand s the topic	Nose prosthesis retained by osseointegrated implants	Theoretica l + Practical	Written and practical exams, Attendanc e
Twenty- Fifth	5	Student understand s the topic	Nose prosthesis retained by spectacles	Theoretica l + Practical	Written and practical exams, Attendanc e
Twenty- Sixth	5	Student understand s the topic	Nose opening device	Theoretica l + Practical	Written and practical exams, Attendanc e
Twenty- Seventh	5	Student understand s the topic	Orthognathic surgery	Theoretica l + Practical	Written and practical exams, Attendanc e
Twenty- Eighth	5	Student understand s the topic	Prosthetic part of cranioplasty	Theoretica l + Practical	Written and practical exams, Attendanc e

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:

302. Required Textbooks:

1. Maxillofacial Prosthetics A Multidisciplinary Approach, by John Beumer
2. Textbook of Prosthodontics, by Nallaswamy, et al.

303. Main References: Not specified

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

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

305. 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: 2026-2025 2nd course					
Date of Description Preparation: 11/11/2025					
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:					
306. To familiarize the student with the importance of professional conduct in the field of dental technologies.					
307. To enable dental technology students to interact with patients.					
Learning and Teaching Strategies:					
308. Lectures					
309. Use of visual aids inside the hall					
310. Interactive lecture					
311. 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 understand s the topic	Dealing with medical materials.	Theoretica l	Attendance + Written exams
Twenty- Eighth	2	Student understand s the topic	How to deal with laboratory medical devices used.	Theoretica l	Attendance + Written exams
Twenty- Ninth	2	Student understand s the topic	Medical law.	Theoretica l	Attendance + Written exams
Thirtieth	2	Student understand s the topic	Professional responsibility.	Theoretica l	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:

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

313. Main References (Sources):

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

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

315. Electronic References, Internet Sites: Not specified

Course Description					
Course Name: Partial Denture / Fourth Level					
Course Code:					
Study Duration: courses					
2026-2025					
Date of Description Preparation: 20/11/2025					
Available Attendance Modes: Mandatory attendance					
Total Study Hours (Total)/Total Units (Total): 180 / 8					
Course Instructor:					
Name: assist lec. abeer adnan nouri					
Email: abeeradnan321@Gmail.com					
Name: Prof. Mohammed Mudhafar Mohammed Ali					
Email: dr.moh.moudh@au.edu.iq					
Course Objectives:					
<p>316. To teach students the general concept of partial dentures.</p> <p>317. To teach students about the components of acrylic partial dentures.</p> <p>318. To guide students on how to work in the acrylic partial denture manufacturing laboratory.</p> <p>319. To teach students how to overcome errors and find solutions for them in the laboratory during the manufacturing of partial dentures.</p>					
Learning and Teaching Strategies:					
<p>320. Lectures and discussion lectures</p> <p>321. Use of visual aids and short educational films</p> <p>322. Practical applications</p>					
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
Second courses					
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:

323. Required Textbooks:

1. Removable Partial Prosthodontics, 13th Edition by McCracken

324. Main References:

1.	Removable Partial Prosthodontics by McCracken
2.	Essential of removable partial denture by K. Bhasker
325.	Supporting Books and References (Scientific journals, reports):
1.	Journal of Dentistry / University of Baghdad
2.	Journal of Dentistry / Al-Mustansiriya University
326.	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: courses					
2026-2025					
Date of Description Preparation: 20/11/2025					
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:					
327. To teach students the general concept of complete dentures.					
328. To teach students about the components of complete acrylic dentures.					
329. To guide students on how to work in the complete acrylic denture manufacturing laboratory.					
330. 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:					
331. Lectures and discussion lectures					
332. Use of visual aids and short educational films					
333. 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
Second course					
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:					
334. Required Textbooks:					
1. Complete Denture Prosthodontics by Sharry J.					
2. Boucher's Prosthodontic Treatment for Edentulous Patients					
335. Main References: Not specified					
336. Supporting Books and References (Scientific journals, reports):					
1. Journal of Dentistry / University of Baghdad					
2. Journal of Dentistry / Al-Mustansiriya University					
337. Electronic References, Internet Sites:					
1. Ashur University website					
2. College of Health and Medical Technologies - Baghdad website					