

Orthodontics

This Program Specification provides a concise summary of the main features of the program and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It is supported by a specification for each course that contributes to the program.

1. Teaching Institution	Al Ayen Iraqi University
2. University Department/Centre	Health and Medical Technologies, Dental Technology Department
3. Program Title	Orthodontics
4. Title of Final Award	
5. Modes of Attendance offered	Lectures and laboratory practice in the Orthodontic lab
6. Accreditation	Two semesters/ 4 th year 30 hours of theoretical lectures and 120 laboratory hours
7. Other external influences	
8. Date of production/revision of this specification	21-11-2022 Academic year 2022-2023
9. Aims of the Program	
High end tutoring of dental students scientifically through orthodontics theoretical lectures and lab practice in order for the student to:	
1- Understand the science of orthodontics.	
2- Understand the cases that need to undergo orthodontic treatment.	
3- Provide the student with sufficient information about removable orthodontic appliances.	
4- Be Informed about the eruption stages of the primary and permanent teeth.	

5- Be familiar with the age changes that occur in the teeth and their impact on occlusion.

6- Be informed about the importance of orthodontics for his/her future profession as a laboratory technician.

10. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Cognitive goals

- A1. To understand the basics of orthodontic diagnosis and treatment
- A2. To understand the different classes of malocclusion and the ability to differentiate between them.
- A3. Providing the student with the ability to apply the theoretical information in its clinical applications on patients.

B. The skills goals special to the program.

- B1. The practical aspect of laboratory sessions.
- B2. Understanding, comprehension and cognitive analysis.
- B3. Observation and Perception.

Teaching and Learning Methods

Power Point lecture presentation

Recommending the students to use the library resources to support their learning

Encouraging self-directed learning through explaining its importance

Encourage students to use the Internet as a supportive learning tool

Using discussion and dialogue to increase students' comprehension

Assessment methods

Quizzes, midterm exams, and final exams both theoretically and practically

Affective and value goals

L. Learning other skills that'll help the student in getting recruited by various dental centers in addition to self-improvement of the student him/herself.

Helping the student to deal with up to date scientific lectures and instruments

Teaching and Learning Methods

120 Clinical practical hours and 30 theoretical lecture hours

General and Transferable Skills (other skills relevant to employability and personal development)

D1. Learning other skills that'll help the student in getting recruited by various dental centers

D2. self-improvement of the student him/herself

Teaching and Learning Methods

Assessment Methods

11. Program Structure

Level/Year	Course or Module Code	Course or Module Title	Credit rating	
Fourth year	Orthodontics	Orthodontic terms	2 hours	Bachelor Degree Requires (x) credits
Fourth year	Orthodontics	Andrews's keys	1 hour	
Fourth year	Orthodontics	Classification of malocclusion	2 hours	
Fourth year	Orthodontics	Development of the primary teeth.	1 hour	
Fourth year	Orthodontics	Development of the permanent teeth.	1 hour	
Fourth year	Orthodontics	Etiology of normal occlusion.	1 hour	
Fourth year	Orthodontics	Cross bite.	1 hour	
Fourth year	Orthodontics	Deep bite.	1 hour	
Fourth year	Orthodontics	Open bite	1 hour	
Fourth year	Orthodontics	Bite plane and its modifications.	1 hour	
Fourth year	Orthodontics	Removable	1 hour	

	s	orthodontic appliance construction.		
Fourth year	Orthodontic s	Removable orthodontic appliance construction.	1 hour	
Fourth year	Orthodontic s	Removable orthodontic appliance construction.	1 hour	
Fourth year	Orthodontic s	Myofunctional appliance constructions.	1 hour	
Fourth year	Orthodontic s	Myofunctional appliance	1 hour	
Fourth year	Orthodontic s	Myofunctional appliance	1 hours	
Fourth year	Orthodontic s	Orthodontic wires & its properties.	2 hours	
Fourth year	Orthodontic s	Soldering.	1 hour	
Fourth year	Orthodontic s	Welding.	1 hour	
Fourth year	Orthodontic s	Repair of orthodontic appliance.	1 hour	

Fourth year	Orthodontic s	Retainers.	1 hour	
Fourth year	Orthodontic s	Retainers.	1 hour	
Fourth year	Orthodontic s	Space maintainers.	1 hour	
Fourth year	Orthodontic s	Bad habits.	1 hour	
Fourth year	Orthodontic s	Habit breaker.	1 hour	
Fourth year	Orthodontic s	Fixed orthodontic appliance.	1 hour	
Fourth year	Orthodontic s	Fixed orthodontic appliance.	1 hour	

	Method of learning	Course or Module Code	Course or Module Title	Hours	Week
	Lecture using power point	Orthodontics	Impression procedures for orthodontic cast.	4	1
	Lecture using power point	Orthodontics	Wire bending of different figures.	4	2

	Lecture using power point	Orthodontics	Wire bending of t different triangle.	4	3
	Lecture using power point Practical training	Orthodontics	Wire bending of different rectangle.	4	4
	Lecture using power point Practical training	Orthodontics	Modifications of Z – Spring& Recurved Z-spring.	4	5
	Lecture using power point Practical training	Orthodontics	Modifications of Z – Spring& Recurved Z-spring.	4	6
	Lecture using power point Practical training	Orthodontics	Modifications of Finger spring& Modified finger spring.	4	7
	Lecture using power point Practical training	Orthodontics	Modifications of Finger spring& Modified finger spring.	4	8
	Lecture using power point Practical training	Orthodontics	Modifications of Buccal canine retractor & Modified Buccal canine retractor.	4	9
	Lecture using power point	Orthodontics	Modifications of Buccal canine retractor & Modified Buccal canine retractor.	4	10

	Practical training				
	Lecture using power point Practical training	Orthodontics	Modifications of Hawley labial arch.	4	11
	Lecture using power point Practical training	Orthodontics	Modifications of Hawley labial arch.	4	12
	Lecture using power point Practical training	Orthodontics	Modifications of Robert retractor.	4	13
	Lecture using power point Practical training	Orthodontics	Modifications of Robert retractor.	4	14
	Lecture using power point Practical training	Orthodontics	Modifications of Fitted labial arch.	4	15
	Laboratory exam	Orthodontics	Modifications of Fitted labial arch.	4	16
	Lecture using power point Practical training	Orthodontics	Adams clasp & its modifications.	4	17

	Lecture using power point Practical training	Orthodontics	Adams clasp & its modifications.	4	18
	Lecture using power point Practical training	Orthodontics	Adams clasp & its modifications.	4	19
	Lecture using power point Practical training	Orthodontics	Adams clasp & its modifications.	4	20
	Lecture using power point Practical training	Orthodontics	Modifications of Base plate construction.	4	21
	Lecture using power point Practical training	Orthodontics	Modifications of Base plate construction.	4	22
	Lecture using power point Practical training	Orthodontics	Modifications of Anterior bite plate.	4	23
	Lecture using power point Practical training	Orthodontics	Modifications of Anterior bite plate.	4	24

Lecture using power point Practical training	Orthodontics	Modifications of Anterior bite plate.	4	25
Lecture using power point Practical training	Orthodontics	Posterior bite plate.	4	26
Lecture using power point Practical training	Orthodontics	Posterior bite plate.	4	27
Lecture using power point Practical training	Orthodontics	Soldering & Welding	4	28
Laboratory exam	Orthodontics	Soldering & Welding	4	29
Laboratory exam	Orthodontics	Soldering & Welding	4	30

13. Personal Development Planning

Seminars and presentation all over the academic year
I, assistant lecturer Abd El Hadi Kanj will supervise the students' seminars, presentations, and help them academically and practically all year long.

15. Key sources of information about the programme

- 1: Orthodontics for dental students
- 2: Removable orthodontic appliance
- 3: Textbook of Orthodontics

This course was designed to develop extended knowledge, understanding and advanced skills in the treatment of patients who require prosthetic facial rehabilitation. Students study and practice a broad range of treatments for the replacement of missing hard and soft tissues, using both traditional and advanced digital technologies.

1- Educational institution	Al-Ayen Iraqi University / College of Medical and Health Technologies
2- Scientific department/center	Department of Dental Industry
3- Course name/code	Maxillofacial Prosthodontics
4-Name of the lecturer(s).	Dr. Doaa Mohamed
5-Available forms of attendance	Theoretical and practical
6-Semester/year	1 st + 2 nd semester/ 4 th stage
7-Number of study hours (total)	30 hours
8-The date this description was prepared	2023-10-15
9- Course objectives	
A systematic scientific study of common Maxillofacial Defects in terms of their etiology, clinical presentation, clinical evaluation, patient management, preparation and restorations of these defects.	

10.Course outcomes and teaching, learning and evaluation methods

A- Cognitive objectives

By the end of this course the student should have the following knowledge:

A1- Types of Maxillofacial defects

A2- Etiology of Maxillofacial defects

A3- Management of the patients

A4- Clinical evaluation of Maxillofacial Defects

A5- Types and techniques of impressions used for Maxillofacial defects

A6- Clinical and Laboratory steps to fabricate a prosthesis
B - The skills objectives of the course. B1-Teaching the student the ability to clinically evaluate a defect B2-Teaching the student to choose the optimum technique of impression B3-Teaching the student to fabricate the optimum maxillofacial prosthesis
Teaching and learning methods Using PowerPoint (practical and theoretical) Using interactive laboratory sessions
Evaluation methods 1- Monthly exams 2- Laboratory Reports 3- Discussions in practical sessions 4-Group discussions in Lectures
C- Emotional and value goals C1- Self-confidence C2- Paying attention to external appearance C3- Adherence to working hours C4- Follow up on scientific and cognitive development
D-Transferable general and qualifying skills (other skills related to employability and personal development). D1 - Teaching the student the ability to sympathize and support the patient D2 - Teaching the student to distinguish between different lab techniques D3 - Teaching the student about digital workflow

Teaching method	Name of the unit/topic	hrs	Week
Theoretical	Introduction to Maxillofacial Prosthodontics	2	First
Theoretical	Basic Principles of Restorations	2	Second
Theoretical	Ocular Prosthesis Introduction	2	Third
Theoretical	Ocular Prosthesis Impression Material	2	Fourth

Theoretical	Ocular Prosthesis Impression Techniques	2	Fifth
Theoretical	Ocular Prosthesis Fabrication	2	Sixth
Theoretical	Orbital Defects Introduction	2	Seventh
Theoretical	Orbital Defects Impression	2	Eighth
Theoretical	Orbital Defects Fabrication	2	Ninth
Theoretical	Orbital Defects Retention	2	Tenth
Theoretical	Ear Defects Introduction	2	Eleventh
Theoretical	Ear Defects Impression	2	Twelfth
Theoretical	Ear Defects Fabrication	2	Thirteenth
Theoretical	Ear Defects Retention	2	Fourteenth
Theoretical	Meatal Opening Device	2	Fifteenth

11.Infrastructure	
Required prescribed books	Maxillofacial rehabilitation: prosthodontic and surgical management of cancer-related, acquired, and congenital defects of the head and neck
Main references	
A- Recommended books and references (scientific journals, reports,)	Prosthetic restoration of orbital defects A Shifman, A C Levin, M Levy, J B Lepley Prosthetic rehabilitation by Thomas, Keith F
B - Electronic references, Internet sites...	

Dental Implant

This Program Specification provides a concise summary of the main features of the program and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It is supported by a specification for each course that contributes to the program.

1. Teaching Institution	Al Ayen University
2. University Department/Centre	Health and Medical Technologies, Dental Technology Department

3. Program Title	Dental Implant
4. Title of Final Award	Bachelor's degree of dental prosthetics
5. Modes of Attendance offered	Lectures and laboratory practice
6. Accreditation	1 st + 2 nd semesters/ 4 th year 30 hours of theoretical lectures and 30 laboratory hours
7. Other external influences	
8. Date of production/revision of this specification	28-03-2022 Academic year 2023-2024
9. Aims of the Program	
High end tutoring of dental students scientifically through orthodontics theoretical lectures and lab practice in order for the student to:	
1- Understand the science of dental implant. 2- Understand the cases that need to undergo dental implant treatment. 3- Provide the student with sufficient information about dental implant prosthetics. 4- Be Informed about the components of dental implant . 5- Be familiar with types of dental implant. 6- Be informed about the importance of dental implant for his/her future profession as a laboratory technician.	

10. Learning Outcomes, Teaching, Learning and Assessment Methods

A. Cognitive goals

- A1. To understand the basics of dental implant diagnosis and treatment
- A2. To understand the different types and components of dental implant the ability to differentiate between them.
- A3. Providing the student with the ability to apply the theoretical information in its clinical applications on patients.

B. The skills goals special to the program.

- B1. The practical aspect of laboratory sessions.
- B2. Understanding, comprehension and cognitive analysis.
- B3. Observation and Perception.

Teaching and Learning Methods

Power Point lecture presentation

Recommending the students to use the library resources to support their learning

Encouraging self-directed learning through explaining its importance

Encourage students to use the Internet as a supportive learning tool

Using discussion and dialogue to increase students' comprehension

Assessment methods

Quizzes, midterm exams, and final exams both theoretically and practically

C. Affective and value goals

C1. Learning other skills that'll help the student in getting recruited by various dental centers in addition to self-improvement of the student him/herself.

C2. Getting the student to deal with up-to-date scientific lectures and instruments

Teaching and Learning Methods

120 Clinical practical hours and 30 theoretical lecture hours

General and Transferable Skills (other skills relevant to employability and personal development)
D1. Learning other skills that'll help the student in getting recruited by various dental centers.
D2. self-improvement of the student him/herself
D3. Improvement the determination type of prosthetics for each dental implant.
D4.

Teaching and Learning Methods

Assessment Methods

11. Program Structure

Level/Year	Course or Module Code	Course or Module Title	Credit rating	
Fourth year	Dental Implant	Dental Implant history	1 hour	Bachelor Degree Requires (x) credits
Fourth year	Dental Implant	Types of Implants	1 hour	
Fourth year	Dental Implant	Classification of Dental Implant	1 hour	
Fourth year	Dental Implant	DESIGN OF IMPLANTS.	2 hours	
Fourth year	Dental Implant	Implant Components	1 hour	
Fourth year	Dental Implant	Implant Osseointegration	1 hour	
Fourth year	Dental Implant	Implant Biomaterials	1 hour	
Fourth year	Dental Implant	IMPLANT PROPERTIES	1 hour	
Fourth year	Dental Implant	Bio-adhesion	1 hour	
Fourth year	Dental Implant	Bifunctionality (Elastic Modulus)	1 hour	

Fourth year	Dental Implant	Implant surgery	2 hours	
Fourth year	Dental Implant	SELECTION OF AN IMPLANT MATERIAL	1 hour	
Fourth year	Dental Implant	BIOMECHANICS of dental implant.	1 hour	
Fourth year	Dental Implant	Case Selection	1 hour	
Fourth year	Dental Implant	Implant Stabilized Prosthesis	1 hour	
Fourth year	Dental Implant	STUDY MODELS	1 hours	
Fourth year	Dental Implant	Examination and Treatment Planning	1 hour	
Fourth year	Dental Implant	Implant Positioning	1 hour	
Fourth year	Dental Implant	Immediate Loading of dental implants	1 hour	
Fourth year	Dental Implant	Prosthodontic Procedure of Single Tooth Implant	1 hour	
Fourth year	Dental Implant	Prosthodontic Procedure of Multiple Teeth Implant	1 hour	
Fourth year	Dental Implant	Abutment Selection of dental implant	1 hour	
Fourth year	Dental Implant	Implants Longevity	1 hour	
Fourth year	Dental Implant	Factor for determining implant success	1 hour	
Fourth year	Dental Implant	Occlusal Consideration	1 hour	

		for Implant Supported Prosthesis		
Fourth year	Dental Implant	Bone Mechanics and Occlusion	1 hour	
Fourth year	Dental Implant	Complications of Dental Implants	1 hour	

	Method of learning	Course or Module Code	Course or Module Title	Hours	Week
	Lecture using power point	Dental Implant	Dental Implant history	1	1
	Lecture using power point	Dental Implant	Types of Implants	1	2
	Lecture using power point	Dental Implant	Classification of Dental Implant	1	3
	Lecture using power point	Dental Implant	DESIGN OF IMPLANTS.	1	4
	Lecture using power point	Dental Implant	Implant Components	1	5
	Lecture using power point	Dental Implant	Implant Osseointegration	1	6
	Lecture using power point	Dental Implant	Implant Biomaterials	1	7
	Lecture using power point	Dental Implant	IMPLANT PROPERTIES	1	8
	Lecture using power point	Dental Implant	Bio-adhesion	1	9
	Lecture using power point	Dental Implant	Bifunctionality (Elastic Modulus)	1	10
	Lecture using power point	Dental Implant	Implant surgery	1	11
	Lecture using power point	Dental Implant	SELECTION OF AN IMPLANT MATERIAL	1	12
	Lecture using power point	Dental Implant	BIOMECHANICS of dental implant.	1	13
	Lecture using power point	Dental Implant	Case Selection	1	14
	Lecture using power point	Dental Implant	Implant Stabilized Prosthesis	1	15
	Lecture using power point	Dental Implant	STUDY MODELS	1	16
	Lecture using power point	Dental Implant	Examination and Treatment Planning	1	17

	Lecture using power point	Dental Implant	Implant Positioning	1	18
	Lecture using power point	Dental Implant	Immediate Loading of dental implants	1	19
	Lecture using power point	Dental Implant	Prosthodontic Procedure of Single Tooth Implant	1	20
	Lecture using power point	Dental Implant	Prosthodontic Procedure of Multiple Teeth Implant	1	21
	Lecture using power point	Dental Implant	Abutment Selection of dental implant	1	22
	Lecture using power point	Dental Implant	Implants Longevity	1	23
	Lecture using power point	Dental Implant	Factor for determining implant success	1	24
	Lecture using power point	Dental Implant	Occlusal Consideration for Implant Supported Prosthesis	1	25
	Lecture using power point	Dental Implant	Bone Mechanics and Occlusion	1	26
	Lecture using power point	Dental Implant	Complications of Dental Implants	1	27
	Lecture using power point	Dental Implant	Dental Implant Protective Occlusion	1	28
	Lecture using power point	Dental Implant	Types of Crown Contour	1	29
	Lecture using power point	Dental Implant	Complications Following Second Stage Surgery	1	30

13. Personal Development Planning

Seminars and presentation and discussion all over the academic year
I, assistant lecturer Ghazwan Hasan will supervise the students' seminars, presentations, and help them academically and practically all year long.

15. Key sources of information about the programmed

- 1: Implantology Made Easy
- 2: Dental implant Prosthetics
- 3: Textbook of Dental implant

Crowns and bridges

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected from the student to achieve, proving whether he has made the most of the available learning opportunities. They must be linked to the description of the program.‘

1.Educational institution	Al- Ayen University
2.Scientific department / Center	Department of dental industry technologies

3.Course name / code	Crowns and bridges
4.Available forms of attendance	Through internet programs and communication applications
5.Semester / year	1 st and 2 nd semester /4 stage
6 .Number of academic hours (total(	240
7.Date of preparation of this description	2023/10/25
1. Course objectives	
10 Enable the student to make the correct diagnosis	
11 develop an appropriate treatment plan for the patient	
12 manufacture and work of crowns and bridges	
13 the student knows what is meant by crowns and bridges in general from a theoretical and practical point of view	

10. Course outputs and methods of teaching, learning and evaluation
A-cognitive goals -1enables students to obtain knowledge and understanding of the subject of crowns and bridges. -2teaches the student to understand the complete parts of crowns and bridges and the measurements required for each part
B-the Marathi objectives of the course. B1-students use modern materials for dental industry laboratories B2-the student watches scientific films on how to design bridges and bridges correctly and without errors B3-writes Scientific Reports on the material of crowns and bridges B4-he makes enlarged models of the arrangement of teeth on crowns and bridges to benefit from him in learning how to make crowns and bridges.
Teaching and learning methods
1- classroom theory 2- Interactive 3- video 4- Research
Evaluation methods
Periodic questions Monthly tests Periodic meetings and discussions Quarterly examinations

C-emotional and value goals C1-upgrading and developing the scientific standard C2-development and development of expertise and knowledge C3-promotion of scientific research C4-compliance with laws and scientific instructions
D-general and qualifying skills transferred (other skills related to employability and personal development.(D1-gaining experience and confidence in information D2 - exchange of experiences D3-love of cooperation, education and learning D4-be patient and meticulous at work

10.Course structure					
The week	Watches	Required learning outcomes	Name of the unit / or subject	Method of Education	Evaluation method
Weekly	2 hours theoretical + 4 hours practical	The student understands the material	Crowns and bridges	Theoretical + practical	Tests and application

Types of fixed restorations and their waxing techniques	1
Types of Connectors, Types of pontics	2
Principles of tooth preparation: biological, mechanical	3
Principles of tooth preparation: esthetic consideration	4
Digital smile design	5
Scanners and 3D printing technique	6
All ceramic restoration: classification	7
All ceramic restoration: aluminous core/slip cast	8
Pressed ceramic restoration	9
Porcelain labial margin	10
Machined ceramic restoration: types	11
Machined ceramic restoration: techniques	12
Visual perception	13
Retainer for a removable partial denture	14
Precision attachment	15

11.Infrastructure

1.required prescribed books	
2. main references (sources)	Handbook of Pediatric Dentistry E-Book: Arabic Bilingual
O books and references that are recommended (scientific journals, reports,....)	Handbook of Pediatric Dentistry E-Book 2014
B-electronic references, Internet sites....	Al Ain University website

12. Course development plan
Upgrading and developing the student's knowledge and information and his scientific background

Partial denture / fourth stage

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected from the student to achieve, proving whether he has made the most of the available learning opportunities. They must be linked to the description of the program.

1.Educational institution	Al- Ayen University
2.Scientific department / Center	Department of dental industry technologies
3.Course name / code	Partial denture / fourth stage
4.Available forms of attendance	Presence via social media platforms
5.Semester / year	1st semester/4th stage
6 .Number of academic hours (total(	240
7.Date of preparation of this description	2023/10/25
1. Course objectives	
Enable the student to make the correct diagnosis	
develop an appropriate treatment plan for the patient	
Manufacture and work of a partial kit	

11.Course outputs and methods of teaching, learning and evaluation

A-cognitive goals A1-studying new research that interests the student and how to select good research A2-knowledge of the origins of the scientific research book A3-choosing the right sources A4-maintaining professional etiquette and ethics of dealing with colleagues
B-the Marathi objectives of the course. B1-gaining the right experience in dealing with the patient B2-how to make correct treatment plans and correct diagnosis B3-mastering all the steps of working the partial kit B4-making a partial kit for the patient and periodic follow-up of the patient
Teaching and learning methods
In the classroom
Evaluation methods
Conducting exams and periodic questions
C-emotional and value goals C1-upgrading scientific reality C2-development and development of scientific and practical talents C3-application of laws and practical obligations
Teaching and learning methods
In the classroom
Evaluation methods
Conducting exams and periodic questions
D-general and qualifying skills transferred (other skills related to employability and personal development.(D1-increased self-confidence D2-bearing the burdens and hardships of work D3-building a strong rapport among colleagues at work D4-being ethical

12.Course structure					
The week	Watches	Required learning outcomes	Name of the unit / or subject	Method of Education	Evaluation method
Weekly	2 hours theoretical + 4 hours practical	The student understands the material	Partial set	Theoretical + practical	Tests and application

المفردات الدراسية /الكورس الثاني (النظرية- سمنارات)	
التفاصيل	الأسبوع
RPD production methods	1
Step by step fabrication of RPD using conventional lost-wax method	2
Step by step fabrication of RPD using subtractive milling method	3
Step by step fabrication of RPD using additive (3D printing) method	4
Combination metal/resin RPD	5
Esthetic considerations with removable partial dentures	6
Principles in arrangements of artificial teeth for RPD opposing complete denture	7
Principles in arrangements of artificial teeth for RPD Opposing natural teeth	8
Principles in arrangements of artificial teeth for RPD opposing RPDs	9
Alter cast technique in RPD	10
Disinfection impression, cast, and acrylic partial denture	11
Immediate RPD	12
Post insertion complications and failure in RPD	13
RPD framework: soldering and welding	14
RPD: Maintenance and follow up	15

13.Infrastructure	
1.required prescribed books	He wrote the principles and basics of the partial kit
Main references (sources)	Stewart's clinical removable partial prosthodontics, 3rd ed McCrackens removable partial prosthodontics, 12th ed

O books and references that are recommended (scientific journals, reports,....)	Stewart's clinical removable partial prosthodontics, 3rd ed McCrackens removable partial prosthodontics, 12th ed Removable partial dentures-A Practitioners' Manual, OlcayŞakar Seidin A. Occlusal rests and rest seats. J Prosthet Dent 1958;8: 431-440. Dunny JA, King CIE. Minor connector design for anterior acrylic resin bases: A preliminary study. J Prosthet Dent 1975;34:496-502
B-electronic references, Internet sites	Stewart's clinical removable partial prosthodontics, 3rd ed McCrackens removable partial prosthodontics, 12th ed Removable partial dentures-A Practitioners' Manual, OlcayŞakar Seidin A. Occlusal rests and rest seats. J Prosthet Dent 1958;8: 431-440. Dunny JA, King CIE. Minor connector design for anterior acrylic resin bases: A preliminary study. J Prosthet Dent 1975;34:496-502

14.Course development plan

Complete Dentures-Stage IV

This course description provides a brief summary of the most important characteristics of the course and the learning outcomes expected from the student to achieve, proving whether he has made the most of the available learning opportunities. They must be linked to the description of the program.‘

1.Educational institution	Al- Ayen University
2.Scientific department / Center	Department of dental industry technologies

.3Course name / code	Complete Dentures-Stage IV
.4Available forms of attendance	Classroom attendance
.5Semester / year	2 nd semester/4 stage
6 .Number of academic hours (total(	150
.7Date of preparation of this description	2023/10/25
1. Course objectives	
Enable the student to make the correct diagnosis	
develop an appropriate treatment plan for the patient	
Manufacture and work of a complete mobile kit	

15.Course outputs and methods of teaching, learning and evaluation
A-cognitive goals A1-studying new research that interests the student and how to select good research A2-knowledge of the origins of the scientific research book A3-choosing the right sources A4-maintaining professional etiquette and ethics of dealing with colleagues
B-the Marathi objectives of the course. B1-gaining the right experience in dealing with the patient B2-how to make correct treatment plans and correct diagnosis B3-mastering all the steps of working the partial kit B4-making a partial kit for the patient and periodic follow-up of the patient
Teaching and learning methods
In the classroom
Evaluation methods
Conducting exams and periodic questions
C-emotional and value goals C1-upgrading scientific reality C2-development and development of scientific and practical talents C3-application of laws and practical obligations
Teaching and learning methods
In the classroom
Evaluation methods

Conducting exams and periodic questions

D-general and qualifying skills transferred (other skills related to employability and personal development.)

D1-increased self-confidence

D2-bearing the burdens and hardships of work

D3-building a strong rapport among colleagues at work

D4-being ethical

16.Course structure

The week	Watches	Required learning outcomes	Name of the unit / or subject	Method of Education	Evaluation method
Weekly	2 hours theoretical + 4 hours practical	The student understands the material	Partial set	Theoretical + practical	Tests and application

Details	Week
Selective grinding of complete denture	1
Repairing of complete denture: base and teeth	2
Rebasing of complete denture: materials & techniques	3
Relining of complete denture: materials & techniques (part I)	4
Materials & techniques (part II): Relining of complete denture	5
Single complete denture opposing natural teeth and restored teeth	6
Duplication of complete denture: materials & techniques	7
Immediate complete denture: materials & techniques	8
Over denture	9
Digital system for C.D. (3D printed)	10
Digital system for C.D. (milling)	11
Implant supported removable denture	12
Disinfection of complete denture: cast, impression, final complete denture	13
Problems: post insertion complete denture	14
General overview relating to complete dentures	15

professional ethics

The goal of the year is for the student to learn about professional ethics and provide him with professional ethical rules that enhance his commitment to them in his field of work. The goal is to achieve ethical values. The importance of ethics for the individual and society. Work and profession Work and its importance .

Al Ain University College of Health and Medical Technologies	Educational institution
Dental industry techniques	Scientific\ department/center
Professional ethics	Course name/code .
%100	Available forms of attendance
Semester/year	2 nd Semester/4 th year
theoretical hour 1 30 lectures = 30 hours	Number of study hours (total)
2024	Date this description was prepared
Course objectives	
Specific: set by the subject teacher (as behavioral objectives within the framework of the lesson plan at the single lecture level	
Identify the factors affecting job outcomes	

Course outcomes and teaching, learning and evaluation methods
A- Cognitive objectives Method of establishing professional ethics Levels of building and consolidating professional ethics Means and methods of consolidating professional ethics

B - The skills objectives of the course Identify habits and skills Knowing the factors and problems
Teaching and learning methods
Theoretical
Evaluation methods
As a result of examinations, periodic questions, oral exam, observation, homework, laboratory reports .
Emotional and value goals A1 - He is convinced of the importance of the specialty he is studying C 2 - The effort of teaching staff and technicians in providing the scientific material is appreciated . C3 - Groups of students participate in group work A 4- He respects sincerity in work and hates cheating
Teaching and learning methods
The method of lecture, discussion, and student research in an, interactive ,electronic and video manner
Evaluation methods
Discussion, observation, group tasks
D - General and qualifying transferable skills (other skills related to .(employability and personal development D1- Using the electronic sense in the field of specialization D2 - The possibility of searching for information in Chinese analyzes .and extracting it through the use of the studied programs d- The ability to collect information and analyze it for its main ideas D4 - Writing technical reports on devices in the field of specialization

10- Course structure

Evaluation method	Teaching method	Name of the unit/topic	Required learning outcome	hours	the week
Test and apply	Interactive	The concept of morality and its origin .General rules of ethics		2	2-1
Test and apply	Interactive	Ethics sources Moral values		2	3-4
Test and apply	Interactive	To do and its importance Work behaviors Concept of profession .Definition of profession .The difference between the concept of work, profession and craft. Standards upon which the profession must be based		2	5-6
Test and apply	Interactive	What are professional ethics Positive outcomes of commitment to professional ethics Characteristics of work ethics Characteristics of work ethics Steps for the acceptable level of professional ethics. Unit Four - Values and professional ethics		2	7-8
Test and apply	Interactive	To be honest Honesty Advice		2	9-10
Test and apply	Interactive	Justice Good dealing and mastery of work		2	11-12
Test and apply	Interactive	Unethical administrative behavior -Definition of administrative corruption Types of administrative corruption Bribery The concept of bribery Types of bribery		2	13-14
Test and apply	Interactive	The difference between a gift and a bribe The reasons and motives behind bribery Cheating The concept of cheating The nature of fraud at work Manifestations of fraud in job performance		2	15-16
Test and apply	Interactive	Method of establishing professional ethics Levels of building and consolidating professional ethics Means and methods of consolidating professional ethics		2	17-18
Test and apply	Interactive	Things that must be taken into consideration . in formulating the ethical code of the . profession How to promote ethical behavior at work according to (Kreitner and Kinicki)		2	19-20
Test and apply	Interactive	Characteristics and prescriptions of the medical technician.		2	21-22

		Duties of a medical technician towards his profession, patient, society			
Test and apply	Interactive	Patient rights: Justice and equality Maintaining the confidentiality of patient information Maintain patient privacy Informed consent Comprehensive care .Putting the patient's interests first. Communicating with 27-28fective communication Patients have the right to access medical records		2	23-24
Test and apply	Interactive	A relationship to the basic rules of the profession to prevent the spread of epidemics and diseases, as well as the importance of its role in spreading the virus. The medical technician works with society and his responsibility towards the environment and public safety through health care and ways to prevent the spread of diseases		2	25-26
Test and apply	Interactive	Professional relationship: The relationship of the medical technician with his colleagues in the health institution Respect, cooperation, avoiding criticism in front of patients, accuracy and honesty in evaluating performance, ethics and medical research Ethics of conducting medical experiments in Iraqi health institutions		2	27-28
Test and apply	Interactive	Helsinki Convention on the Ethics of Medical Experiments. Ethics of writing medical research. Ethics of teaching and learning for patients		2	29-30

12- Infrastructure .	
1- Required prescribed books	Book
2- Main references (sources)	Training bag
a- Recommended books and references (scientific journals, ,reports ,.....)	
b- Electronic references, Internet sites	

Course development plan

The curriculum development plan focuses on the following

- 1-Giving the prescribed scientific material and observing and analyzing the students' results
- 2- Studying feedback from students' comments about vocabulary
- 3- Study the practical laboratory notes for the course
- 4-Comparing the current vocabulary with the vocabulary of corresponding colleges in the field

Professional conduct

The goal of the year is for the student to learn about professional ethics and provide him with professional ethical rules that enhance his commitment to them in his field of work. The goal is to achieve ethical values. The importance of ethics for the individual and society. Work and profession Work and its importance .	
Al Ain University College of Health and Medical Technologies	Educational institution
Dental industry techniques	Scientific\ department/center
Professional conduct	Course name/code .
%100	Available forms of attendance
Semester/year	1 st semester/4 year
theoretical hour 1 30 lectures = 30 hours	Number of study hours (total)
2024	Date this description was prepared
Course objectives	
Specific: set by the subject teacher (as behavioral objectives within the framework of the lesson plan at the single lecture level	
Identify the factors affecting job outcomes	

Course outcomes and teaching, learning and evaluation methods
A- Cognitive objectives Method of establishing professional ethics Levels of building and consolidating professional ethics Means and methods of consolidating professional ethics

B - The skills objectives of the course Identify habits and skills Knowing the factors and problems
Teaching and learning methods
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10- Course structure

Evaluation method	Teaching method	Name of the unit/topic	Required learning outcome	hours	the week
Test and apply	Interactive	Professional behavior, its importance and definition .		2	2-1
Test and apply	Interactive	Ethics sources Moral values		2	3-4
Test and apply	Interactive	Personal . Personality types . Factors affecting personality style . Integrated personality traits. Habits and their types . Customs and professional practice .		2	5-6
Test and apply	Interactive	Duties of the health staff towards their profession . Duties of the health staff towards society The duties of the health staff towards themselves Duties of the health staff of the institution in which he works .		2	7-8
Test and apply	Interactive	Values, customs and traditions Characteristics of values . Types of personal values . I value values .		2	9-10
Test and apply	Interactive	personal cleanliness . The importance of personal hygiene . Reasons for lack of personal hygiene in the workplace . Manifestations of poor personal hygiene at work . Main measures to maintain personal hygiene . Characteristics of workers in health institutions .		2	11-12
Test and apply	Interactive	health education Elements of health education Health education, its goals and fields Methods and methods of health education		2	13-14
Test and apply	Interactive	.Preparing the patient from a health standpoint . psychology Types of personalities		2	15-16
Test and apply	Interactive	.Patient rights and duties Management of the complaints department by hospitals and its objectives		2	17-18
Test and apply	Interactive	.Professional compatibility Basic communication skills for the health team		2	19-20
Test and apply	Interactive	Characteristics and prescriptions of the medical technician Duties of a medical technician towards his profession, patient, society		2	21-22
Test and apply	Interactive	Patient rights: Justice and equality		2	23-24

		Maintaining the confidentiality of patient information Maintain patient privacy Informed consent Comprehensive care .Putting the patient's interests first. Communicating with 27-28fective communication Patients have the right to access medical records			
Test and apply	Interactive	A relationship with the basic rules of the profession to prevent the spread of epidemics and diseases, as well as the importance of its role in spreading epidemics.		2	25-26
Test and apply	Interactive	Professional relationship: The relationship of the medical technician with his colleagues in the health institution. Respect, cooperation, avoiding criticism in front of patients, accuracy and honesty in evaluating performance, ethics and medical research: Ethics of conducting medical experiments in Iraqi health institutions		2	27-28
Test and apply	Interactive	Certificate in the judiciary. Doctor and examination fees		2	29-30

12- Infrastructure .

1- Required prescribed books	Book
2- Main references (sources)	Training bag
a- Recommended books and references (scientific journals, ,reports ,.....)	
b- Electronic references, Internet sites	

Course development plan
The curriculum development plan focuses on the following 1-Giving the prescribed scientific material and observing and analyzing .the students' results 2- Studying feedback from students' comments about vocabulary 3- Study the practical laboratory notes for the course 4-Comparing the current vocabulary with the vocabulary of corresponding colleges in the field