

**1. Course Name:**

Dental Implant

**2. Course Code:**

MTDE4106

**3. Semester / Year:**1<sup>st</sup> semester / 2024–2025**4. Description Preparation Date:**

7/10/2025

**5. Available Attendance Forms:**

Attendance in the classroom

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

2 hours of theory

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

Name: T.A. Ali Mushtaq Neamah

Email: [alimushtsq295@gmail.com](mailto:alimushtsq295@gmail.com)**8. Course Objectives****Course Objectives:**

- Preparing a generation of graduates in the dental industry who possess a high level of understanding of dental implants, how to deal with the prosthetic and surgical aspects of implants, and an understanding of implant installation and their types, especially since they will be in direct contact with the oral cavity and patients.
- The possibility of participating in scientific research and specialized scientific conferences to enhance their skills and develop their expertise in this field.

**9. Teaching and Learning Strategies****Strategy**

By the end of the course, the student will be able to:

- 1.Easily Work in in medical centers performing laboratory tests.
- 2. Participate with confidence in specialized scientific conferences.
- 3.Workingin medical laboratories and on equipment related to the this specialty.

**10. Course Structure**

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

### Syllabus of The Theoretical Course

|    |   |                                                             |         |                         |            |
|----|---|-------------------------------------------------------------|---------|-------------------------|------------|
| 1  | 2 | Dental implant [terminologies historical background]        | Lecture | Attendance in classroom | Daily quiz |
| 2  | 2 | Components and types of dental implants                     | Lecture | Attendance in classroom | Daily quiz |
| 3  | 2 | Biomaterials for dental implants                            | Lecture | Attendance in classroom | Daily quiz |
| 4  | 2 | Dental implants: Osseointegration and surgical procedure    | Lecture | Attendance in classroom | Daily quiz |
| 5  | 2 | Treatment options for dental implants                       | Lecture | Attendance in classroom | Daily quiz |
| 6  | 2 | Types of abutments                                          | Lecture | Attendance in classroom | Daily quiz |
| 7  | 2 | Cast fabrication of dental implant (Direct Method)          | Lecture | Attendance in classroom | Daily quiz |
| 8  | 2 | Cast fabrication of dental implant (Indirect Method)        | Lecture | Attendance in classroom | Daily quiz |
| 9  | 2 | Attachment system in dental implant                         | Lecture | Attendance in classroom | Daily quiz |
| 10 | 2 | Implant-supported complete overdenture                      | Lecture | Attendance in classroom | Daily quiz |
| 11 | 2 | CAD-CAM technology in dental implant, and Surgical template | Lecture | Attendance in classroom | Daily quiz |
| 12 | 2 | Implant-supported metal /ceramic FPDs (Direct Method)       | Lecture | Attendance in classroom | Daily quiz |
| 13 | 2 | Implant-supported metal /ceramic FPDs (Indirect Method)     | Lecture | Attendance in classroom | Daily quiz |
| 14 | 2 | Implant-supported restorations: Failure complications       | Lecture | Attendance in classroom | Daily quiz |
| 15 | 2 | Implant-supported restorations: Maintenance follow          | Lecture | Attendance in classroom | Daily quiz |

### Syllabus of The Practical Course

|   |   |                                                       |         |                          |            |
|---|---|-------------------------------------------------------|---------|--------------------------|------------|
| 1 | 2 | Components of dental implants                         | Lecture | Attendance in laboratory | Daily quiz |
| 2 | 2 | Types of dental implants                              | Lecture | Attendance in laboratory | Daily quiz |
| 3 | 2 | Dental implants versus conventional dental prosthesis | Lecture | Attendance in classroom  | Daily quiz |

|    |   |                                                 |         |                         |            |
|----|---|-------------------------------------------------|---------|-------------------------|------------|
| 4  | 2 | Clinical and laboratory steps in dental implant | Lecture | Attendance in classroom | Daily quiz |
| 5  | 2 | Types of abutments                              | Lecture | Attendance in classroom | Daily quiz |
| 6  | 2 | Cast fabrication: Direct impression technique   | Lecture | Attendance in classroom | Daily quiz |
| 7  | 2 | Cast fabrication: Direct impression technique   | Lecture | Attendance in classroom | Daily quiz |
| 8  | 2 | Cast fabrication: Indirect impression technique | Lecture | Attendance in classroom | Daily quiz |
| 9  | 2 | Cast fabrication: Indirect impression technique | Lecture | Attendance in classroom | Daily quiz |
| 10 | 2 | Implants- supported complete overdenture        | Lecture | Attendance in classroom | Daily quiz |
| 11 | 2 | Implants- supported complete overdenture        | Lecture | Attendance in classroom | Daily quiz |
| 12 | 2 | Implants- supported metal/ceramic crowns        | Lecture | Attendance in classroom | Daily quiz |
| 13 | 2 | Implants- supported metal/ceramic crowns        | Lecture | Attendance in classroom | Daily quiz |
| 14 | 2 | Implants- supported metal/ceramic bridge        | Lecture | Attendance in classroom | Daily quiz |
| 15 | 2 | Implants- supported metal/ceramic bridge        | Lecture | Attendance in classroom | Daily quiz |
|    |   |                                                 |         |                         |            |

## 11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, or med and final exams, .... etc

## 12. Learning and Teaching Resources

|                                               |                                                                                                                                                                                            |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any) | 1. Implant Dentistry: A Practical Approach<br>Book by Arun K. Garg<br>2. Contemporary Implant Dentistry<br>Book by Carl E. Misch<br>3. Dental Implant Prosthetics<br>Book by Carl E. Misch |
| Main references (sources)                     | 1. Mini Dental Implants: Principles and Practices by Victor Sendax                                                                                                                         |

|                                                                       |                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                       | <p>2. Practical Osseous Surgery in Periodontics and Implant Dentistry</p> <p>Book by Jean–Pierre Dibart and Serge Dibart</p> <p>3. Clinical Periodontology and Implant Dentistry by Niklaus P. Lang (Editor), Jan Lindhe (Editor) (5–Jun–2015)</p>                                                                                             |
| Recommended books and references<br>(scientific journals, reports...) |                                                                                                                                                                                                                                                                                                                                                |
| Electronic References, Websites                                       | <p>1- <a href="https://www.nature.com/subjects/dental-implants">https://www.nature.com/subjects/dental-implants</a></p> <p>2- Founded in 1951, the American Academy of Implant Dentis (AAID) is the first professional organization in the world dedicated to implant dentistry. <a href="https://www.aaid.com/">https://www.aaid.com/</a></p> |

**1. Course Name:**

Removable Partial Denture

**2. Course Code:**

MTDE4101

**3. Semester / Year:**1<sup>st</sup> semester / 2024–2025**4. Description Preparation Date:**

7/10/2025

**5. Available Attendance Forms:**

Attendance in the classroom

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

2 hours of theory

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

Name: T.A. Ali Mushtaq Neamah

Email: [alimushtsq295@gmail.com](mailto:alimushtsq295@gmail.com)**8. Course Objectives****Course Objectives:**

- Preparing a generation of graduates in the dental industry who possess a high level of scientific understanding of removable prostheses, their manufacturing methods, and the importance of the materials used to manufacture them, especially since they will be in direct contact with the oral cavity and patients.
- 
- The possibility of participating in scientific research and specialized scientific conferences to enhance their skills and develop their expertise in this field.

**9. Teaching and Learning Strategies****Strategy**

By the end of the course, the student will be able to:

- Easily Work in in medical centers performing laboratory tests.
- 2. Participate with confidence in specialized scientific conferences.
- 3. Working in medical laboratories and on equipment related to the this specialty.

## 10. Course Structure

| Week                                      | Hours | Required Learning Outcomes                             | Unit or subject name | Learning method          | Evaluation method |
|-------------------------------------------|-------|--------------------------------------------------------|----------------------|--------------------------|-------------------|
| <b>Syllabus of The Theoretical Course</b> |       |                                                        |                      |                          |                   |
| 1                                         | 2     | Acrylic and metal RPD Kennedy Classification           | Lecture              | Attendance in classroom  | Daily quiz        |
| 2                                         | 2     | Surveying and Articulator                              | Lecture              | Attendance in classroom  | Daily quiz        |
| 3                                         | 2     | Types of RPD (Part I)                                  | Lecture              | Attendance in classroom  | Daily quiz        |
| 4                                         | 2     | Types of RPD (Part II)                                 | Lecture              | Attendance in classroom  | Daily quiz        |
| 5                                         | 2     | Maxillary and Mandibula M Connector                    | Lecture              | Attendance in classroom  | Daily quiz        |
| 6                                         | 2     | Minor Connector, Rest, Rest Seat                       | Lecture              | Attendance in classroom  | Daily quiz        |
| 7                                         | 2     | Extracoronary Direct Retainer                          | Lecture              | Attendance in classroom  | Daily quiz        |
| 8                                         | 2     | Intracoronary Direct Retainer                          | Lecture              | Attendance in classroom  | Daily quiz        |
| 9                                         | 2     | Indirect Retainer                                      | Lecture              | Attendance in classroom  | Daily quiz        |
| 10                                        | 2     | Stress Breaker                                         | Lecture              | Attendance in classroom  | Daily quiz        |
| 11                                        | 2     | Denture base consideration and teeth selection for RPD | Lecture              | Attendance in classroom  | Daily quiz        |
| 12                                        | 2     | Support of distal extension denture base               | Lecture              | Attendance in classroom  | Daily quiz        |
| 13                                        | 2     | Establishment of occlusal relationship                 | Lecture              | Attendance in classroom  | Daily quiz        |
| 14                                        | 2     | A flexible removable partial denture                   | Lecture              | Attendance in classroom  | Daily quiz        |
| 15                                        | 2     | RPD framework using CAD-CAM system                     | Lecture              | Attendance in classroom  | Daily quiz        |
| <b>Syllabus of The Practical Course</b>   |       |                                                        |                      |                          |                   |
| 1                                         | 2     | Selection of case study (maxillary cast)               | Lecture              | Attendance in laboratory | Daily quiz        |
| 2                                         | 2     | Special tray, and master cast                          | Lecture              | Attendance in laboratory | Daily quiz        |

|    |   |                                                        |         |                         |            |
|----|---|--------------------------------------------------------|---------|-------------------------|------------|
|    |   | preparation                                            |         | laboratory              |            |
| 3  | 2 | Surveying, and RPD redrawing design on the master cast | Lecture | Attendance in classroom | Daily quiz |
| 4  | 2 | Undercut block-out and relief                          | Lecture | Attendance in classroom | Daily quiz |
| 5  | 2 | Duplication of the master cast                         | Lecture | Attendance in classroom | Daily quiz |
| 6  | 2 | Preparation of refractory cast                         | Lecture | Attendance in classroom | Daily quiz |
| 7  | 2 | Hand-made wax design                                   | Lecture | Attendance in classroom | Daily quiz |
| 8  | 2 | Hand-made wax design                                   | Lecture | Attendance in classroom | Daily quiz |
| 9  | 2 | Hand-made wax design                                   | Lecture | Attendance in classroom | Daily quiz |
| 10 | 2 | Spruing                                                | Lecture | Attendance in classroom | Daily quiz |
| 11 | 2 | Investing                                              | Lecture | Attendance in classroom | Daily quiz |
| 12 | 2 | Burn out and Casting                                   | Lecture | Attendance in classroom | Daily quiz |
| 13 | 2 | Burn out and Casting                                   | Lecture | Attendance in classroom | Daily quiz |
| 14 | 2 | Finishing of metal alloy framework                     | Lecture | Attendance in classroom | Daily quiz |
| 15 | 2 | Polishing of metal alloy framework                     | Lecture | Attendance in classroom | Daily quiz |
|    |   |                                                        |         |                         |            |

## 11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, or med and final exams, .... etc

## 12. Learning and Teaching Resources

|                                               |                                                                                                                                                                                          |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any) | 1. McCracken's Removable Partial Prosthodontics<br>Book by Alan B. Carr and David T. Brown<br>2. Textbook of Removable Partial Prosthodontics Kindle Edition<br>by Sharad Gupta (Author) |
|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                    | 3. Stewart's Clinical Removable Partial Prosthodontics Book by Charles F. DeFreest, David R. Cagna, and Rodney D. Phoenix                                                                                                                                                                                                                                                                                                                                                                           |
| Main references (sources)                                          | 1. Removable Partial Denture Construction by John F. Bates<br>2. Removable Partial Prosthetics Miller , Ernestl , L.<br>3. Atlas of Removable Partial Denture Prosthodontics by Weinberg , Lawrence                                                                                                                                                                                                                                                                                                 |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Electronic References, Websites                                    | 1- Retrospective analysis of removable partial denture treatment in a state-sponsored dental school.<br>The Journal of Prosthetic Dentistry.<br><a href="https://doi.org/10.1016/j.prosdent.2025.02.0">https://doi.org/10.1016/j.prosdent.2025.02.0</a><br>2- Understanding the impact of removable partial dentures on patients' lives and their attitudes to oral care. British Dental Journal. <a href="https://doi.org/10.1038/s41415-021-2949-4">https://doi.org/10.1038/s41415-021-2949-4</a> |



## Academic description of a complete denture

|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
|------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------|--------------------------|
| <b>1. Course Name:</b> Complete Denture                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
| <b>2. Course Code:</b>                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
| MTDE4102                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
| <b>3. Semester / Year:</b> first semester/fourth year                                                            |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
| <b>4. Description Preparation Date:</b> 1/10/2025                                                                |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
| <b>5. Available Attendance Forms:</b> Theoretical and practical in the classroom and laboratory                  |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total):</b> 30 theoretical hours + 60 practical hours/ 4 |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
| <b>7. Course administrator's name (mention all, if more than one name)</b>                                       |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
| <b>Name:</b> Asst. Lec. Zahraa Saadi Noori<br><b>Email:</b> drzahrara@gmail.com                                  |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
| <b>8. Course Objectives</b>                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
| <b>Course Objectives</b>                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>Introducing the student to the basic steps and materials involved in making an acrylic complete denture</li> <li>Enabling the students of the Dental Industry Department in the manufacture of acrylic complete dentures</li> </ul> |                             |                        |                          |
| <b>9. Teaching and Learning Strategies</b>                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
| <b>Strategy</b>                                                                                                  | 1- Teaching the student the ability to diagnose each case, distinguish between cases, and choose the appropriate treatment plan<br>2 - Teaching the student the best choice for dental prosthetics for each case<br>3- Introducing the student to laboratory tools and the steps for making a removable complete denture<br>4- Enabling the student to manufacture the removable complete denture |                                                                                                                                                                                                                                                                            |                             |                        |                          |
| <b>10. Course Structure</b>                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                            |                             |                        |                          |
| <b>Week</b>                                                                                                      | <b>Hours</b>                                                                                                                                                                                                                                                                                                                                                                                      | <b>Required Learning Outcomes</b>                                                                                                                                                                                                                                          | <b>Unit or subject name</b> | <b>Learning method</b> | <b>Evaluation method</b> |

|                   |   |                                                                                                                   |                                                                                      |                    |                                |
|-------------------|---|-------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------|--------------------------------|
| <b>First</b>      | 2 | <b>Know the anatomical part of Maxillary and mandibular arch</b>                                                  | Anatomical landmarks of maxillary and mandibular edentulous arch of complete denture | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Second</b>     | 2 | <b>Identify special tray, record base and occlusal rim construction methods in order to make complete denture</b> | Special tray, record base, and occlusal conventional ready-made                      | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Third</b>      | 2 | <b>Know about the relation between the maxillary and mandibular arch</b>                                          | Maxillo-mandibular relationship                                                      | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Fourth</b>     | 2 | <b>Learn method of determination of occlusion</b>                                                                 | Occlusion                                                                            | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Fifth</b>      | 2 | <b>Learn about the types of mandibular Movement</b>                                                               | Mandibular movements                                                                 | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Sixth</b>      | 2 | <b>Learn about the articulator, types, and how to use it</b>                                                      | Face bow, Articulator and Mounting procedure                                         | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Seventh</b>    | 2 | <b>Identify the types and size of artificial teeth</b>                                                            | Selection of artificial teeth: anterior and posterior teeth                          | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Eighth</b>     | 2 | <b>Learn how to arrange teeth and it to make a complete denture class 1</b>                                       | Arrangement of artificial teeth Class I                                              | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Ninth</b>      | 2 | <b>Learn how to arrange teeth and it to make a complete denture class 2 and 3</b>                                 | Arrangement of artificial teeth Class II and Class III                               | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Tenth</b>      | 2 | <b>Learn about wax using arrangement</b>                                                                          | Wax contouring and gingival carving                                                  | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Eleventh</b>   | 2 | <b>Identify the site and type of post dam</b>                                                                     | Post dam: Types and location in maxillary edentulous arch                            | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Twelfth</b>    | 2 | <b>Learn how to put the cast in with flask and packing</b>                                                        | Flasking and packing of complete denture                                             | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Thirteenth</b> | 2 | <b>Get to know How to finish and polish the complete denture</b>                                                  | Finishing and polishing of complete denture                                          | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Fourteenth</b> | 2 | <b>Learn about the type and technique of materials used in complete denture</b>                                   | The material used for denture base: materials & techniques                           | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Fifteenth</b>  | 2 | <b>Know about the definition and factors to obtain retention and stability of the denture</b>                     | Retention and Stability in complete denture                                          | <b>theoretical</b> | <b>Short exams and discuss</b> |

| <b>11. Course Evaluation</b>                                                                                                                                         |                                                          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------|
| Distributing the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily oral, monthly, or written exams, reports .... etc |                                                          |
| <b>Daily exams: 10%</b>                                                                                                                                              |                                                          |
| <b>Semester exams: 70%</b>                                                                                                                                           |                                                          |
| <b>Preparing reports: 10%</b>                                                                                                                                        |                                                          |
| <b>Discussions in practical: 10%</b>                                                                                                                                 |                                                          |
| <b>12. Learning and Teaching Resources</b>                                                                                                                           |                                                          |
| <b>Required textbooks (curricular books, if any)</b>                                                                                                                 |                                                          |
| <b>Main references (sources)</b>                                                                                                                                     | Boucher's Prosthodontic Treatment<br>Edentulous Patients |
| <b>Recommended books and references (scientific journals, reports...)</b>                                                                                            | Dental journal                                           |
| <b>Electronic References, Websites</b>                                                                                                                               | Google scholar                                           |

## Academic description of Crowns and Bridges (basics)

|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|------------------------|--------------------------|
| <b>1. Course Name:</b>                                                                                           |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
| Crowns and bridges (basics)                                                                                      |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
| <b>2. Course Code:</b>                                                                                           |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
| MTDE4103                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
| <b>3. Semester / Year:</b>                                                                                       |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
| first semester/fourth year                                                                                       |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
| <b>4. Description Preparation Date:</b> 1/10/2025                                                                |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
| <b>5. Available Attendance Forms:</b> Theoretical and practical in the classroom and laboratory                  |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total):</b> 30 theoretical hours + 60 practical hours/ 4 |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
| <b>7. Course administrator's name (mention all, if more than one name)</b>                                       |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
| <b>Name:</b> Asst. Lec. Eba'a Enad Hameed<br><b>Email:</b> ebaaenad@gmail.com                                    |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
| <b>8. Course Objectives</b>                                                                                      |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
| <b>Course Objectives</b>                                                                                         |                                                                                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>Inform the student about the materials used in making crowns and bridge and how to handle them.</li> <li>Enabling dental technology students to manufacture fixed crowns and bridges</li> </ul> |                             |                        |                          |
| <b>9. Teaching and Learning Strategies</b>                                                                       |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
| <b>Strategy</b>                                                                                                  | 1– Teaching the student the ability to take an impression, distinguish between cases, and choose the appropriate treatment plan.<br>2 – Teaching the student the best choice for dental prosthetics for each case<br>3– Introducing the student to laboratory tools and the steps for making crowns and bridges<br>4– Enabling the student to manufacture crowns and bridges |                                                                                                                                                                                                                                        |                             |                        |                          |
| <b>10. Course Structure</b>                                                                                      |                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                        |                             |                        |                          |
| <b>Week</b>                                                                                                      | <b>Hours</b>                                                                                                                                                                                                                                                                                                                                                                 | <b>Required Learning Outcomes</b>                                                                                                                                                                                                      | <b>Unit or subject name</b> | <b>Learning method</b> | <b>Evaluation method</b> |

|            |   |                                                            |                                                                                       |             |                         |
|------------|---|------------------------------------------------------------|---------------------------------------------------------------------------------------|-------------|-------------------------|
| First      | 2 | Types of fixed restoration and their waxing techniques     | Complete cast Crowns,<br>Partial veneer crown<br>Metal ceramic crown<br>Post crown    | theoretical | Short exams and discuss |
| Second     | 2 | Types of connectors and pontics                            | Rigid Connectors,<br>Non-Rigid Connector over pontic, conical pontic                  | theoretical | Short exams and discuss |
| Third      | 2 | Principles of tooth preparation: biological and mechanical | Conservation of tooth structure and periodontal health, protection of the dental pulp | theoretical | Short exams and discuss |
| Fourth     | 2 | Principles of tooth preparation: esthetic consideration    | Margin design, margin placement, and preservation of tooth structure                  | theoretical | Short exams and discuss |
| Fifth      | 2 | Digital smile design                                       | Principles of smile designing,<br>Advantages of DSD                                   | theoretical | Short exams and discuss |
| Sixth      | 2 | Scanners and 3D printing technique                         | Types of scanner and 3D printing techniques                                           | theoretical | Short exams and discuss |
| Seventh    | 2 | All ceramic restoration: classification                    | Classification based on materials                                                     | theoretical | Short exams and discuss |
| Eighth     | 2 | All ceramic restoration: aluminum core/slip cast           | Ceramic, all ceramic<br>Classifications<br>Indication, contraindications              | theoretical | Short exams and discuss |
| Ninth      | 2 | Pressed ceramic restoration                                | Heat-pressed ceramic<br>Fabrication method                                            | theoretical | Short exams and discuss |
| Tenth      | 2 | Porcelain labial margin                                    | Procedure, advantages<br>Disadvantages                                                | theoretical | Short exams and discuss |
| Eleventh   | 2 | Machined ceramic restoration: types                        | Types of CAD/CAM<br>Component                                                         | theoretical | Short exams and discuss |
| Twelfth    | 2 | Machined ceramic restoration techniques                    | Advantages,<br>Digital impression                                                     | theoretical | Short exams and discuss |
| Thirteenth | 2 | Visual perception                                          | Light, color, Munsell<br>Color order system                                           | theoretical | Short exams and discuss |
| Fourteenth | 2 | Retainer for a removable partial denture                   | Retainer supported<br>RPD                                                             | theoretical | Short exams and discuss |

|                                                                                                                                                                     |          |                             |                                                         |                    |                                |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|-----------------------------|---------------------------------------------------------|--------------------|--------------------------------|
| <b>Fifteenth</b>                                                                                                                                                    | <b>2</b> | <b>Precision attachment</b> | <b>Indication, contraindications and classification</b> | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>11. Course Evaluation</b>                                                                                                                                        |          |                             |                                                         |                    |                                |
| Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc |          |                             |                                                         |                    |                                |
| <b>Daily exams: 10%</b>                                                                                                                                             |          |                             |                                                         |                    |                                |
| <b>Semester exams: 70%</b>                                                                                                                                          |          |                             |                                                         |                    |                                |
| <b>Preparing reports: 10%</b>                                                                                                                                       |          |                             |                                                         |                    |                                |
| <b>Discussions in practical: 10%</b>                                                                                                                                |          |                             |                                                         |                    |                                |
| <b>12. Learning and Teaching Resources</b>                                                                                                                          |          |                             |                                                         |                    |                                |
| <b>Required textbooks (curricular books, if any)</b>                                                                                                                |          |                             |                                                         |                    |                                |
| <b>Main references (sources)</b>                                                                                                                                    |          |                             | Contemporary fixed prosthodontics                       |                    |                                |
| <b>Recommended books and references (scientific journals, reports...)</b>                                                                                           |          |                             | Dental journal                                          |                    |                                |
| <b>Electronic References, Websites</b>                                                                                                                              |          |                             | Google scholar                                          |                    |                                |

## Academic description of Maxillofacial prosthesis (intermediate)

|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b> Maxillofacial prosthesis (intermediate)                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>2. Course Code:</b>                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>3. Semester / Year:</b> First semester/Fourth year                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>4. Description Preparation Date:</b> 20/12/2025                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>5. Available Attendance Forms:</b> Theoretical and practical in the classroom and laboratory                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total):</b> 30 theoretical hours + 60 practical hours/ 4 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>7. Course administrator's name (mention all, if more than one name)</b>                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Name:</b> Asst. Lec. Zahraa Saadi Noori<br><b>Email:</b> drzahrara@gmail.com                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>8. Course Objectives</b>                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Course Objectives</b>                                                                                         | <ul style="list-style-type: none"> <li>● Introducing the student to the contents and supplies of the maxillofacial prosthetics laboratory, in addition to the materials used + making some Prosthetic devices for the jaws</li> <li>● Preparing the student for the next stage, during which the student will be equipped with theoretical and practical information in order to master work in Prosthetics laboratories for the face and jaws, specifically prosthetics for chin, lip, uvula, and roof</li> </ul> |
| <b>9. Teaching and Learning Strategies</b>                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Strategy</b>                                                                                                  | 1. Introducing the student to the contents and supplies of the maxillofacial prosthetic laboratory<br>2- Introducing the student to the characteristics of the necessary materials, the materials used in the manufacture of prosthetic devices for the jaws<br>3- Introducing the student to laboratory tools and the steps for making the prosthetic devices<br>4- Introducing the student to the techniques of manufacturing prosthetic devices for the jaws                                                    |

| 10. Course Structure |       |                                                                                                     |                                                                                 |                 |                         |
|----------------------|-------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|-----------------|-------------------------|
| Week                 | Hours | Required Learning Outcomes                                                                          | Unit or subject name                                                            | Learning method | Evaluation method       |
| First                | 2     | Learn about the anatomy of the eye and the causes of eye loss<br>And how to make ocular prosthesis  | Ocular prosthesis (anatomy, impression and cast preparation)                    | theoretical     | Short exams and discuss |
| Second               | 2     | Identify about the methods of sculpture fabrication                                                 | Ocular prosthesis (sculpture and construction)                                  | theoretical     | Short exams and discuss |
| Third                | 2     | Studying about flasking procedure of ocular prosthesis and finishing and polishing                  | Ocular prosthesis (flasking and processing techniques, finishing and placement) | theoretical     | Short exams and discuss |
| Forth                | 2     | Study of problem occur during after ocular prosthesis fabrication                                   | Ocular prosthesis (problems)                                                    | theoretical     | Short exams and discuss |
| Fifth                | 2     | Learn the anatomical parts, impression, and how to make a mold to make orbital prosthesis           | Orbital prosthesis (definition and construction)                                | theoretical     | Short exams and discuss |
| Sixth                | 2     | Learn about orbital and ocular prosthesis retention methods                                         | Orbital and ocular prostheses retention                                         | theoretical     | Short exams and discuss |
| Seventh              | 2     | Knowing the anatomical parts of nose and the causes of nasal deformity and the method of impression | Nasal prosthesis (anatomy, impression and cast preparation)                     | theoretical     | Short exams and discuss |
| Eighth               | 2     | Study of the method of sculpture fabrication and processing                                         | Nasal prosthesis (sculpture processing)                                         | theoretical     | Short exams and discuss |
| Ninth                | 2     | Study of methods of making nasal opening device and its benefit and method of impression techniques | Nasal opening device (definition, impression techniques, sculpture)             | theoretical     | Short exams and discuss |
| Tenth                | 2     | Learn about the steps of nasal opening device packing and finishing and polishing                   | Nasal opening device (packing, construction, finishing placement)               | theoretical     | Short exams and discuss |
| Eleventh             | 2     | Learn the steps of feeding plate fabrication and its benefit                                        | Feeding construction                                                            | theoretical     | Short exams and discuss |
| Twelfth              | 2     | Learn about the steps of obturator fabrication and its differences from feeding plate               | Maxillary obturator construction                                                | theoretical     | Short exams and discuss |
| Thirteenth           | 2     | Studying about the steps of palatal lift fabrication                                                | Palatal lift prosthesis construction                                            | theoretical     | Short exams and discuss |



|            |   |                                                                              |                                              |             |                         |
|------------|---|------------------------------------------------------------------------------|----------------------------------------------|-------------|-------------------------|
| Fourteenth | 2 | Studying about the palatal augmentation method and the type of material used | Palatal augmentation prosthesis construction | theoretical | Short exams and discuss |
| Fifteenth  | 2 | Learn about the mandibular guide prosthesis method                           | Mandibular Guide Flange Prosthesis           | theoretical | Short exams and discuss |

## 11. Course Evaluation

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

**Daily exams: 10%**

**Semester exams: 70%**

**Preparing reports: 10%**

**Discussions in practical: 10%**

## 12. Learning and Teaching Resources

|                                                                    |                                      |
|--------------------------------------------------------------------|--------------------------------------|
| Required textbooks (curricular books, if any)                      |                                      |
| Main references (sources)                                          | Textbook of maxillofacial prosthesis |
| Recommended books and references (scientific journals, reports...) | Dental journals                      |
| Electronic References, Websites                                    | Google                               |

## Academic description of Orthodontics

|                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
|-----------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|-----------------------------|------------------------|--------------------------|
| <b>1. Course Name:</b> Orthodontics (intermediate)                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
|                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
| <b>2. Course Code:</b>                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
|                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
| <b>3. Semester / Year:</b> first semester/fourth year                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
|                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
| <b>4. Description Preparation Date:</b> 1/10/2025                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
|                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
| <b>5. Available Attendance Forms:</b> Theoretical and practical in the classroom and laboratory                       |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
|                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total):</b> 30 theoretical hours + 60 practical hours/ 4      |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
|                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
| <b>7. Course administrator's name (mention all, if more than one name)</b>                                            |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
| <b>Name:</b> Asst. Lec. Eba'a Enad Hameed<br><b>Email:</b> <a href="mailto:ebaaenad@gmail.com">ebaaenad@gmail.com</a> |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
| <b>8. Course Objectives</b>                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
| <b>Course Objectives</b>                                                                                              | <b>A. To familiarize the student with the basic steps involved in the fabrication of orthodontic appliances</b><br><b>B. Specific Objective:</b><br><b>To enable dental technology students to deliver various types of removable orthodontic appliances</b>                                                                                                                                                             |                                   |                             |                        |                          |
| <b>9. Teaching and Learning Strategies</b>                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
| <b>Strategy</b>                                                                                                       | <b>1. To introduce the student to what orthodontics is</b><br><b>2. To introduce the student to how to manufacture different types of removable orthodontic appliances</b><br><b>3. To introduce the student to the scientific and practical laboratory steps for manufacturing orthodontic appliances</b><br><b>4. To introduce the student to traditional and modern techniques and materials used in orthodontics</b> |                                   |                             |                        |                          |
| <b>10. Course Structure</b>                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                          |                                   |                             |                        |                          |
| <b>Week</b>                                                                                                           | <b>Hours</b>                                                                                                                                                                                                                                                                                                                                                                                                             | <b>Required Learning Outcomes</b> | <b>Unit or subject name</b> | <b>Learning method</b> | <b>Evaluation method</b> |

|                   |   |                                               |                                     |                    |                                |
|-------------------|---|-----------------------------------------------|-------------------------------------|--------------------|--------------------------------|
| <b>First</b>      | 2 | Development of normal occlusion               | normal occlusion<br>Ideal occlusion | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Second</b>     | 2 | Andrews's keys to normal occlusion            | Andrews's six keys                  | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Third</b>      | 2 | Orthodontic wires & its properties            | Types of wires                      | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Forth</b>      | 2 | Development of the primary teeth              | Primary teeth                       | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>fifth</b>      | 2 | Development of the permanent teeth            | Permanent teeth                     | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Sixeth</b>     | 2 | Mixed dentition                               | Mixed dentition                     | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>seventh</b>    | 2 | Etiology of malocclusion                      | Etiology of malocclusion            | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Eighth</b>     | 2 | Open bite                                     | Etiology and treatment              | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>ninth</b>      | 2 | Crossbite                                     | Etiology and types                  | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>tenth</b>      | 2 | Deep bite                                     | Etiology and types                  | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>eleventh</b>   | 2 | Removable orthodontic appliances construction | Types of appliances and Parts       | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>twelveth</b>   | 2 | Bite plane and its modifications              | Types and modifications             | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>thirteenth</b> | 2 | Expansion springs                             | Types                               | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>Fourteenth</b> | 2 | Orthodontics screw and its types              | Orthodontics screw and its types    | <b>theoretical</b> | <b>Short exams and discuss</b> |
| <b>fifteenth</b>  | 2 | Tissue changes and tooth movement             | Tissue changes and tooth movement   | <b>theoretical</b> | <b>Short exams and discuss</b> |

## 11. Course Evaluation

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

|                                                                                                                                |                |
|--------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>Daily exams: 10%</b><br><b>Semester exams: 70%</b><br><b>Preparing reports: 10%</b><br><b>Discussions in practical: 10%</b> |                |
| <b>12. Learning and Teaching Resources</b>                                                                                     |                |
|                                                                                                                                |                |
| <b>Main references (sources)</b>                                                                                               |                |
| <b>Recommended books and references (scientific journals, reports...)</b>                                                      | Dental journal |
| <b>Electronic References, Websites</b>                                                                                         | Google scholar |