

## **Prosthodontics**

**A course that focuses on the basic laboratory aspect of the work**  
**Theoretical: The laboratory part is studied exclusively from the steps of making full mobile prostheses for patients who have lost all their teeth, and this stage is the basis for the curricula followed in the field of dental industry, concentration and note-taking are an actual way to achieve the maximum benefit from them.**

**Practical: It is done in the dental industry laboratory and you learn the steps of making complete mobile dentures and the perfect dental arrangement.**

## **Different evaluation methods for students in the Department of Dentistry**

Daily tests with multiple-choice questions for subjects that require practical skills.

B- Daily exams with practical questions.

C- Semester and final exams.

D- Setting grades for the assigned homework .

H- Grades of participation of questions competing for the subjects of study.

G- Daily evaluation of the student's work in scientific laboratories and educational clinics.

## **Learning Outcomes for Dental Courses**

Using health information technology in oral and dental health care effectively.

Apply appropriate professional, ethical and legal standards in the provision of patient care in accordance with health care rules and regulations.

Providing graduates with scientific knowledge and professional skills in the fields of oral and dental surgery, dental prosthesis, dental preservation,

orthodontics, pediatric dentistry, periodontal pathology and surrounding tissues, as well as community dentistry.

Knowledge of the principles of oral and dental health and understanding of the development, prevention and treatment of related diseases

**Health promotion and disease prevention to serve the community.**

Integrating basic and medical sciences into healthcare practice.

Develop decision-making and problem-solving skills in healthcare.

Evaluate the state of oral and dental health and the medical condition of the patient, request the necessary diagnostic analyzes, and interpret the results of various analyzes to reach the appropriate diagnosis.

Prepare a care plan for the prevention and treatment of diseases taking into account the needs of the patient.

Demonstrate competence in performing procedures safely in all aspects of dentistry and prevent injuries arising from treatment.

Providing graduates with theoretical knowledge and laboratory and clinical skills that increase the effectiveness of diagnosis.

Preparing dental graduates and training them to become distinguished in various fields of dentistry.

Lesson name and units

<i>Subject</i>	<i>1<sup>st</sup> Semester hours/week</i>		<i>2<sup>nd</sup> semester hours/week</i>		<i>Units</i>	<i>Code</i>
	<i>Theory</i>	<i>Practical</i>	<i>Theory</i>	<i>Practical</i>		
<b>6.Prostodontics</b> صناعة الاسنان	1	4	1	4	6	PR215

<b>1-Subject title</b>	<b>Prostodontics</b>	
<b>2-Number of credits</b>	Theory:2	Clinical:4
<b>3-Number of contact hours</b>	Theory:1h/wk.	Clinical 4h/wk.
<b>4-Subject time</b>	Second Year	

No.	Title of The Lectures		Hours
1	Introduction	<ul style="list-style-type: none"> <li>• Complete denture</li> <li>✓ Objective of complete denture</li> <li>✓ General consideration in complete denture construction</li> <li>✓ Complete denture component parts</li> </ul>	1
2	Anatomical landmarks	<ul style="list-style-type: none"> <li>• Anatomical landmarks</li> <li>✓ Maxillary arch anatomical landmarks               <ul style="list-style-type: none"> <li>➢ Supporting structures</li> <li>➢ Limiting structures</li> <li>➢ Relief areas</li> </ul> </li> </ul>	1
3	Anatomical landmarks	<ul style="list-style-type: none"> <li>• Anatomical landmarks</li> <li>✓ Mandibular arch anatomical landmarks               <ul style="list-style-type: none"> <li>➢ Supporting structures</li> <li>➢ Limiting structures</li> <li>➢ Relief areas</li> </ul> </li> </ul>	1

4	<b>Complete Denture Impression</b>	<ul style="list-style-type: none"> <li>• Impression tray - Definition</li> <li>• Parts of the impression tray</li> <li>• Types of tray</li> <li>• Stock tray – Definition</li> <li>• Types of stock trays</li> <li>• Factors effect in selection of stock tray</li> </ul>	1
5	<b>Complete Denture Impression</b>	<ul style="list-style-type: none"> <li>• Special tray</li> <li>✓ Advantages of special tray</li> <li>✓ Materials used for construction of special tray</li> <li>✓ Types of special tray</li> </ul>	1

		<ul style="list-style-type: none"> <li>✓ Techniques or methods for construction of special tray</li> <li>✓ Criteria for special tray construction</li> </ul>	
6	<b>Complete Denture Impression</b>	<ul style="list-style-type: none"> <li>• Dental impression - Definition</li> <li>• Complete denture impression - Definition</li> <li>• Objective of impression making</li> <li>• Primary impression - Definition</li> <li>• Materials used for making primary impression</li> <li>• Primary cast - Definition</li> <li>• Production of study cast</li> <li>• Secondary impression - Definition <ul style="list-style-type: none"> <li>• Master cast- Definition</li> <li>• Materials used for final impression</li> <li>• Technique used for making final impression</li> <li>• Boxing an impression and making the casts</li> <li>• Advantages of boxing</li> <li>• Common fault in impression making</li> </ul> </li> </ul>	1
7	<b>Record Base</b>	<ul style="list-style-type: none"> <li>• Record base - Definition</li> <li>• Requirements of record base</li> <li>• Types of materials used in construction of record base</li> </ul>	1
8	<b>Occlusion Rims</b>	<ul style="list-style-type: none"> <li>• Occlusion rims - Definition</li> <li>• Requirements of occlusion rim</li> <li>• Materials used in construction of occlusion rim</li> <li>• Measurements of maxillary occlusion</li> </ul>	1

		<ul style="list-style-type: none"> <li>rim</li> <li>• Measurements of mandibular occlusion rim</li> <li>• Uses of occlusion rim</li> <li>• Occlusal plane</li> <li>• Fox – bite</li> </ul>	
9	Anatomy And Physiology Of Temporomandibular Joint	<ul style="list-style-type: none"> <li>• Temporomandibular joint (TMJ) – Definition</li> <li>• Ligaments</li> <li>• Muscles</li> </ul>	1
10	Anatomy And Physiology Of Temporomandibular Joint	<ul style="list-style-type: none"> <li>• Mandibular axes and mandibular movements</li> <li>• Knowledge of mandibular movements</li> <li>• Mandibular movements</li> </ul>	1
11	Maxillomandibular relation	<ul style="list-style-type: none"> <li>• Types of jaw relation</li> <li>✓ Vertical jaw relation <ul style="list-style-type: none"> <li>➤ Rest position</li> <li>➤ Inter – occlusal distance</li> <li>➤ Importance of vertical dimension</li> <li>➤ Increased vertical dimension</li> <li>➤ Decreased vertical dimension</li> </ul> </li> </ul>	1
12	Methods Of Recording Vertical Relation	<ul style="list-style-type: none"> <li>• Method of recording rest vertical dimension</li> <li>• Method of recording occlusal vertical dimension</li> <li>• Pre – extraction records</li> <li>• Methods without pre – extraction record</li> </ul>	1
13	Horizontal Jaw Relation	<ul style="list-style-type: none"> <li>• Centric jaw relation</li> <li>✓ Importance of centric jaw relation</li> <li>✓ Methods of recording jaw relation</li> <li>✓ Factors that complicates centric jaw relation</li> <li>✓ Methods of recording</li> </ul>	1

		eccentric jaw relation	
14	<b>Dental Articulators</b> (Classification & Digital computerized articulator programming)	<ul style="list-style-type: none"> <li>• Dental articulator</li> <li>✓ Definition</li> <li>✓ Functions of articulator</li> <li>✓ Requirements of articulator</li> <li>✓ Types of articulator</li> </ul>	1
15	<b>Face – Bow</b>	<ul style="list-style-type: none"> <li>• Face- bow</li> <li>✓ Definition</li> <li>✓ Parts of face – bow</li> <li>✓ Types of face – bow</li> <li>✓ Important of the face – bow</li> </ul>	1
16	<b>Mounting</b>	<ul style="list-style-type: none"> <li>• Mounting</li> <li>✓ Definition</li> <li>✓ Preparation of articulator</li> <li>✓ Preparation of the casts and mounting the upper cast on CL II articulator</li> <li>✓ Mounting the lower cast</li> <li>✓ Errors occurred during mounting</li> </ul>	1
17	<b>Selection Of Artificial Teeth</b>	<ul style="list-style-type: none"> <li>• Selection of anterior teeth</li> <li>✓ The factors of shade selection</li> <li>✓ Size selection a. Length b. Width</li> <li>✓ Form selection</li> <li>✓ Materials of anterior teeth</li> <li>✓ Difference between acrylic and porcelain teeth</li> </ul>	1
18	<b>Selection Of Posterior Teeth</b>	<ul style="list-style-type: none"> <li>✓ Shade</li> <li>✓ Bucco-lingual width</li> <li>✓ Mesio-distal length</li> <li>✓ Occluso-gingival height</li> <li>✓ Occlusal form</li> <li>✓ Advantages of cusp form teeth</li> <li>✓ Advantages of non-cusp form teeth</li> </ul>	1
19	<b>Arrangement Of Artificial Teeth</b>	<ul style="list-style-type: none"> <li>• Guideline of artificial teeth arrangement</li> <li>✓ Arrangement of</li> </ul>	1

		<p>anterior teeth</p> <ul style="list-style-type: none"> <li>✓ Arrangement of upper anterior teeth</li> </ul>	
20	Arrangement Of Posterior Teeth	<ul style="list-style-type: none"> <li>• Curve of Spee</li> <li>• Compensatory curves</li> <li>• Arrangement of lower posterior teeth</li> <li>• Arrangement of upper posterior teeth</li> <li>• Common errors in arrangement of teeth</li> </ul>	1
21	Waxing And Carving	<ul style="list-style-type: none"> <li>• Waxing</li> <li>✓ Definition</li> <li>✓ Requirements of waxing the polish surfaces</li> <li>✓ The procedure of waxing</li> <li>✓ Establishing the posterior palatal seal area</li> <li>✓ Procedure for carving of posterior palatal seal area</li> <li>✓ Advantages of posterior palatal seal</li> <li>• Esthetic consideration in complete denture</li> </ul>	1
22	Complete Denture Occlusion	<ul style="list-style-type: none"> <li>• Occlusion</li> <li>✓ Occlusion of complete denture</li> <li>✓ Centric occlusion</li> <li>✓ Centric relation</li> </ul>	1
23	Complete Denture Occlusion	<ul style="list-style-type: none"> <li>✓ Eccentric occlusion</li> <li>✓ Concepts of complete denture occlusion</li> <li>✓ Try-in appointment</li> </ul>	1
24	Processing Of The Denture (Flasking)	<ul style="list-style-type: none"> <li>• Flasking of the denture</li> <li>✓ Flasking techniques</li> </ul>	1
25	Occlusal Correction	<ul style="list-style-type: none"> <li>• Causes of errors in occlusion</li> <li>• Selective grinding</li> <li>• Correction of occlusal errors</li> <li>• Disadvantages of intra – oral correction</li> <li>• Advantages of extra – oral correction</li> </ul>	1

		<ul style="list-style-type: none"> <li>• Rules for selective grinding</li> </ul>	
26	<b>Finishing And Polishing Of Complete Denture</b>	<ul style="list-style-type: none"> <li>• Procedure of finishing</li> <li>• Grinding and cutting instruments</li> <li>• Polishing of complete denture</li> <li>• Principles of polishing</li> <li>• Procedures of polishing</li> </ul>	1
27	<b>Repair Of Complete Denture</b>	<ul style="list-style-type: none"> <li>• Types of material used in repair</li> <li>• Causes of denture fracture</li> <li>• Types of repair</li> <li>• Laboratory procedure for repairing fractured denture base</li> </ul>	1
28	<b>Repair Of Complete Denture</b>	<ul style="list-style-type: none"> <li>• Replacement of broken or missing tooth</li> <li>• Replacement of missing or lost part</li> <li>• Requirement of repair</li> </ul>	1
29	<b>Relining And Rebasing</b>	<ul style="list-style-type: none"> <li>• Indication for relining or rebasing</li> <li>• Relining</li> <li>• Contraindications of relining and rebasing</li> <li>• The impression techniques for relining and rebasing</li> </ul>	1
30	<b>Relining And Rebasing</b>	<ul style="list-style-type: none"> <li>• Laboratory procedures for relining</li> <li>• Rebasing</li> <li>• The chair – side reline technique</li> </ul>	1
<b>Total</b>			<b>30</b>

### *Laboratory sessions*

Lab no.	Study unit title	Hours
1	Clinical and laboratory steps of complete denture construction	4
2	Taking primary impression on metal mold by impression compound and beading and boxing and pouring by dental plaster	4

3	Pouring on rubber mold (upper and lower primary cast)	4
4	Description of anatomical landmarks (maxillary and mandibular arch)	4
5	Demonstration of making upper and lower special tray by cold cure acrylic	4
6	Finishing and polishing of special tray and evaluation	4
7	Demonstration of taking final impression and construction of master cast	4
8	Evaluation of record base construction, finishing and polishing	4
9	Bite rims construction (upper and lower arch)	4
10	Demonstration of face bow and fox bite and description of types of jaw relation	4
11	Description about the methods of recording vertical jaw relation	4
12	Description about the methods of recording horizontal jaw relation	4
13	Demonstration about the types of articulators, parts, its uses and action	4
14	Mounting of upper and lower casts on articulators	4
15	Mounting of upper and lower casts on articulators (continue) and evaluation of the student work	4
16	Description the methods of selection of anterior and posterior teeth for complete denture	4
17	Demonstration about arrangement of upper and lower anterior teeth	4
18	Arrangement of upper and lower anterior teeth (continue) and evaluation of the student work	4
19	Demonstration about arrangement of upper and lower posterior teeth	4
20	Arrangement of upper and lower posterior teeth( continue).	4
21	Arrangement of posterior teeth and carving of posterior palatal seal and evaluation of the student work	4
22	Demonstration about carving and waxing of upper complete denture.	4
23	Carving and waxing of lower complete denture (continue) and evaluation of the student work	4
24	Flasking and investment of the denture	4
25	Wax elimination, packing and curing of heat cure acrylic	4
26	Deflasking ,finishing and polishing of upper complete denture	4
27	Deflasking ,finishing and polishing of lower complete denture (continue)	4
28	Demonstration of selective grinding	4
29	Repair of fracture denture	4
30	Repair of missing tooth	4
<b>Total</b>		<b>120</b>