

Course Description Form

1. Course Name:	
Prosthodontics	
2. Course Code: ZUDE0301	
3. Semester / Year: 2025-2026	
Annual	
4. Description Preparation Date:	
13/8/2025	
5. Available Attendance Forms:	
Weekly	
6. Number of Credit Hours (Total) / Number of Units (Total)	
30 hours (Theoretical) + 60 hours (Practical). (one theoretical hour and two practical hours per week)	
7. Course administrator's name (mention all, if more than one name)	
Name: safa abbas mohammad Email: safa.abbas@alzahu.edu.iq	
8. Course Objectives	
Course Objectives	This course aims to provide students with all information related to partial denture.
9. Teaching and Learning Strategies	
Strategy	Cognitive strategy (explaining the topic), meta cognitive strategy, and social affective strategy, in addition to active learning strategy such as brain storming. In practice, the learning strategy include using models and simulation, training and using computers to show the photos and videos.

10.Course structure (theoretical)					
Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	1	Introduction to removable partial dentures	Partial dentures ☐ Removable partial denture (RPD) ☐ Objectives for RPD construction ☐ Causes of teeth loss	Power Point	Weekly quiz

			☐ Indications of removable partial dentures ☐ Fixed partial denture ☐ Indications for fixed partial denture ☐ Dental implant therapy ☐ Contraindications for dental implant therapy ☐ Terminology and re-finishing		
2	1	Classification of partially edentulous arches	Need for classification. Requirements of an acceptable method of classification ☐ Removable partial dentures may be classified according to the type of support ☐ Removable partial dentures may be classified according to the type of material ☐ Removable partial dentures may be classified according to the type of treatment ☐ Classification based on arch configuration ☐ Kennedy – Applegate – Fiset classification system.	Power Point	Weekly quiz

			☐ Applegate's rules governing the application of the Kennedy classification method		
3+4	2	Surveying	The ideal requirements for successful removable partial denture ☐ Purposes (Objective) of Surveying the Diagnostic Cast ☐ Advantages of single path of placement (insertion) ☐ Guiding planes ☐ Dental surveyor ☐ Types of dental surveyors ☐ Parts of dental surveyor (Ney type surveyor) ☐ Principles of surveying ☐ Types of undercuts established by surveying ☐ Factors that determine and affect the path of placement (insertion) and removal of the RPD	Power Point	Weekly quiz
5	1	Components of removable partial dentures	Main components of RPD ☐ Major connectors ☐ Requirements of major connectors ☐ Guidelines for design and location of major	Power Point	Weekly quiz

			connectors ☐ Characteristics of major connectors		
6	1	Maxillary major connectors	☐ Special Structural Requirements for Maxillary Major Connectors ☐ Types of Maxillary Major Connector ☐ Single palatal bar ☐ Single palatal strap ☐ Anterior-posterior palatal bars ☐ Combination anterior and posterior palatal strap–type connector ☐ Palatal plate-type connector ☐ U-shaped palatal connector	Power Point	Weekly quiz
7	1	Mandibular major connectors	☐ Special structural requirements ☐ Types of mandibular major connectors ☐ Lingual bar ☐ Methods that may be used to determine the relative height of the floor of the mouth ☐ Lingual plate (linguoplate) ☐ The indications for the use of linguoplate ☐ Double lingual bar (lingual bar with	Power Point	Weekly quiz

			cingulum bar) ☐		
8	1	Minor connectors	☐ Definition ☐ Functions ☐ Form & location ☐ Basic types of minor connectors ☐ Tissue stops ☐ Finishing lines ☐ Reaction of Tissue to Metallic Coverage	Power Point	Weekly quiz
9	1	Rests & rest seats	☐ The purposes of the rest in general ☐ Occlusal Rest ☐ Extended Occlusal Rest ☐ Interproximal Occlusal Rest ☐ Internal Occlusal Rests ☐ Occlusal Rest Seat Preparation ☐ Occlusal Rests on Amalgam Restorations ☐ Occlusal Rest on Crowns ☐ Lingual Rests (Cingulum Rest) ☐ Incisal Rests and Rest Seats ☐ Implants as a Rest	Power Point	Weekly quiz
10	1	Retention & removable partial denture retainers	☐ Direct retainers ☐ Indirect retainers ☐ The extra coronal retainer	Power Point	Weekly quiz
11	1	Extra coronal direct retainers (types of clasp assemblies)	☐ Clasps designed without movement accommodation.	Power Point	Weekly quiz

			☐ Circumferential (Circle or Akers) clasp ☐ Ring-type clasp ☐ Embrasure (double Akers) clasp ☐ Back action clasp ☐ Multiple clasps ☐ Half-and-half Clasp ☐ Reverse-action clasp (Hairpin) ☐ Disadvantages of circumferential clasps in summary ☐ Clasps designed to accommodate distal extension functional movement ☐ RPI clasp ☐ Bar-type clasp assembly ☐ RPA clasp; Akers clasp ☐ Infra-bulge clasp ☐ Combination clasp		
12	1	Intra coronal direct retainers (internal attachments , precision attachments)	☐ Internal attachments ☐ Precision Attachments ☐ Some indications for precision attachments ☐ Some of the contraindications for precision attachments ☐ The main types of precision	Power Point	Weekly quiz

			attachments ☐ Selection of an Attachment for a Removable Partial Denture		
13	1	Stress breakers (stress equilizers)	☐ Stress breakers ☐ Types of stress breakers	Power Point	Weekly quiz
14+15	2	Indirect retainers	☐ The main factors influencing the effectiveness of an indirect retainer ☐ The auxiliary functions of indirect retainers ☐ Forms of Indirect Retainers ☐ Auxiliary occlusal rest ☐ Lingual rest ☐ Incisal rest ☐ Canine extensions from occlusal rests ☐ Cingulum bars (continuous bars) and linguo-plates ☐ Modification areas ☐ Rugae support	Power Point	Weekly quiz
16	1	Laboratory procedures in RPD construction : block out & relief	☐ Blockout and relief ☐ Cast preparation ☐ Types of blockout of master cast ☐ Parallel blockout ☐ Shaped blockout ☐ Arbitrary blockout ☐ Relieving the master cast ☐ Purpose of	Power Point	Weekly quiz

			- relief ☐ Sites ☐ Tissue Stops		
17	1	Laboratory procedures in RPD construction : duplication & refractory cast construction	☐ Duplicating a stone cast ☐ Duplicating material and flask ☐ Impression ☐ Refractory cast	Power Point	Weekly quiz
18	1	Laboratory procedures in RPD construction: wax pattern	☐ Waxing the framework ☐ Spruing ☐ General rules for spruing ☐ Investing the sprued pattern ☐ Purpose of investment ☐ Burnout	Power Point	Weekly quiz
19	1	Laboratory procedures in RPD construction: casting & finishing	☐ Casting ☐ Casting recovery ☐ Finishing the framework ☐ Sprue removal	Power Point	Weekly quiz
20	1	Denture base in RPD	☐ The primary function of denture base ☐ Types of denture base according to support ☐ Types of the denture base according to materials ☐ Advantages of metal denture base ☐ Disadvantages of metal denture base ☐ Design consideration of denture base ☐ Periodontal consideration of denture base design ☐ Types of artificial teeth	Power Point	Weekly quiz

21	1	Record bases, occlusion rims, mounting & arrangement of teeth	☐ Record bases ☐ Types of record bases according to materials constructed from it ☐ Occlusion rims ☐ Occlusion rims for static jaw relation records ☐ Occlusion rims for recording functional or dynamic jaw relationship record ☐ Mounting casts on the Articulator ☐ Arrangement of artificial teeth to the opposing cast ☐ Principles that should be taken during arrangement of artificial teeth ☐ Laboratory procedure of arrangement teeth (Example)	Power Point	Weekly quiz
22+23	2	Biomechanics of RPD	☐ Biomechanical considerations ☐ Possible movements of partial dentures ☐ Tooth-tissue–supported Prosthesis ☐ Tooth-supported partial denture ☐ Occlusal Rest Seat Preparation and Denture Movement ☐ Impact of	Power Point	Weekly quiz

			Implants on Movements of Partial Dentures		
24+25	2	Principles of RPD design	☐ Difference in Prosthesis Support and Influence on Design ☐ Differentiation Between Two Main Types of Removable Partial Dentures ☐ Components of Partial Denture Design ☐ Implant Considerations in Design	Power Point	Weekly quiz
26	1	Clinical phases of RPD construction	☐ 1st Phase: Education of patient ☐ 2nd Phase: Diagnosis, Treatment Planning, Design, Treatment Sequencing, and Mouth Preparation ☐ 3rd Phase: Support for Distal Extension Denture Bases ☐ 4th Phase: Establishment and Verification of Occlusal Relations and Tooth Arrangements ☐ 5th Phase: Initial Placement Procedures ☐ 6th phase: Periodic Recall	Power Point	Weekly quiz

27	1	Acrylic RPD	☐ Acrylic removable partial dentures ☐ Appearance ☐ Maintenance of space ☐ Reestablishment of occlusal relationships ☐ Conditioning of teeth and residual ridges ☐ Interim restoration during treatment ☐ Conditioning the patient for wearing a prosthesis ☐ Clinical procedure for placement	Power Point	Weekly quiz
28	1	Flexible RPD	☐ Flexible removable partial dentures ☐ Type of material used for the flexible denture ☐ Support ☐ Retention	Power Point	Weekly quiz
29	1	Repair & addition to RPD	☐ Broken clasp arms ☐ Several reasons for breakage of clasp arms ☐ Fractured occlusal rests ☐ Distortion or breakage of other components – major and minor connectors ☐ Addition of a new artificial tooth to a RPD ☐ Repair by soldering	Power Point	Weekly quiz

30	1	Digitally designed & fabrication process of RPD framework using CAD/CAM system	☐ Components of CAD/CAM system ☐ Types of Digital Scanner ☐ Digital RPD Framework Design (step by step) ☐ Digital Fabrication Process	Power Point	Weekly quiz
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10.Course structure (Practical)					
Week	Hours	Subject name	Required learning outputs	Learning method	Assessment method
1	2	Introduction to removable partial dentures		Models & simulation	Assessing the work
2	2	Kennedy Classification		Models & simulation	Assessing the work
3	2	Cast trimming		Models & simulation	Assessing the work
4&5	4	Surveying		Models & simulation	Assessing the work
6&7	4	Wire bending		Models & simulation	Assessing the work
8	2	Acrylic removable partial denture design		Models & simulation	Assessing the work
9&10	4	Acrylic removable partial denture laboratory procedures		Models & simulation	Assessing the work
11	2	Flexible partial denture design		Models & simulation	Assessing the work
12, 13, &14	6	Flexible partial denture laboratory procedures		Models & simulation	Assessing the work
15 &16	4	Principles of 2D design for the RPD		Models & simulation	Assessing the work
17	2	Principles of drawing 2D design for the RPD		Models & simulation	Assessing the work

18, 19, &20	6	2D design for maxillary & mandibular arch		Models & simulation	Assessing the work
21 &22	4	Drawing RPD 3D design		Models & simulation	Assessing the work
23	2	Types of rests		Models & simulation	Assessing the work
24	2	Rest seat preparation		Models & simulation	Assessing the work
25&26	4	Block out & relief		Models & simulation	Assessing the work
27	2	Duplication of the master cast		Models & simulation	Assessing the work
28&29	4	Wax pattern for RPD framework		Models & simulation	Assessing the work
30	2	Framework fabrication		Models & simulation	Assessing the work

11. Course evaluation

A grade out of 100 is distributed to the tasks assigned to the student, such as daily and monthly exams, oral and written exams, reports, etc....
40% annual course includes daily and monthly exams, 20% practical exam, 40% final theoretical exam.

12. Teaching and learning references

Text books	Carr, A.B., Brown, D.T. (2011) McCracken's Removable Partial Prosthodontics.12th ed. St. Louis, Missouri: Mosby, Inc., Elsevier Tne.
Electronic references, websites	Phoenix, R.D., Cagna, D.R., Defreest, C.F. (2008). Stewart's Clinical Removable Partial Prosthodontics. Phoenix, 4" ed, Quintessence Publishing Co, Inc.