



**ALTAMASH INSTITUTE OF DENTAL MEDICINE
(JINNAH SINDH MEDICAL UNIVERSITY)**

**BDS Second Year
Junior Prosthodontics
Study Guide**

Introduction

This course is designed to teach the students about the basic definitions, principles and techniques of four major branches of prosthodontics (removable, fixed, & implant prosthodontics and dental occlusion). This science is taught to dental undergraduates in order to equip them with the basic clinical and laboratory skills performed on partially and completely edentulous patients. This course will help the students to obtain the basic knowledge before they are exposed to more in-depth courses

Outcome:

By the end of the Prosthodontics course, BDS graduates will be able to demonstrate skills in rehabilitating the oral function of the patients by restoring chewing, esthetics and phonetics through the use of veneers, crowns and/or dental prostheses.

Teaching and learning:

1. Interactive lectures (IL)
2. Phantom head Demonstrations (PD)
3. Tutorials
 - a. Case Based Discussion (CBD)
 - b. Small Group Discussion (SGD)
4. Not applicable on second year level N/A

Assessment tools:

1. Multiple Choice Questions: (MCQs)
 - One Correct Type
 - One Best Type
2. Observed Structured Practical Examination (OSPE)

s.n o.	Topic	Course Objectives: By the end of the course, 2 nd year students will be able to:	Teaching method	Assessment Tool
1	Complete Denture	<ul style="list-style-type: none">• Define the following terms:<ul style="list-style-type: none">○ Conventional denture○ Immediate denture	IL	MCQ



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		<ul style="list-style-type: none"> ○ Overdenture ○ Single complete denture ○ Implant supported CD ○ Stability ● Discuss extra- and intra-oral landmarks of prosthetic importance ● Discuss the border structures that limit the periphery of the denture in the maxilla and the mandible ● Classify tongue form according to House. ● Describe Selection of occlusion depending on tongue condition: <ul style="list-style-type: none"> ○ Tongue position; ○ Examination of floor of mouth posture; ○ Tongue biting. ● Discuss the importance of saliva in complete denture retention considering the following: <ul style="list-style-type: none"> ○ salivary flow and viscosity ○ medical conditions affecting the salivary flow and viscosity ○ xerostomia ● Discuss the salivary factors contributing to complete denture retention ● Discuss the management of edentulous patients with altered salivary flow ● Discuss history-taking of edentulous patients based on the prescribed format ● Discuss the following examinations of edentulous patients according to the recommended method: <ul style="list-style-type: none"> ○ General Examination (gait, complexion and personality, cosmetic index, mental attitude of patient) ○ Extra Oral examination including facial features, facial form, facial profile, lower facial height, muscle tone, complexion, lip competency ○ TMJ examination (including muscles of mastication, deviation, deflection, clicking/crepitation of TMJ and mouth opening) ○ Neuromuscular examination ○ Intra Oral Examination 	SGD	SAQ
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		<ul style="list-style-type: none"> ▪ existing teeth (number of teeth, tilting, drifting, supra-eruption, rotation, undercuts) ▪ mucosa (color, condition, thickness) ▪ tongue examination including frenal attachment ▪ saliva [consistency (normal, thick, ropy), xerostomia] ▪ occlusion (canine guided, group function, mutually protective, inter-arch space) ▪ others (midline mouth opening, occlusal stops, periodontal condition, residual alveolar ridge classification, residual roots, tooth surface loss, prosthesis, gag reflex) ○ Radiographic examination (crown to root ratio, periapical pathology, retained residual roots, thickness of mucosa, bone support and quality, root configuration of abutment teeth) ● Discuss the intra- and extra-oral soft and hard tissue conditions pertinent to edentulous patients. ● Discuss the treatment plan for edentulous patients requiring complete denture ● Justify the treatment plan for edentulous patient requiring complete denture ● Discuss the residual ridge configuration given by Atwood ● Discuss the parallelism of ridges and ridge relations ● Discuss the objectives of impression making ● Define the basic terminologies of occlusion ● Describe the different types of occlusion ● Discuss characteristics, importance, general considerations and types of balanced occlusion ● Discuss advantages, disadvantages, indications, contraindications of types of occlusion ● Discuss labial form of occlusal rims considering the facial landmarks, fullness of upper lip, 		
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		<p>philtrum, nasolabial fold and oral commissures</p> <ul style="list-style-type: none"> • Construct maxillary and mandibular occlusal rims on ideal edentulous model • Discuss function, types, uses, advantages and disadvantages, purpose and requirements of an articulator. • Identify different types of articulators on pictures • Describe facebow and its types. • Describe the objectives, general considerations and methods in teeth selection • Discuss try-in in complete denture fabrication 	CBD	
2	Fixed Prosthodontics	<ul style="list-style-type: none"> • Define the basic terminologies pertinent to fixed prosthodontics • Discuss the applied anatomy and physiology for temporomandibular joint, muscles of mastication and dentition • Describe Posselt's Envelop of Motion • Identify Kennedy's Class (including modifications) on models and pictures of dentures and dentition 	IL	MCQ
3	Crown And Fixed Partial Denture(Indirect Restorations)	<ul style="list-style-type: none"> • Define the basic terminologies pertinent to fixed partial dentures • Discuss the various components and types of fixed partial dentures • Discuss the indications and contraindications for fixed partial dentures • Discuss the various partial and full coverage indirect restorations • Describe the principles of tooth preparation for indirect prosthesis • Discuss the indications, contraindications, required clinical assessment and steps of preparation for provision of inlay and on-lay. • Discuss the materials, impression techniques, clinical and laboratory procedures for the fabrication of indirect prosthesis • Describe the latest innovations including CAD-CAM Technology 	IL CBD SGD	



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Procedural Skills			
<ul style="list-style-type: none"> • Identify extra- and intra-oral landmarks of prosthetic importance on models • Identify the border structures that limit the periphery of the denture in the maxilla and the mandible of patients presenting to OPD • Obtain history of edentulous patients presenting to prosthodontic OPD based on the prescribed format • Perform the following examinations on edentulous patients presenting to prosthodontic OPD according to the recommended method: <ul style="list-style-type: none"> ○ General Examination (gait, complexion and personality, cosmetic index, mental attitude of patient) ○ Extra Oral examination including facial features, facial form, facial profile, lower facial height, muscle tone, complexion, lip competency ○ TMJ examination (including muscles of mastication, deviation, deflection, clicking/crepitation of TMJ and mouth opening) ○ Neuromuscular examination ○ Intra Oral Examination <ul style="list-style-type: none"> ▪ existing teeth (number of teeth, tilting, drifting, supra-eruption, rotation, undercuts) ▪ mucosa (color, condition, thickness) ▪ tongue examination including frenal attachment ▪ saliva [consistency (normal, thick, ropy), xerostomia] ▪ occlusion (canine guided, group function, mutually protective, inter-arch space) ▪ others (midline mouth opening, occlusal stops, periodontal condition, residual alveolar ridge classification, residual roots, tooth surface loss, prosthesis, gag reflex) ○ Radiographic examination (crown to root ratio, periapical pathology, retained residual roots, thickness of mucosa, bone support and quality, root configuration of abutment teeth) • Construct maxillary and mandibular occlusal rims on ideal edentulous model • Describe the objectives, general considerations and methods in teeth selection • Identify Kennedy's Class (including modifications) on models and pictures of dentures and dentition 	<p>SGD</p> <p>N/A</p>	<p>SAQ</p>	
	<p>PD</p> <p>SGD</p>	<p>OSPE</p>	



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Reading Sources:

Text Book: Removable partial prosthodontics. McCracken. Thirteenth edition.

Contemporary fixed prosthodontics. Rosenstiel. 10th edition.

Phantom Head Lab: used for realistically simulating all types of dental treatment as well as ergonomic working or first aid procedures but without a real patient having to be present.

Internet resources: With easy access to digital library students will use internet resources with added time flexibility to enrich and update their knowledge and its application.

Library: It provides wealth of resources, space to study alone or in a group. It also provide world of books to discover and borrow.

Assessment Criteria :

Knowledge:



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- MCQs (Multiple Choice Questions) are used to assess objectives covered in each module.
- A MCQ has a statement or clinical scenario followed by four options (likely answer).
- Students after reading the statement/scenario select ONE, the most appropriate response from the given list of options.
- Correct answer carries one mark, and incorrect 'zero mark'. There is no negative marking.
- Students mark their responses on an answer sheet provided by examination department.

Skills:

- OSPE: Objective Structured Practical Examination:
 - Each student will be assessed on the same content and have same time to complete the task.
 - Comprise of 12-25 stations.
 - Each station may assess a practical tasks include practical skills and application of knowledge
 - Stations are observed, interactive, application of knowledge based and rest.
 - In Observed and Interactive Stations these will be assessed by internal or external examiners through structured viva or a task.
 - Application of knowledge Stations: it will be static stations in which there will be pictures, clinical scenarios with related questions for students to answer on the provided answer copy.
 - Rests: It is a station where there is no task given and in this time student can organize his/her thoughts.

AIDM Internal Assessment Policy

Students will be assessed to determine achievement of learning objectives with the subject of Dental Materials through the following:

- Midterm Examination will be scheduled on completion of half of the course
- Mock Examination will be scheduled on completion of whole course
- The method of examination comprises theory exam which includes MCQs, and practical examination by OSCE (Objective Structured Clinical Examination).
- Student's behaviors and attitudes will be observed during all academic activities.

Annual Examination:



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Content of this course will be assessed in final professional examination through OSCEs and MCQs.

Course Evaluation:

- Pass/fail ratio of continuous assessments will be evaluated.
- 75% attendance is mandatory to be eligible for annual professional examination
- Feedback will be taken
 - Regarding course from students and faculty
 - Student feedback regarding faculty
 - Faculty feedback of students

Course Faculty:

- Dr Rafia Ruaaz (Assistant Professor)
- Dr Lareb Khattak (Demonstrator)
- Dr Shareel Khan (Demonstrator)

For queries:

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