



Institute of Dentistry,

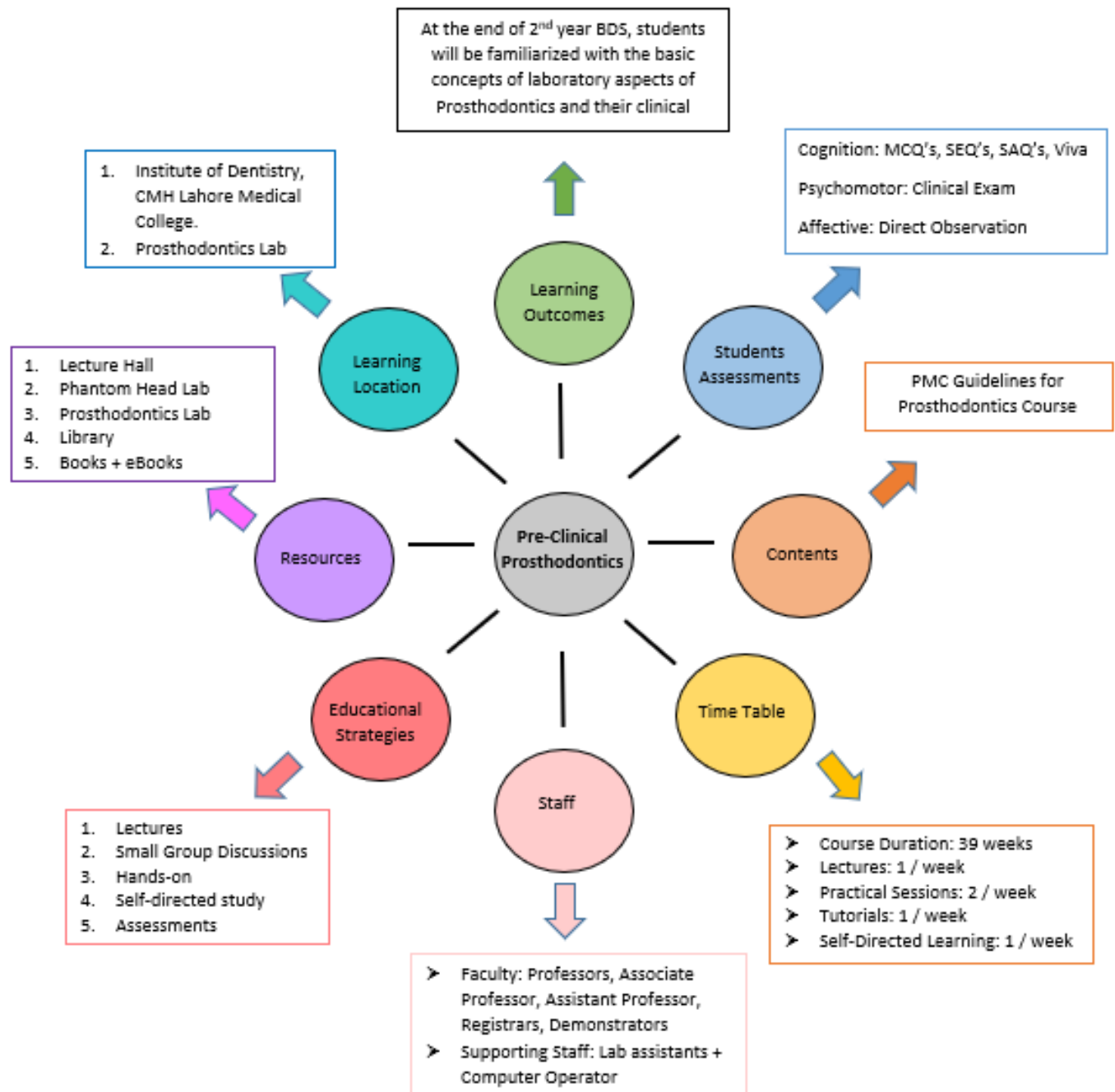
CMH Lahore Medical College

Study Guide

Department of Pre-clinical Prosthodontics

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Curriculum map of Pre-Clinical Prosthodontics



ORGANOGRAM OF PRECLINICAL PROSTHODONTICS

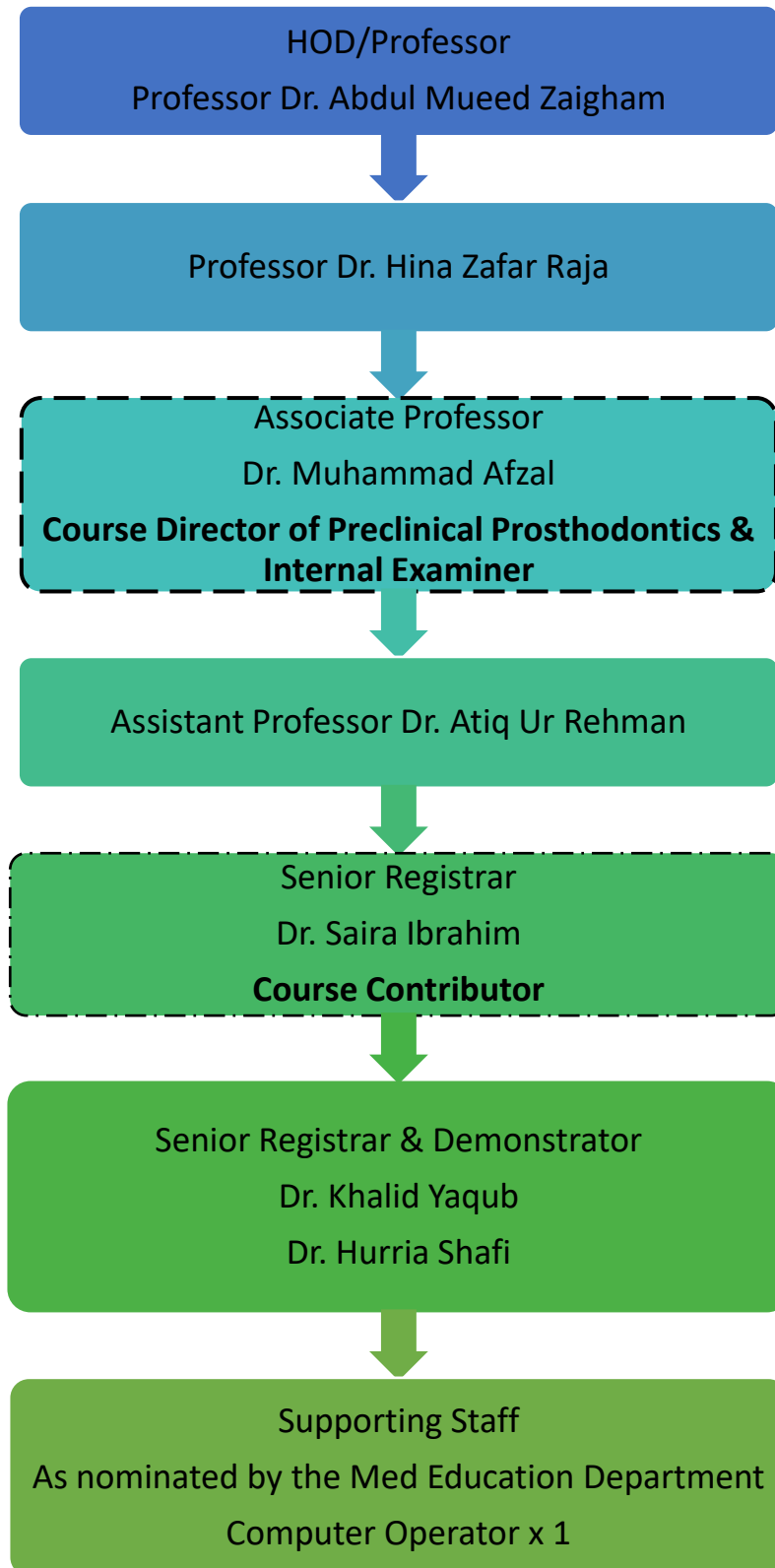


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INTRODUCTION TO PRE-CLINICAL PROSTHODONTICS

Preclinical Prosthodontics is an introductory course for the students of 2nd year BDS to familiarize them about the concepts of laboratory aspects of Prosthodontics and their clinical application. This course aims to teach didactic and practical skills leading to competency in the field of prosthodontics. The program provides a basic science foundation for understanding of the subject for the preclinical students, so that they are trained to do procedures which will be a part of the clinical sessions in the third and final year of the course.

Since proficiency in all elements of prosthodontics is required, equal emphasis is placed on partial and complete denture prosthodontics. This will provide the students with an opportunity to develop their knowledge and skills.

Resources:

- A. Teaching faculty
B. Infrastructure resources

A. Teaching faculty:

Sr. #.	Faculty Name	Designation as per PMC Certificate	Qualification
1.	Prof. Dr. Abdul Mueed Zaigham	Professor	BDS, FCPS Prosthodontics
2.	Prof. Dr. Hina Zafar Raja	Professor	BDS, FCPS Prosthodontics
3.	Dr. Muhammad Afzal	Associate Professor	BDS, FCPS Prosthodontics
4.	Dr. Atiq Ur Rehman	Assistant Professor	BDS, FCPS Prosthodontics
5.	Dr. Saira Ibrahim	Senior Registrar	BDS, FCPS Prosthodontics
6.	Dr. Khalid Yaqub	Senior Registrar	BDS, FCPS Prosthodontics
7.	Dr. Hurria Shafi	Demonstrator	BDS

B. Infrastructure resources:

Sr. No.	Infrastructure Resources	Quantity
1.	Phantom Head Labs <ul style="list-style-type: none"> • Lab A- Phantom heads • Lab B- Phantom heads 	02 <ul style="list-style-type: none"> • 20 • 20
2.	Prosthodontics lab	• 01
3.	Ceramic lab	• 01
4.	Plaster room	• 01

Teaching and learning strategies:

Multiple educational methods will be used comprising of self-study, interactive lectures, group discussions, and practical skill sessions.

(i) Methods for achieving cognitive objectives

- Interactive lectures using audio visual aids on power point presentation
- Group discussions in form of large group and small group
- Hands on demonstrations
- Tutorials
- Journal club
- Collaborative learning
- Self-study and reading from learning resources

(ii) Methods for achieving psychomotor objectives

- Lab skills

(iii) Methods for achieving affective objectives

- Interaction with peers, group members, teachers, support staff etc.
- Group discussions (small and large)
- Oral presentations by students

LEARNING METHODOLOGIES:

The following teaching / learning methods are used to promote better understanding:

- Interactive Lectures
- Small Group Discussion
- Practical

- Skills session
- E- Learning
- Self-Directed Study

INTERACTIVE LECTURES

In large group, the lecturer introduces a topic or common clinical condition and explains the underlying phenomena through questions, pictures, exercises, etc. Students are actively involved in the learning process.

SMALL GROUP DISCUSSION (SGD): This format helps students to clarify concepts and to acquire skills or attitudes. Sessions are structured with the help of specific exercises such as patient case, interviews or discussion topics. Students exchange opinions and apply knowledge gained from lectures, tutorials, and self-study. The facilitator role is to ask probing questions summarize, or rephrase to help clarify concepts.

CASE – BASED LEARNING: A small group discussion format where learning is focused around a series of question based on a clinical scenario. Students discuss and answer the questions applying relevant knowledge gained in clinical and basic health sciences during the module.

TEAM – BASED LEARNING: Team – Based Learning is an evidence based collaborative learning teaching strategy designed around units of instruction, known as “modules,” that are taught in a three-step cycle: (a) Preparation, (b) in-class readiness assurance testing and (c) application-focused exercise.

- a) Preparation before class:** Students must complete preparatory materials before a class or the start of the module. Materials may be text, visual or other, and set at a level that is appropriate to the students and the course.
- b) In-class Reading Assurance Testing:** Students complete an individual readiness assurance test (IRAT), consisting of 5 to 20 multiple choice questions. After submitting their individual answers, they take the same test, the team RAT (TRAT), with their team. All members of each team share the same TRAT score, and both IRAR and TRAT source count toward the students’ grades.
- c) Instructor Feedback:** The instructor reviews materials from the RAT that seems to be difficult for students.
- d) In-class application focused exercise:** the remainder of the session is taken up with exercises that help students learn how to apply and extent the knowledge that they have

pre-learned and tested. Teams are given an appropriate problem or challenges, and must arrive at a consensus to choose a “best” solution out of options provided. Teams then display their answer choice, and the educator facilitates a classroom discussion between teams to explore the topic and the possible answer to the problem.

PRACTICAL: Practicals related to laboratory based prosthodontic procedure are scheduled for student learning.

SELF DIRECTED STUDY: Students’ assume responsibilities of their own learning through individual study, sharing and discussing with peers, seeking information from Learning Resource Center, teachers and resource persons within and outside the college. Students can utilize the time within the college scheduled hours of self-study.

E-LEARNING: E-Learning is a strategy by which learning occurs through the utilization of electronic media, typically the internet. The basic aspects of medical professionalism and ethics will be addressed through an e-learning course.

Curriculum implementation:

Curriculum implementation refers to putting into practice the official document including course content, objectives, learning and teaching strategies. Implementation process helps the learner to achieve knowledge, skills and attitudes required of the learning tasks. Learners are a pertinent component of the implementation process. Implementation occurs when the learner achieves the intended learning experiences, knowledge, ideas, skills and attitudes which are aimed to make the learner an effective part of the society. Curriculum implementation also refers to the stage at which curriculum is put into effect. There has to be an implementing agent as well. Teacher is an important part of this process and implementation of the curriculum is the way the teacher selects and utilizes various components of the curriculum. Implementation occurs when the teacher’s formulated course content, teacher’s personality and teaching and learning environment interact with the learners. Therefore, curriculum implementation is how the officially planned course of study is translated and reflected by the teacher into schemes of work, lesson plans, syllabus and resources are effectively transferred to the learners. Curriculum implementation can be affected by certain factors such as teachers, learners, learning

environment, resource materials and facilities, culture and ideology, instructional supervision and assessments.

a) Personnel involved in teaching and facilitation

(i) Lectures delivery by: Prof. Dr. Abdul Mueed Zaigham (Professor)
Prof. Dr. Hina Zafar Raja (Professor)
Dr. Muhammad Afzal (Associate professor)
Dr. Atiq Ur Rehaman (Assistant Professor)
Dr. Saira Ibrahim (Senior Registrar)
Dr. Khalid Yaqub (Senior Registrar)

(ii) Senior Registrar/Demonstrators for clinics/practical and small group discussion sessions:

Dr. Saira Ibrahim

Dr. Khalid Yaqub

Dr. Hurria Shafi

(iii) Support staff: As nominated by the medical education department.

(iv) Computer assistant: 1 as nominated by the college

b) Time frame

Course duration: 38 weeks

Lectures: Wednesday: (8:00 to 8:50am)

Practical visits: Monday – Wednesday (8:55am to 11:30 am)

Thursday (8:55am to 11:30 am)

Self-study: 1 hour per week from 1400hrs to 1500 hrs on every Friday

c) Time Duration / Year

Practical's/week = 2hrs 35min → Total 155min

Lectures/week = 50 min → Total 50 min

Self-Directed Learning = 60 min → Total 60 min

Total Contact weeks according to curriculum → 38 weeks

Contact Time in minutes → $38 \times 265 = 10070$ min

Contact Time in hours → $10070/60 = \mathbf{167.8}$ hours

Total contact hours = 168 hours

According to latest 2nd Year BDS Curriculum (2023-onwards) by NUMS,

Required contact hours

Preclinical Prosthodontics → **135 hours.**

Preclinical Operative → 135 hours.

COURSE OBJECTIVES AND STRATEGIES:

At the end of 2nd year BDS the students will be able to:

TOPICS AND OBJECTIVES	FACULTY	Learning Domain (CPA)	LEARNING STRATEGY	ASSESSMENT				
				Clinical	VIVA	OSPE	NUMS MCQs	NUMS SEQs
Complete denture Prosthodontics								
1. Introduction to Prosthodontics	Dr. Muhammad Afzal	C	Interactive lecture / Small Group Discussion		X	X	X	X
• Define Prosthodontics?								
• Describe branches of Prosthodontics?								
• Name the different types of Prosthesis?								
2. Parts and Surfaces of a Complete Denture	Dr. Muhammad Afzal	C	Interactive lecture / small group discussion / Lab Demonstration		X	X	X	X
• Describe surfaces of the Denture?								
• Describe parts of the Denture?								
3. Anatomical Landmarks of Maxillary Arch and Mandibular Arch	Professor Dr. Abdul Mueed Zaigham	C	Interactive lecture / small group discussion / Lab Demonstration	X	X	X	X	X
• Describe Anatomical Landmarks of Maxillary Arch?								
• Describe Anatomical Landmarks of Mandibular Arch?								
4. Impression Trays	Dr. Muhammad Afzal	C	Interactive lecture / Small Group Discussion / Lab Demonstration	X	X	X	X	X
• Define impression tray?								
• What are the requirements of Impression Tray?								

<ul style="list-style-type: none"> Describe types of Impression Trays? 								
5. Impressions in Complete Denture	Dr. Muhammad Afzal	C	Interactive lecture / Small Group Discussion / Lab Demonstration					
<ul style="list-style-type: none"> Define impression? 					X	X	X	X
<ul style="list-style-type: none"> What are the Objectives of impression making? 								
6. Dental Casts	Dr. Saira Ibrahim	C	Interactive lecture / Small Group Discussion / Lab Demonstration					
<ul style="list-style-type: none"> Define dental Cast? 								
<ul style="list-style-type: none"> What are the types of Cast? 				X	X	X	X	X
<ul style="list-style-type: none"> Describe the requirements of the Cast? 								
<ul style="list-style-type: none"> Describe parts of a Cast? 								
7. Record Bases	Dr. Muhammad Afzal	C	Interactive lecture / Small Group Discussion / Lab Demonstration					
<ul style="list-style-type: none"> Define record bases? 								
<ul style="list-style-type: none"> What are the requirements of record bases? 				X	X	X	X	X
<ul style="list-style-type: none"> What types are of record Bases? 								
8. Occlusion Rim	Professor Dr. Hina Zafar Raja	C	Interactive lecture / Small Group Discussion / Lab Demonstration					
<ul style="list-style-type: none"> Define occlusal rims? 								
<ul style="list-style-type: none"> What are the uses of Occlusion rims? 				X	X	X	X	X
<ul style="list-style-type: none"> Describe dimension of Occlusion rims? 								
9. Articulators	Dr. Muhammad Afzal	C	Interactive lecture / Small Group Discussion / Lab Demonstration					
<ul style="list-style-type: none"> Define articulators? 								
<ul style="list-style-type: none"> Classify articulators? 				X	X	X	X	X
<ul style="list-style-type: none"> What are the requirements of articulator? 								
10. Artificial Teeth	Dr. Khalid Yaqub	C	Interactive lecture / Small Group Discussion /					
<ul style="list-style-type: none"> Describe artificial teeth based on the Type of Material used? 					X	X	X	X

<ul style="list-style-type: none"> Describe artificial teeth based on the Occlusal Form of Teeth? 			Lab Demonstration					
11. Occlusion in Complete Denture	Dr. Muhammad Afzal	C	Interactive lecture / Small Group Discussion / Lab Demonstration			X	X	X
<ul style="list-style-type: none"> Describe occlusion in complete denture? 								
12. Teeth setup	Dr. Muhammad Afzal	C	Interactive lecture / Small Group Discussion / Lab Demonstration					
<ul style="list-style-type: none"> Describe the setup of anterior teeth? Describe the setup of posterior teeth? 				X	X	X	X	X
13. Denture processing	Dr. Muhammad Afzal	C	Interactive lecture / Small Group Discussion / Lab Demonstration	X	X	X	X	X
14. Finishing and polishing of denture	Dr. Saira Ibrahim	C	Interactive lecture / Small Group Discussion / Lab Demonstration	X	X	X	X	X
15. Spot grinding	Dr. Muhammad Afzal		Interactive lecture	X		X	X	X

A. REMOVABLE PARTIAL DENTURES (RPDs)

16. Classification of Partially Edentulous Arch and Applegate's Rules	Dr. Saira Ibrahim	C	Interactive lecture / Small Group Discussion / Lab Demonstration					
<ul style="list-style-type: none"> Define Removable partial denture? 				X	X	X	X	
<ul style="list-style-type: none"> Describe Components of Removable partial denture? Describe Kennedy's Classification? 								

<ul style="list-style-type: none"> Describe Applegate's Rules governing Kennedy's classification? 										
17. Components of Cast Partial Denture	Dr. Muhammad Afzal	C	Interactive lecture / Small Group Discussion / Lab Demonstration							
<ul style="list-style-type: none"> Define Major connector? 										
<ul style="list-style-type: none"> Describe requirements of Major connectors? 										
<ul style="list-style-type: none"> Classify Maxillary Major Connectors? 										
<ul style="list-style-type: none"> Classify Mandibular Major Connectors? 							X	X	X	X
<ul style="list-style-type: none"> Review the Indications for Maxillary Major Connectors? 										
<ul style="list-style-type: none"> Describe Minor Connector? 										
<ul style="list-style-type: none"> Define minor connectors joining the denture base? 										
18. Rests	Dr. Saira Ibrahim	C	Interactive lecture / Small Group Discussion / Lab Demonstration							
<ul style="list-style-type: none"> Define rest? 										
<ul style="list-style-type: none"> Describe Functions of Rest? 							X	X	X	X
<ul style="list-style-type: none"> Classify Rest? 										
19. Direct Retainers	Dr. Muhammad Afzal	C	Interactive lecture / Small Group Discussion / Lab Demonstration							
<ul style="list-style-type: none"> Define direct retainers? 										
<ul style="list-style-type: none"> Describe Parts of a Clasp? 										
<ul style="list-style-type: none"> Describe Requirements of a Clasp Design? 							X	X	X	X
<ul style="list-style-type: none"> Describe Circumferential or Akers Clasp or Occlusally Approaching Clasp? 										

<ul style="list-style-type: none"> Describe Vertical Projection or Bar or Roach Clasp or Gingivally Approaching Clasp? 								
20. Surveying	Dr. Atiq Ur Rehman	C	Interactive lecture / Small Group Discussion X					
<ul style="list-style-type: none"> Define dental surveyor? 								
<ul style="list-style-type: none"> What are the types of surveyors? 				X	X	X	X	
<ul style="list-style-type: none"> What are the Uses of surveyors? 								



**Pre-Clinical Prosthodontics Dentistry
2nd Year BDS
Lecture Schedule 2023**

Every Wednesday 8:00 am to 8:50 am

Date	TOPIC	NO OF LECTURES	INSTRUCTOR
BLOCK I (1- 13 Weeks)			
25-01-23	Introduction to Prosthodontics	1	Dr. Muhammad Afzal
01-02-23	Introduction to Partial dentures and Parts of removable partial dentures	1	Dr. Muhammad Afzal
08-02-23	Classification of Partially edentulous arches	1	Dr. Saira Ibrahim
15-02-23	Surveying	1	Dr Atiq Ur Rehman
22-02-23	Means of Retention – Types of clasp	1	Dr. Muhammad Afzal
27/2/2023 to 02/3/2023	SPORTS WEEK		
01-03-23	1ST CLASS TEST	Dr. Muhammad Afzal / Dr. Saira Ibrahim	
08-03-23	Means of support – Rest	1	Dr. Saira Ibrahim
15-03-23	Connectors - Maxilla	1	Dr. Saira Ibrahim
20/3/2023 to 26/3/2023	SPRING HOLIDAYS		
23/3/2023	PAKISTAN DAY		
29-03-23	Connectors - Mandible	1	Dr. Saira Ibrahim
05-04-23	Artificial Teeth	1	Dr. Khalid Yaqub
12/4/2023 to 18/4/2023	BLOCK I EXAMS		

14-04-23	Exam Pre-Clinical Operative / Pre-Clinical Prosthodontics	Dr. Muhammad Afzal / Dr. Saira Ibrahim	
BLOCK II (17x Weeks)			
19-04-23	Setup of teeth	1	Dr. Saira Ibrahim
21/04/23 to 25/04/23	EID UL FITR		
26-04-23	Setup of teeth	1	Dr. Saira Ibrahim
01-05-23	LABOUR DAY		
03-05-23	Processing & finishing partial dentures	1	Dr. Muhammad Afzal
10-05-23	Anatomical landmarks – Maxilla	1	Dr. Abdul Mueed Zaigham
17-05-23	Anatomical landmarks – Mandible	1	Dr. Abdul Mueed Zaigham
24-05-23	Impression trays and construction of special trays	1	Dr. Muhammad Afzal
31-05-23	Types of Dental casts and wax up for maxilla and mandible	1	Dr. Saira Ibrahim
07-06-23	2nd CLASS TEST		Dr. Muhammad Afzal / Dr. Saira Ibrahim
14-06-23	Record bases and Flasking process	1	Dr. Muhammad Afzal
21-06-23	Dewaxing, packing and finishing of acrylic base plates	1	Dr. Muhammad Afzal
28/6/2023 to 30/6/2023	EID UL ADHA		
05-07-23	Dewaxing, packing and finishing of acrylic base plates	1	Dr. Muhammad Afzal
12-07-23	Occlusal rims	1	Dr. Hina Zafar Raja
19-07-23	Introduction to Articulators	1	Dr. Muhammad Afzal
24/7/2023 to 18/8/2023	SUMMER VACATIONS		
21/8/2023 to 1/9/2023	BLOCK II EXAMS		
25-08-23	Exam Pre-Clinical Operative / Pre-Clinical Prosthodontics	Dr. Muhammad Afzal / Dr. Saira Ibrahim	
BLOCK III (15x Weeks)			
30-08-23	OSCE for Block Exam II	1	Dr. Muhammad Afzal
06-09-23	Classification of articulators and process of articulation	1	Dr. Muhammad Afzal
13-09-23	Tooth setup – Upper and lower anteriors	1	Dr. Muhammad Afzal
20-09-23	Tooth setup – Upper and lower posteriors	1	Dr. Muhammad Afzal
27-09-23	Occlusion in complete dentures	1	Dr. Muhammad Afzal
04-10-23	3RD CLASS TEST		Dr. Muhammad Afzal / Dr. Saira Ibrahim
11-10-23	Occlusion in complete dentures	1	Dr. Muhammad Afzal
18-10-23	Wax up, processing of dentures, Finishing of dentures	1	Dr. Muhammad Afzal

25-10-23	Finishing of dentures, spot grinding/parts and surfaces of denture	1	Dr. Muhammad Afzal
01-11-23	Revision Lecture	1	Dr. Muhammad Afzal / Dr. Saira Ibrahim
08-11-23	Revision Lecture	1	Dr. Muhammad Afzal / Dr. Saira Ibrahim
13/11/2023 to 19/11/2023	Prep Leave for Pre-Annual Exam		
20/11/2023 to 3/12/2023	Pre-Annual Exam		
24/11/2023	Pre-clinical Operative/ Pre-clinical Prosthodontics Written Exam	Dr. Muhammad Afzal / Dr. Saira Ibrahim	
27/11/23 to 01/12/23	Pre-clinical Operative/ Pre-clinical Prosthodontics Practical Exam	Dr. Muhammad Afzal / Dr. Saira Ibrahim	
4/12/2023 to 25/12/2023	Prep Leave for Annual Exam		
26/12/2023 Onward	NUMS University 2nd Annual Exams		

**Pre-Clinical Prosthodontics Dentistry
2nd Year BDS (2023)**



Lab Demonstration Schedule

Venue: Pre Clinical Prosthodontics Lab

Days and Timing: Wednesday (08:50 am to 11:25 am)
Thursday (08:50 am to 11:25 am)

Date	Topic	Instructor	Contributors	Batches
BLOCK I 23-01-23 to 20-04-23 (13 x weeks)				
25-01-23	Introduction to laboratory instruments	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
26-01-23	Introduction to laboratory instruments	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
01-02-23	Pouring of dentate and edentate molds - Cast Making	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
02-02-23	Pouring of dentate and edentate molds - Cast Making	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
08-02-23	Identification of Anatomical landmarks Maxilla and Mandible	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
09-02-23	Identification of anatomical landmarks Maxilla and Mandible	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
15-02-23	Clasp fabrication	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
16-02-23	Clasp fabrication	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A

22-02-23	Waxup and occlusal rim fabrication of P/D	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
23-02-23	Waxup and occlusal rim fabrication of P/D	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
27-02-23 to 02-03-23	Sports week			
01-03-23	Occlusal Rim Fabrication of P/D	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
02-03-23	Occlusal Rim Fabrication of P/D	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
08-03-23	Articulation of P/D	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
09-03-23	Articulation of P/D	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
15-03-23	Revision - Articulation	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
16-03-23	Revision - Articulation	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
20-03-23 to 26-03-23	Spring Holidays			
23-03-23	23rd March Holiday			
29-03-23	Tooth setup for P/D Upper and Lower Anterior Teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
30-03-23	Tooth setup for P/D Upper and Lower Anterior Teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
05-04-23	Revision - Tooth Setup Anterior Teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
06-04-23	Revision - Tooth Setup Anterior Teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
12-04-23 to 18-04-23	BLOCK - I EXAM			
BLOCK II (17x weeks) (19 April - 21 August)				
19-04-23	Tooth setup for P/D Upper and Lower Posterior Teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
20-04-23	Tooth setup for P/D Upper and Lower Posterior Teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
21-04-23 to 25-04-23	EID UL FITAR			
26-04-23	Revision - Tooth Setup Posterior Teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B

27-04-23	Revision - Tooth Setup Posterior Teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
01-05-23	LABOUR DAY			
03-05-23	Flasking and Dewaxing of P/D (4 flasks)	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
04-05-23	Flasking and Dewaxing of P/D (4 flasks)	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
10-05-23	Acrylic Paking of P/D (4 flasks)	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
11-05-23	Acrylic Paking of P/D (4 flasks)	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
17-05-23	Finishing of partial denture	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
18-05-23	Finishing of partial denture	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
24-05-23	Custom tray in autopolymerizing acrylic with spacer for edentulous arches	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
25-05-23	Custom tray in autopolymerizing acrylic with spacer for edentulous arches	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
31-05-23	Wax-up of upper and lower casts	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
01-06-23	Wax-up of upper and lower casts	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
07-06-23	Flasking and Dewaxing	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
08-06-23	Flasking and Dewaxing	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
14-06-23	Packing and curing	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
15-06-23	Packing and curing	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
21-06-23	Finishing of base plates	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch B
22-06-23	Finishing of base plates	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma	Batch A
28-06-23 to 30-06-23	EID UL ADHA			
05-07-23	Occlusal Rims	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan	Batch B

06-07-23	Occlusal Rims	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan	Batch A
12-07-23	Revision - Occlusal Rims	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan	Batch B
13-07-23	Revision - Occlusal Rims	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan	Batch A
19-07-23	Articulation	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan	Batch B
20-07-23	Articulation	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan	Batch A
24-07-23 to 18-08-23	SUMMER VACATIONS			
14-08-23 to 21-08-23	Block Exam II			
BLOCK III (15 x weeks)				
30-08-23	OSCE for Block Exam II	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch B
31-08-23	OSCE for Block Exam II	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch A
06-09-23	Setup of upper anterior teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch B
07-09-23	Setup of upper anterior teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch A
13-09-23	Setup of lower anterior teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch B
14-09-23	Setup of lower anterior teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch A
20-09-23	Revision Setup of Anterior Teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch B
21-09-23	Revision Setup of Anterior Teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch A
27-09-23	Setup of upper posterior teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch B
28-09-23	Setup of upper posterior teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch A
04-10-23	Setup of lower posterior teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch B
05-10-23	Setup of lower posterior teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch A
11-10-23	Revision - Setup of Posterior Teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch B
12-10-23	Revision - Setup of Posterior Teeth	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch A
18-10-23	Waxup, carving and festooning	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch B
19-10-23	Waxup, carving and festooning	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch A
25-10-23	Flasking & dewaxing of C/D (4 flasks)	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch B
26-10-23	Flasking & dewaxing of C/D (4 flasks)	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch A
01-11-23	Acrylic Packing of C/D (4 flasks)	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch B
02-11-23	Acrylic Packing of C/D (4 flasks)	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch A
08-11-23	Finishing of denture & Spot grinding	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch B

09-11-23	Finishing of denture & Spot grinding	Dr. Muhammad Afzal	Dr. Saira Ibrahim	Batch A
13-11-23 to 19-11-23	Prep Leave for Pre-Annual Exam			
20-11-23 to 03-12-23	Pre-Annual Exam			
24-12-23	Pre-clinical Operative/ Pre-clinical Prosthodontics Written Exam			
27-11-23 to 01-12-23	Pre-clinical Operative/ Pre-clinical Prosthodontics Practical Exam			
04-12-23 to 25-12-23	Prep Leave for Annual Exam			
26-12-23 onwards	NUMS University Annual Exam			

2nd Year BDS (2023)

Tutorial Schedule

Venue: Lecture Hall J / Conference Hall, 1st Floor

Days and Timing: Monday (1400hrs to 1500hrs)

Date	Topic	Instructor	Contributors
BLOCK I 23-01-23 to 20-04-23 (13 x weeks)			
30-01-23	Introduction to laboratory instruments + Cast Making	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma
13-02-23	Identification of Anatomical landmarks + Clasp Fabrication	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma
27-02-23 to 02-03-23	Sports week		
06-03-23	Waxup and occlusal rim fabrication of P/D	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma
20-03-23 to 26-03-23	Spring Holidays		
23-03-23	23rd March Holiday		
27-03-23	Articulation of P/D	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma
10-04-23	Tooth setup for P/D	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma
12-04-23 to 18-04-23	BLOCK - I EXAM		
BLOCK II (17x weeks) (20 April - 21 August)			
21-04-23 to 25-04-23	EID UL FITAR		
15-05-23	Finishing of partial denture	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma

29-05-23	Custom tray in autopolymerizing acrylic with spacer for edentulous arches	Dr. Muhammad Afzal	Dr. Saira Ibrahim, Dr. Abdullah Ehsan, Dr. Asma
13-11-23 to 19-11-23	Prep Leave for Pre-Annual Exam		
20-11-23 to 03-12-23	Pre-Annual Exam		
24-12-23	Pre-clinical Operative/ Pre-clinical Prosthodontics Written Exam		
27-11-23 to 01-12-23	Pre-clinical Operative/ Pre-clinical Prosthodontics Practical Exam		
04-12-23 to 25-12-23	Prep Leave for Annual Exam		
26-12-23 onwards	NUMS University Annual Exam		

Learning resources:

Topic	Resource
Parts and Surfaces of a Complete Denture	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Prosthodontic Treatment for Edentulous Patients By: Zarb 13th Edition
Anatomical Landmarks of Maxillary Arch and Mandibular Arch	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Prosthodontic Treatment for Edentulous Patients By: Zarb 13th Edition
Impression Trays	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Prosthodontic Treatment for Edentulous Patients By: Zarb 13th Edition
Impressions in Complete Denture	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Prosthodontic Treatment for Edentulous Patients By: Zarb 13th Edition
Dental Casts	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Prosthodontic Treatment for Edentulous Patients By: Zarb 13th Edition
Record Bases	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Prosthodontic Treatment for Edentulous Patients By: Zarb 13th Edition
Occlusion Rim	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Prosthodontic Treatment for Edentulous Patients By: Zarb 13th Edition

Articulators	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Prosthodontic Treatment for Edentulous Patients By Zarb 13th Edition
Artificial Teeth	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Prosthodontic Treatment for Edentulous Patients By: Zarb 13th Edition
Teeth setup	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Prosthodontic Treatment for Edentulous Patients By: Zarb 13th Edition
Denture processing	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Prosthodontic Treatment for Edentulous Patients By: Zarb 13th Edition
Finishing and polishing of denture	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Prosthodontic Treatment for Edentulous Patients By: Zarb 13th Edition
Spot grinding	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Prosthodontic Treatment for Edentulous Patients By: Zarb 13th Edition
Classification of Partially edentulous Arches and Applegate's Rules	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Removable Partial Prosthodontics By Mc 'Crackens 12th Edition
Components of Cast Partial Denture	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Removable Partial Prosthodontics By Mc 'Crackens 12th Edition
Rests	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Removable Partial Prosthodontics By Mc 'Crackens 12th Edition
Direct Retainers	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Removable Partial Prosthodontics By Mc 'Crackens 12th Edition
Indirect Retainers	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition • Removable Partial Prosthodontics By Mc 'Crackens 12th Edition
Surveying	<ul style="list-style-type: none"> • Preclinical Manual of Prosthodontics By: S Lakshmi 3rd edition

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| | <ul style="list-style-type: none"> Removable Partial Prosthodontics By Mc 'Crackens 12th Edition |
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OTHER LEARNING RESOURCES:

Hands- on Activities / Practical	Students will be involved in Practical sessions and hands-on activities that will link the laboratory procedures to clinical procedures.
Labs	Utilize the lab provides the simulated learning to the models available.
Skills Lab	A skills lab provides the simulated learning experience to learn the basic skills and procedures.
Videos	Video familiarize the student with the procedures and protocols to assist patients
Computer Lab/ CSs /DVDs/ Internet Resources:	To increase the knowledge, students should utilize the available internet resources. This will be an additional advantage to increase learning.
Self-Directed Learning	Self-Directed Learning is scheduled to search for information to solve cases, read through different resources and discuss among the peers and with the faculty to clarify the concepts.

Summative assessment methods and policies

ASSESSMENT METHODS:

Internal Assessment.

- a. Weightage of internal assessment shall be 20 %, each for theory and practical, in BDS Professional Examination.
- b. The Internal Assessment shall comprise of monthly test / PBL / assignments etc.
- c. The Internal Assessment record shall be kept in the respective department of the College / Institute and after approval of Principal, a summary as per University registration number shall be furnished to the Controller of Examinations, at least two weeks before the commencement of final examination.
- d. The result of all the class tests / tools which contribute towards IA will be displayed to the students during an academic year.
- e. The same internal assessment shall be counted both for annual and supplementary examinations. The students who are relegated, however, can improve the internal assessment during subsequent year
- f. Internal assessment tools of any subject may be changed after the approval of respective FBS.

Annual Examination

- a. The weightage of Annual Examination shall be 80%, each for theory and practical, in BDS.
- b. The examination comprises of a theory paper and practical/clinical examinations as per PM&DC regulations and the Table of Specifications (TOS) of the University.
- c. The gap between two consecutive theory papers shall not be more than two days.
- d. The Theory Paper shall be of 3-hours duration, held under the arrangements of the university. It shall have two parts; 60 MCQs (60 Marks) and 8 SAQs/SEQs (40 Marks) for the year 2023-onward. It may be changed after the approval of Academic Council.
- e. Allocated time for MCQs for 2023-onward shall be as under:

20 MCQs	-	20 Minutes
30 MCQs	-	30 Minutes
50 MCQs	-	50 Minutes
60 MCQs	-	60 Minutes

- f. Each MCQs shall have four distractors
- g. The distribution of SAQs/SEQs as well as MCQ difficulty levels for BDS annual examinations is as under: -

Table of Specification (TOS)

Table of specifications for Annual Professional Examination: Theory

Marks of Written Paper	= 80	Total Time Allowed = 03 hrs
Marks of Int. Asses (20%)	= 20	(including MCQs)
Max Marks	= 100	(MCQs:40%+SEQs:40%+IA:20%)
Pass Marks	= 50	

Paper-1: (*Marks of MCQ component shall be rationalized to 40% weightage)

60 x MCQs (1 mark each) (60 Marks) Time =60 min

Paper-2:

8x SEQs/SAQs (05 Marks Each) (40 Marks) Time = 120 min

*If a candidate obtains 50 marks in MCQs it will be rationalized as: $(50/60 \times 40 = 33.33)$

60 x MCQs (on separate sheet) (60 Marks) (Time: 60 min)

08 x SEQs/SAQs (05 marks each) (40 Marks) (Time: 2hr)

Part A – Preclinical Prosthodontics				
01	MCQ	30 (01 mark each)	30 Marks	50 Marks
02	SEQ/SAQ	04 (05 marks each)	20 Marks	
Part B – Preclinical Operative Dentistry				
01	MCQ	30 (01 mark each)	30 Marks	50 Marks
02	SEQ/SAQ	04 (05 marks each)	20 Marks	

Practical / Viva Examination (80 Marks)

Part A – Preclinical Operative Dentistry		
01	Clinical / LAB	20 Marks
02	VIVA	20 Marks
Total		40 Marks

Part B- Pre Clinical Prosthodontics		
01	Clinical/Lab	20 Marks
02	VIVA	20 Marks
Total		40 Marks
Grand Total		
Total	80 Marks	
Internal Assessment of both subjects	20 Marks	
Grand Total		100 Marks

Theory: Internal Assessment calculation (20 Marks)

INTERNAL ASSESSMENT - THEORY	
INTERNAL ASSESSMENT WEIGHTING: 20%	
Exams	Weightings
Attendance in Lectures:	10%
a. $\geq 90\%$ = 10%	
b. 80-89% = 7%	
c. 70-79% = 5%	
End of Block/ clinical rotation (theory) Examination	45%
Continuous assessment (average score of all tests attempted after every learning session during the academic year)	20%
Pre-Annual Exam	25%
Total	100%
INTERNAL ASSESSMENT STRUCTURE - PRACTICAL	
INTERNAL ASSESSMENT WEIGHTING: 20%	
Exams	Weightings
Attendance in Practicals:	10%
a. $\geq 90\%$ = 10%	
b. 80-89% = 7%	
c. 70-79% = 5%	
*End of Block/ clinical rotation (OSCE) Examination	45%
*Continuous assessment of practical/ clinical skills and attitude	20%
Pre-Annual Exam	25%
Total	100%

TABLE OF SPECIFICATIONS DETAILED**Preclinical Prosthodontic**

Ser	Blocks	Topics	Number of MCQs (30)		Number of SEQs/SAQs (04)
			Recall: 18	Application:12	
1.	Complete Denture Prosthodontics - I	• Anatomical landmarks Maxilla and Mandible	4	2	02
2.		• Impressions and Impression trays			
3.		• Dental Casts	2	2	
4.		• Record Bases			
5.		• Occlusion Rims			
6.		• Articulator	3	2	
7.		• Occlusion in Complete Denture			
8.	Complete Denture Prosthodontics - II	• Artificial teeth	1	1	01
9.		• Arrangement of teeth Maxilla and Mandible			
10.		• Laboratory procedures prior to insertion	2	1	
11.		• Parts & Surfaces of a Denture			
12.	• Spot grinding				
13.	Partial Denture Prosthodontics	• Classification of partially edentulous arches	2	1	01
14.		• Rests and Rest seats			
15.		• Major Connectors	1	1	
16.		• Minor Connectors			
17.		• Indirect Retainers	3	1	
18.		• Direct Retainers			
19.		• Denture Base			
20.		• Surveying		1	
Total			30 (30 Marks)		04 (20 Marks)

Internal Examiner

He/she shall be Professor and Head of Department who has been involved in teaching of the class being examined for at least six months and has delivered 50% of the total lectures. Second preference shall be Associate/Assistant Professor who is involved in teaching of the class and posted there for one year. Third preference shall be a recognized Professor of the subject.

External Examiner

He/she shall be a Professor/Associate Professor of a recognized Medical/Dental College or at least an Assistant Professor with three years teaching experience in the relevant subject.

Conflict of Interest

No person shall serve as an examiner whose close relative (wife, husband, son, daughter, adopted son, adopted daughter, grand-son, grand-daughter, brother, sister, niece /nephew, son and daughter- in-law brother and sister- in-law, parental and maternal uncle and aunt etc) is appearing in the examination. All examiners likely to serve as an examiner shall render a certificate in compliance to this para.

Paper Setting

- a. Each College / Institute shall forward a set of two question papers as per TOS along with the key for each subject to the Controller of Examinations, at least three months in advance of the annual examination. The question paper as a whole / a question without a comprehensive key shall not be considered towards final paper setting.
- b. The set of question papers shall be prepared by the respective Head of Department (HoD) and furnished to Controller of Examinations through Head of Institution (HoI)
- c. The Controller of Examinations shall approve the faculty for the final paper setting having fair representation of each college / institute

Paper Assessment

- a. The Controller of Examinations shall approve the faculty for the theory paper marking, to be undertaken in the manner as deemed appropriate.
- b. The Examination Directorate shall coordinate directly with the faculty, earmarked for the paper marking
- c. A student who scores 85% and above marks in any subject shall qualify for distinction in that particular subject.

- d. A fraction in aggregate marks of a subject shall be rounded off to whole number. If it is less than 0.5 then it will be rounded off to the previous whole number while 0.5 or more will be rounded off to the next whole number.

Practical / Examinations

- a. The Controller of Examiners shall approve the faculty to serve as the internal & external examiners.
- b. The number of external and internal examiners shall be equal.
- c. One external & internal examiner each shall be marked for a group of 100 students.
- d. Candidates may be divided into groups in the practical examinations and be standardized by incorporating OSCE/OSPE stations.
- e. Practical/clinical examination shall be held after the theory examination of the subject but in special cases, it may be held before the theory examination with the approval of the Controller of Examinations. For the purpose of practical/clinical examination, the candidates may be divided into sub groups by the examiners.
- f. The assessment of the practical / clinical examination duly signed by internal & external examiner shall be furnished to the Controller of Examinations within one week of the conclusion of examination

Pass Marks

- a. Pass marks for all subjects shall be 50 % in theory and practical, separately.
- b. No grace marks shall be allowed to any student in any examination.

Declaration of Result. Every effort shall be made to declare the result of each examination within one month of the last practical examination or earlier.

Re-Totaling. Any student may apply to the Controller of Examinations on a prescribed form along with the specified fee.

Supplementary Examination. The interval between a supplementary examination and the previous professional examination shall not be more than two months. There shall be no special supplementary examination.