

# Add On- online Course On “Basic Dental Materials”



MAHARSHTRA INSTITUTE OF DENTAL SCIENCE AND  
RESEARCH, LATUR

UNDER THE AEGIS OF MUHS, NASHIK

**Add On- online Course “On Basic Dental Materials 2020”**

Organized By – Department of orthodontics, conservative and endodontics & Department of  
Prosthodontics

**Maharashtra Institute of Dental Sciences and Research, Latur.**

**I. CONTENT:**

The study of the following fields materials –

1. Prosthodontics materials
2. Orthodontics materials
3. Endodontics materials
4. Practical Training.

**II. LEARNING OBJECTIVES :**

1. To develop complete proficiency in dental materials.
2. To develop high standards of practice
3. Explain some of the difficulties invited in soldering, welding, impression making & cement mixing etc.
4. Discuss how dental materials changed over time to meet a range of applications.

**III. THE PROGRAM CURRICULUM AND SCHEDULE INCLUDES;**

1. Theoretical lectures
2. Demonstration

**IV. COURSE DESCRIPTION:**

Basic Dental Materials is a course that provides an introduction to dental materials. From this knowledge base, students learn to understand the role of dental materials in the delivery of

preventative and restorative care. The composition, properties, and manipulation of materials used in dentistry.

**V. TOPICS INCLUDE:**

**Module I :**

1. Structure of matter and principles of adhesion
2. Physical properties of dental metals.
3. Mechanical properties of metals.
4. Soldering and welding theory
5. Demonstration of metal properties and soldering and welding.

**Module II:**

1. Hydrochloride impression materials.
2. Elastomeric impression Materials
3. Synthetic resins
4. Gypsum products
5. Demonstration of handling of gypsum products, dental cements, and impression materials.

**Module III:**

1. Zinc Phosphate cement.
2. Manipulation and handling of cement.
3. Bonding & composite reviews.
4. Rubber Dam isolation

**VI. COURSE OUTCOME:**

- After completing Dental Materials, students will be equipped with a basic understanding of the following:
- Provide students with the principles of dental materials so they can understand the rationale for their use.
- Identify characteristics and phases of dental materials must possess to endure in the oral environment.

**VII. COURSE SUMMARY:**

MODULES	III MODULES / 3 DAYS
Duration :	16 HOURS COURSE
Start Date :	
End Date :	
Category :	Undergraduate Student Education
COURSE Level :	Continuing Education

**BASIC DENTAL MATERIALS**

<b>Module I</b>	Focus on basics of metallurgy and demonstration of soldering/welding.
<b>Module II</b>	Focus on Basics of impression materials and gypsum products, demonstration on handling of impression material.
<b>Module III</b>	Focus on Bonding & restorative materials, demonstration on Banding & restorative material

**VIII. ELIGIBILITY OF CANDIDATES:** Dental Under Graduate students.

**IX. EXPECTED COURSE OUTCOME:**

All the under graduate students will be getting benefit by gathering basic knowledge about dental materials and demonstration of handling materials will help to understand its properties and use in dentistry.

**X. ASSESSMENT METHODOLOGY:**

All under graduate will be informed through circular regarding curriculum and schedule of the course. All the participants are suppose to gather in the lecture hall 10 min prior to start of the course and this course is compulsory for all the students and attendance is compulsory for all 3 modules.

**XI. REGISTRATION FEES:** free

**XII. FACILITIES:**

Certificate will be given after completion of course and dental material required for the demonstration will be provided by the college.

**XIII. COURSE SCHEDULE :**

<b>Department of Orthodontics</b>				
1	<b>Module I/ Day 1</b>	1 hour	Structure of matter and principles and Physical properties of metals	Dr. Pravin Marure
2		1 hour	Mechanical properties and biocompatibility of metals	Dr. Shilpa Kendre
3		1 hour	Soldering & welding theory	Dr Chaitanya khanapure
4		1 hour	Wrought metal alloys	Dr. Yatish Joshi
5		1 hour	Demonstration of metal properties and soldering and welding	Dr. Anand Ambekar
<b>Dept. Of Prosthodontics</b>				
6	<b>Module II / Day 2</b>	1 hour	Hydrochloride impression materials	Dr. Suresh Kamble/ Dr. Susheen Gajre
7		1 hour	Non elastomeric impression materials	Dr. Ajit Jankar/ Dr. Sandeep Fere
8		1 hour	Synthetic resins	Dr. Shashi Patil/ Dr. Shyam Jadhav
9		1 hour	Gypsum products	Dr. Shital Wagh/ Dr. Shirish Pawar
10		2 hour	Demonstration of handling of gypsum products, dental cements, and impression material	Dr. Shashi Patil, Dr. Shyam Jadhav, Dr. Shital Wagh, Dr. Shirish Pawar
<b>Dept. Of Endodontics</b>				
11	<b>Module III / Day 3</b>	1 hour	Zinc Phosphate Cement	Dr. Abhishek Badade



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12		1 hour	Manipulation and handling of cements	Dr. Ajit Shinde
13		2 hour	Bonding & Composite Resins	Dr. Kabir
14		1 hour	Rubber Dam Isolation	Dr. Madhuri

