#### SCIENCE OF DENTAL MATERIALS

#### 2<sup>nd</sup> Year BDS Lecture outline (6<sup>TH</sup> JAN-9<sup>TH</sup> MAY 2020, 1<sup>st</sup> JUNE-30<sup>TH</sup> JUNE2020)

# **Dow Dental College**

### TERM 1: (6<sup>TH</sup> JAN-13<sup>TH</sup> JUNE)

Weeks	Dental Materials (Lecture 1)	Dental Materials (Lecture 2)	Dental Materials Practical
Week 1	Introduction to Dental Materials	Properties Used to Characterize Materials	Introduction To Dental Instruments And Partial Denture.
	Dr Faiza	Dr Faiza	
Week 2	Properties Used to Characterize Materials Dr Faiza	Properties Used to Characterize Materials Dr Faiza	Manipulation of Gypsum &     Demonstration of Plaster Slab fabrication
Week 3	Properties Used to Characterize Materials Dr Faiza	Properties Used to Characterize Materials Dr Faiza	Plaster Slab fabrication
Week 4	Properties Used to Characterize Materials Dr Faiza	Properties Used to Characterize Materials Dr Faiza	Plaster Slab Fabrication
Week 5	Properties Used to Characterize Materials Dr Faiza	Gypsum Products for Dental Casts  Dr Tabinda	Plaster Slab Fabrication
Week 6	Gypsum Products for Dental Casts Dr Tabinda	Dental Waxes Dr Fasiha	Plaster Slab Fabrication
Week 7	Impression Materials Dr Tabinda	Impression Materials Dr Tabinda	Plaster Slab Fabrication
Week 8	Impression Materials Dr Tabinda	Impression Materials Dr Tabinda	Demonstration of Wire Bending (A,E, F, H, I, J, K, L, M, N, T, V, W, X, Y, Z)
Week 9	Impression Materials Dr Tabinda	Impression Materials Dr Tabinda	Wire Bending     Impression making pouring and model trimming
Week 10	Impression Materials Dr Tabinda	Synthetic Polymers Dr Faiza	Wire Bending     Impression making pouring and model trimming
Week 11	Synthetic Polymers Dr Faiza	Denture Base Polymers Dr Faiza	Wire Bending     Impression making pouring and model trimming
Week 12	Denture Base Polymers Dr Faiza	Denture Base Polymers Dr Faiza	Wire Bending     Impression making pouring and model trimming
Week 13	Denture Lining Materials Dr Fasiha	Artificial Teeth Dr Fasiha	Demonstration of Wire Bending (B, C, D,G, O, P, Q, R. S, U)

Week 14	Metals and Alloys Dr Faiza	Gold and Alloys of Noble Metals Dr Faiza	Wire Bending
Week 15	Gold and Alloys of Noble Metals Dr Faiza	Base Metal Casting Alloys Dr Faiza	Wire Bending
Week 16	Steel and Wrought Alloys Dr Faiza	Steel and Wrought Alloys Dr Faiza	Wire Bending
Week 17	Investment and refractory dies Dr Tabinda	Investment and refractory dies Dr Tabinda	Wire Bending
Week 18	Casting Dr Faiza	Casting Dr Faiza	Wire Bending Completion
Week 19	Revision class	Revision Class	Wire Bending Completion

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# 2<sup>nd</sup> Year BDS Lecture Outline

# Term 2: (15th JUNE- 25TH OCTOBER 2020)

Weeks	Dental Materials Lecture	Dental Materials Lecture 2	Dental Materials Practical
Week 1	Partial Denture and its components	Partial Denture and its components	Introduction to Partial Denture Demonstration of clasp fabrication, wax up and set up
Week 2	Requirements of direct filling materials and historical perspective Dr Fasiha	Dental Amalgam Dr Tabinda	clasp fabrication
Week 3	Dental Amalgam Dr Tabinda	Dental Amalgam Dr Tabinda	clasp fabrication
Week 4	Resin-based filling materials Dr Faiza	Resin-based filling materials Dr Faiza	Wax up
Week 5	Resin-based filling materials Dr Faiza	Resin-based filling materials Dr Faiza	Wax up
Week 6	Adhesive restorative materials: Bonding of resin-based material Dr Faiza	Adhesive restorative materials: Bonding of resin-based materials Dr Faiza	Wax up
Week 7	Adhesive restorative materials: Bonding of resin-based materials Dr Faiza	Adhesive restorative materials: Bonding of resin-based materials Dr Faiza	Articulation
Week 8	Glass Ionomer restorative materials Dr Faiza	Glass Ionomer restorative materials Dr Faiza	Teeth set up
Week 9	Resin Modified Glass Ionomers & Related Materials Dr Fasiha	Resin Modified Glass Ionomers & Related Materials Dr Fasiha	Teeth set up

Week 10	Finishing & Polishing Materials Dr Fasiha	Finishing & Polishing Materials Dr Fasiha	Teeth set up
Week 11	Finishing & Polishing Materials Dr Fasiha	Requirements of dental cements for lining, base & luting materials Dr Fasiha	Flasking and Dewaxing
Week 12	Cements based on phosphoric acid Dr Faiza	Cements based on phosphoric acid Dr Faiza	Flasking and Dewaxing
Week 13	Cements based on organometallic chelate compounds  Dr Faiza	Cements based on organometallic chelate compounds Dr Faiza	Demonstration and Manipulation of Dental Cements Packing and curing
Week 14	Polycarboxylates, Glass ionomers & Resin modified glass ionomers for luting and lining Dr Faiza	Polycarboxylates, Glass ionomers & Resin modified glass ionomers for luting and lining Dr Faiza	Demonstration and Manipulation of Dental Cements Packing and curing
Week 15	Implants (New Inventions) Dr Tabinda	Implants (New Inventions) Dr Tabinda	Demonstration and Manipulation of Dental Cements Packing and curing
Week 16	Ceramics and Porcelain Fused to Metal Dr Tabinda	Ceramics and Porcelain Fused to Metal Dr Tabinda	Demonstration and Manipulation of Dental Cements Packing and curing
Week 17	Ceramics and Porcelain Fused to Metal Dr Tabinda	Ceramics and Porcelain Fused to Metal Dr Tabinda	Finishing and Polishing
Week 18	Endodontic materials Dr Tabinda	Endodontic materials Dr Tabinda	Finishing and Polishing
Week 19	Temporary Crown and Bridge Dr Fasiha	Revision Class	Submission

#### Midterm topics:

Introduction to Dental Materials **Gypsum Products for Dental Casts** Impression Materials **Denture Lining Materials** Metals and Alloys Base Metal Casting Alloys Investment and refractory dies

Properties Used to Characterize Materials **Dental Waxes** Synthetic Polymers **Artificial Teeth** Gold and Alloys of Noble Metals Steel and Wrought Alloys Casting

INCHARGE DEPARTMENT

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