**TERM 1: (6TH JAN-13TH JUNE)**

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Dental Materials (Lecture 1)</th>
<th>Dental Materials (Lecture 2)</th>
<th>Dental Materials Practical</th>
</tr>
</thead>
</table>
| Week 1  | Introduction to Dental Materials  
Dr Faiza | Properties Used to Characterize Materials  
Dr Faiza | Introduction To Dental Instruments And Partial Denture. |
| 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 Fasihah | Plaster Slab Fabrication |
| Week 7  | Impression Materials  
Dr Tabinda | Impression Materials  
Dr Tabinda | Plaster Slab Fabrication |
| Week 8  | Impression Materials  
Dr Tabinda | Impression Materials  
| 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 Faisha | Artificial Teeth  
Dr Fasihah | Demonstration of Wire Bending (B, C, D, G, O, P, Q, R, S, U) |
<table>
<thead>
<tr>
<th>Week 14</th>
<th>Metals and Alloys</th>
<th>Gold and Alloys of Noble Metals</th>
<th>• Wire Bending</th>
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<tr>
<td></td>
<td>Dr Faiza</td>
<td>Dr Faiza</td>
<td></td>
</tr>
<tr>
<td>Week 15</td>
<td>Gold and Alloys of Noble Metals</td>
<td>Base Metal Casting Alloys</td>
<td>• Wire Bending</td>
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<td>Dr Faiza</td>
<td>Dr Faiza</td>
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<tr>
<td>Week 16</td>
<td>Steel and Wrought Alloys</td>
<td>Steel and Wrought Alloys</td>
<td>• Wire Bending</td>
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<td></td>
<td>Dr Faiza</td>
<td>Dr Faiza</td>
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<tr>
<td>Week 17</td>
<td>Investment and refractory dies</td>
<td>Investment and refractory dies</td>
<td>• Wire Bending</td>
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<td>Dr Tabinda</td>
<td>Dr Tabinda</td>
<td></td>
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<tr>
<td>Week 18</td>
<td>Casting</td>
<td>Casting</td>
<td>• Wire Bending Completion</td>
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<tr>
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<td>Dr Faiza</td>
<td>Dr Faiza</td>
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<tr>
<td>Week 19</td>
<td>Revision class</td>
<td>Revision Class</td>
<td>• Wire Bending Completion</td>
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**SCIENCE OF DENTAL MATERIALS**

**2nd Year BDS Lecture Outline**

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

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

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