### SCIENCE OF DENTAL MATERIALS

**2nd Year BDS Lecture outline (28th January – 8th November 2019)**

**Dow Dental College**

### TERM 1: (28th January – 8th June 2019)

<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>
<tbody>
<tr>
<td>Week 1</td>
<td>Introduction To Dental Materials (30/1/19) Dr Tabinda</td>
<td>Introduction To Dental Materials (1/2/19) Dr Tabinda</td>
<td>Introduction To Dental Instruments And Partial Denture.</td>
</tr>
</tbody>
</table>
| Week 2 | Properties Used To Characterize Materials (6/2/19) Dr Tabinda | Properties Used To Characterize Materials (08/2/19) Dr Tabinda | • Manipulation of Gypsum & Demonstration of Plaster Slab fabrication  
 • Introduction to Partial Denture |
| Week 3 | Properties Used To Characterize Materials (13/2/19) Dr Tabinda | Properties Used To Characterize Materials (15/2/19) Dr Tabinda | • Plaster Slab fabrication  
 • Impression Taking & Pouring |
| Week 4 | Properties Used To Characterize Materials (20/2/19) Dr Tabinda | Properties Used To Characterize Materials (22/2/19) Dr Tabinda | • Plaster Slab Fabrication  
 • Impression taking & Pouring |

### SPORTS WEEK (26th February – 2nd March 2019)

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Dental Materials Practical</th>
</tr>
</thead>
</table>
| Week 5 | Gypsum Products for Dental Casts (8/3/19) Dr Faiza | • Plaster Slab Fabrication  
 • Model Trimming And Clasp Making |
| Week 6 | Gypsum Products for Dental Casts (13/3/19) Dr Faiza | Dental Waxes (15/3/19) Dr Faiza | • Plaster Slab Fabrication  
 • Model Trimming And Clasp Making |
| Week 7 | Impression Materials (20/3/19) Dr Faiza | Impression Materials (22/3/19) Dr Faiza | • Plaster Slab Fabrication  
 • PD Wax up, Articulation & Set up |
 • PD Wax up, Articulation & Set up |
| Week 9 | Impression Materials (3/4/19) Dr Faiza | Impression Materials (5/4/19) Dr Faiza | • Wire Bending  
 • PD Wax up, Articulation & Set Up |
| Week 10 | Synthetic Polymers (10/4/19) Dr Faiza | Synthetic Polymers (12/4/19) Dr Faiza | • Wire Bending  
 • PD Wax up, Articulation & Set Up |
| Week 11 | Denture Base Polymers (17/4/19) Dr Faiza | Denture Base Polymers (19/4/19) Dr Faiza | • Wire Bending  
 • Flasking & Dewaxing |
| Week 12 | Denture Lining Materials & Artificial Teeth Dr Faiza (24/4/19) | Metals & Alloys (26/4/19) Dr Tabinda | • Wire Bending  
 • Flasking & Dewaxing |
| Week 13 | Gold & Alloys of Noble Metals Dr Tabinda Metals (1/5/19) | Gold & Alloys of Noble Metals (3/5/19) Dr Tabinda | • Wire Bending  
 • Packing & Curing |
| Week 14 | Base Metal Casting Alloys (8/5/19) Dr Tabinda | Base Metal Casting Alloys (10/5/19) Dr Tabinda | • Wire Bending  
 • Packing & Curing |
| Week 15 | Steel & Wrought Alloys (15/5/19) Dr Tabinda | Investment & Refractory Dies (17/5/19) Dr Faiza | • Wire Bending  
 • Deflasking, Finishing & Polishing |
<table>
<thead>
<tr>
<th>Week</th>
<th>Dental Materials</th>
<th>Lecture</th>
<th>Dental Materials</th>
<th>Lecture</th>
<th>Dental Materials Practical</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Requirements of direct filling materials and historical perspective (10/7/19) Dr Faiza</td>
<td>Dental Amalgam (12/7/19) Dr Faiza</td>
<td>Demonstration of Wire Bending (B, C, D,G, O, P, Q, R, S, U)</td>
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<tr>
<td>Week 2</td>
<td>Dental Amalgam (17/7/19) Dr Faiza</td>
<td>Dental Amalgam (19/7/19) Dr Faiza</td>
<td>Wire Bending (B, C, D,G, O, P, Q, R, S, U)</td>
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<tr>
<td>Week 3</td>
<td>Resin-based filling materials (24/7/19) Dr Faiza</td>
<td>Resin-based filling materials (26/7/19) Dr Tabinda</td>
<td>Wire Bending (B, C, D,G, O, P, Q, R, S, U)</td>
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<tr>
<td>Week 4</td>
<td>Resin-based filling materials (31/7/19) Dr Tabinda</td>
<td>Adhesive restorative materials: Bonding of resin-based materials (2/8/19) Dr Tabinda</td>
<td>Wire Bending (B, C, D,G, O, P, Q, R, S, U)</td>
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<tr>
<td>Week 6</td>
<td>Glass Ionomer restorative materials (16/8/19) Dr Tabinda</td>
<td>Glass Ionomer restorative materials (21/8/19) Dr Tabinda</td>
<td>Wire Bending (B, C, D,G, O, P, Q, R, S, U)</td>
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<tr>
<td>Week 7</td>
<td>Glass Ionomer restorative materials (23/8/19) Dr Tabinda</td>
<td>Resin Modified Glass Ionomers &amp; Related Materials (28/8/19) Dr Tabinda</td>
<td>Wire Bending (B, C, D,G, O, P, Q, R, S, U)</td>
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<td>Week 8</td>
<td>Resin Modified Glass Ionomers &amp; Related Materials (30/8/19) Dr Tabinda</td>
<td>Finishing &amp; Polishing Materials (4/9/19) Dr Faiza</td>
<td>Wire Bending Completion</td>
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<td>Week 9</td>
<td>Finishing &amp; Polishing Materials (6/9/19) Dr Faiza</td>
<td>Finishing &amp; Polishing Materials (11/9/19) Dr Faiza</td>
<td>Demonstration of Manipulation of Dental Cements</td>
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<tr>
<td>Week 10</td>
<td>Requirements of dental cements for lining, base &amp; luting materials (13/9/19) Dr Tabinda</td>
<td>Cements based on phosphoric acid (18/9/19) Dr Tabinda</td>
<td>Demonstration of Manipulation of Dental Cements</td>
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**Summer Vacations & Midterm Preparatory Leave (9th June 2019 – 1st July 2019)**

**MIDTERM EXAMINATION: 2nd – 9th July 2019**

**SCIENCE OF DENTAL MATERIALS**

**2nd Year BDS Lecture Outline**
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<tr>
<th>Week 11</th>
<th>Cements based on phosphoric acid (20/9/19) Dr Tabinda</th>
<th>Cements based on organometallic chelate compounds (25/9/19) Dr Tabinda</th>
<th>Manipulation of Dental Cements by students</th>
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<tr>
<td>Week 12</td>
<td>Cements based on organometallic chelate compounds (27/9/19) Dr Tabinda</td>
<td>Polycarboxylates, Glass ionomers &amp; Resin modified glass ionomers for luting and lining (2/10/19) Dr Tabinda</td>
<td>Manipulation of Dental Cements by students</td>
</tr>
<tr>
<td>Week 13</td>
<td>Polycarboxylates, Glass ionomers &amp; Resin modified glass ionomers for luting and lining (4/10/19) Dr Tabinda</td>
<td>Implants (Introduction, Types, Material available) (9/10/19) Dr Faiza</td>
<td>Demonstration of Manipulation of Direct Restorative Materials</td>
</tr>
<tr>
<td>Week 14</td>
<td>Implants (New Inventions) (11/10/19) Dr Faiza</td>
<td>Ceramics and Porcelain Fused to Metal (16/10/19) Dr Faiza</td>
<td>Demonstration of Manipulation of Direct Restorative Materials</td>
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<tr>
<td>Week 15</td>
<td>Ceramics and Porcelain Fused to Metal (18/10/19) Dr Faiza</td>
<td>Ceramics and Porcelain Fused to Metal (23/10/19) Dr Faiza</td>
<td>Placement of Direct Restorative Materials by Students</td>
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<tr>
<td>Week 16</td>
<td>Endodontic materials (25/10/19) Dr Faiza</td>
<td>Endodontic materials (30/10/19) Dr Faiza</td>
<td>Placement of Direct Restorative Materials by Students</td>
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<tr>
<td>Week 17</td>
<td>Revision Class (1/11/19)</td>
<td>Revision Class (6/11/19)</td>
<td>Placement of Direct Restorative Materials by Students</td>
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<td>Week 18</td>
<td>Revision Class (8/11/19)</td>
<td>Revision Class (13/11/19)</td>
<td>Submission</td>
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**TERM 2: (10th July – 8th November 2019)**