

## **SYLLABUS / COURSE DETAILS FOR:**

### **PRE CLINICAL DENTISTRY:**

#### **Introduction:**

Pre-clinical dentistry deals with the practice of dentistry using clinical simulation models and performing procedures in the laboratory that will be later in the clinical practice years of training used and applied for making and providing dental appliances / restorations for real patients.

Students shall be exposed to the educational, learning and training experience of dental laboratory techniques and simulated clinical procedures done on phantom head units in the laboratory.. At the end of training, students will appear in the theory and practical examination conducted by the university. This experience of PRE CLINICAL DENTISTRY is to be gained in 2<sup>nd</sup> year BDS and shall relate to the following areas:

- A. Pre-clinical prosthodontics**
- B. Pre-clinical operative dentistry and endodontics**
- C. Pre-clinical orthodontics**

#### **PRE-CLINICAL PROSTHODONTICS:**

#### **TEACHING & LEARNING MATERIAL for Preclinical Prosthodontics**

Wilson HJ, Mansfield MA, Heath JR, Spence D. Dental Technology and Materials for Students. 8<sup>th</sup> edition 1987. Blackwell Scientific Publications, Oxford (UK). 1987.

Lakshmi S. Preclinical Manual of Prosthodontics. Elsevier Health Sciences, India 2010.

Vanitha Reddy. Pre-clinical Prosthodontics. CBS Publishers & Distributors, 2009.

Pre-clinical and Laboratory Manual. ... Text books of Complete Denture Prosthodontics.pdf.rar. available at: <http://www.filefactory.com/file/> <http://ifile.it/>  
Morris Mac Hudis. Dental laboratory prosthodontics [Hardcover]. Amazon Books.

Notes / Handouts,

E-Learning Tools Videos, DVD, CDs explaining technical and clinical aspects of prosthodontic procedures) and use of other e-learning websites.

Practical sessions and small-groups tutorial classes.

<b>Course Description &amp; Objectives:</b>	<b>Suggested Practical Hours</b>
<b>Pre-clinical Prosthodontics: Removable Prosthodontics (Preclinical Complete Dentures)</b> Students will perform steps / procedures involved in the fabrication and adjustment of complete dentures. These will include:	150

<p>Introduction to treating edentulous patients.  Use of essential materials and equipments.  Producing properly contoured casts of edentulous jaws using moulds.  Understanding anatomic landmarks / denture extension and borders.  Fabricating custom trays and wax occlusal rims.  Making record / temporary denture bases and occlusal registration rims / blocks.  Understanding Jaw relations and jaw records.  Selecting shade, shape, mould and material for denture teeth.  Articulating / mounting jaw records / casts.  Setting up denture teeth on complete denture bases.  Performing esthetic wax-up for complete dentures by contouring gingival areas and other polished surfaces.  Investing / packing mould and processing / curing and finishing complete dentures.</p>	
<p>Removable Prosthodontics (Preclinical Removable Partial dentures):  This course provides fundamental foundation knowledge and skills related to Removable Partial Denture via simulated patient care model and laboratory exercises.  Laboratory exercises will provide the dental student with an understanding of the partially edentulous condition and its classification, as well as the diagnosis, treatment planning and treatment of partially edentulous patients with RPDs. At the end of the course, students will be familiar and skillful regarding the terminology, components and related concepts and principles of RPD design and its construction stages. The course content includes:  <b>Introduction to RPDs.</b>  Comparison of FPDs and RPDs.  Dental surveyors and its uses.  Surveying of jaw casts and its clinical importance.  Classification of partially dentate jaws and the relevant rules governing.  Different types of RPDs.  Components of RPDs.  Tooth preparation (Rest, guide planes, clasp undercut and reciprocation etc) using patients' simulator units.  Making anterior RPD (Saddle outline,</p>	

support, connection and retention). Laboratory steps and procedures for acrylic and metallic cast RPDs: Making wrought wire circumferential and bar clasps. Making Adam Clasp. Designing and preparation of Wax patterns on duplicated prepared master cast in investment material.	
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**PRE-CLINICAL OPERATIVE DENTISTRY:**

**TEACHING & LEARNING MATERIAL:**

Joseph R Evans, John H Wilke. Atlas of Operative Dentistry: Preclinical and clinical procedures. Quintessence books Publishing Co.

Reddy Narendranathan, Vanetha N. Operative Dentistry and Endodontics including Viva Voce Questions. CBS Publishers and Distributors, Karachi.

Richard L Kahn, Pinkerton RJ, Kagihara LE. Fundamentals of Preclinical Operative Dentistry. [www.bookdepository.co.uk](http://www.bookdepository.co.uk)

E-Learning tools: Videos (DVD, CDs explaining technical and clinical aspects of operative dentistry procedures) and use of other e-learning websites.

Notes, Handouts, practical demonstrations and small-groups tutorial discussions

The objective of this course is to give foundation knowledge of operative instrumentation, dental terminology, tooth anatomy, principles of cavity preparations, and basics of tooth restorations. This will develop the psychomotor skills necessary for basic intra-coronal preparations and restorations of teeth including endodontic procedures. The skills with a hand piece are mainly accomplished through the use of patients' simulation approaches. The restorations for teeth are taught in a dental operative phantom head laboratory. The development and practice of these skills using a hand piece (dental drill) begins at orientation and continues throughout the academic year.

<b>Course Description &amp; Objectives:</b>	<b>Suggested Practical Hours</b>
Students will be introduced and trained to: Develop hand skills and a working knowledge of clinical dentistry. Use dental unit / operatory. Use instrument used in cavity preparation. Understand classification of dental carious lesions. Apply principles of cavity preparation. Cavity preparation on plaster / acrylic / extracted teeth / phantom heads. Know about materials used in cavity	150

<p>preparation.          Know restorative and endodontic materials.  <b>Endodontics Pre-clinical Course:</b>          The purpose of this course is to introduce students to the basic principles of root canal therapy (technical aspects) and introduce them to the diagnostic elements of root canal procedures.. Students are introduced to endodontic techniques under simulated conditions.  <b>Preclinical Practical Conservative Dentistry Procedures:</b>          Preparation of Plaster Blocks: 5 x 5 x 5 cm and 2 x 2 x 2 cm.          2. Preparation of Proximal cavity in the prepared block.          3. Preparation of Class II type cavity (Dove tail form)          4. Preparation of teeth made from plaster models / acrylic resin and preparing various types of cavities in these.          5. Mounting teeth in a manikin Jaw.          6. Preparation of cavities on the mounted teeth in the manikin jaw.          7. Preparation of teeth for root canal treatment.</p>	
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**PRECLINICAL ORTHODONTICS:**

**Teaching & Learning Resources:**

Richard A Johnson. Preclinical Orthodontics / Pediatric dentistry. Amazon Books, USA.

Notes, Handouts, Tutorials.

Laboratory practical & demonstration sessions.

E-Learning tools: videos, CDs / DVDs / use of e-learning websites.

<b>Course Description &amp; Objectives:            Student should be able to</b>	<b>Suggested            Practical            Hours</b>
<p>This course is designed to expose the student to basic orthodontic laboratory and clinical procedures and encourages the development of technical abilities in banding, bonding, wire bending, and orthodontic appliances fabrication &amp; Diagnosis and treatment planning for various categories of malocclusions using jaw casts and models.  <b>Laboratory Exercises and demonstrations:</b></p>	<p>60</p>

Introduction to orthodontic appliances and components of orthodontic appliances. Properties of wires used in orthodontics. Principles of wire bending including wire bending on wooden blocks and models. Fitting bands and brackets on teeth. Laboratory procedures for making orthodontic appliances.	
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## **SYLLABUS / COURSE DETAILS FOR:** **ORAL PATHOLOGY:**

### **Introduction:**

The branch of medicine dealing with the essential nature of orofacial diseases and disorders. It explores the structural and functional manifestations of oral diseases.

### **Competencies**

Upon completion of this course the BDS Students should ...

- Be able to identify the causes and the etiological factors responsible for the occurrence of a disease.
- Have the understanding of the mechanism of development of oral diseases
- Be able to correlate the mechanism of development of the disease with the relevant clinical signs and symptoms
- Be competent to determine the investigation required for oral diseases
- Have the knowledge of laboratory investigations and their principles
- Be able to identify and correlate the histopathological picture with the clinical disease and radiographic finding
- Be able to prescribe and interpret laboratory investigations and make a sound conclusion
- Have enough knowledge to work out differential out diagnosis
- Familiarity with management and prognosis of diseases is important
- Have the attribute for analytic and critical thinking for reaching a conclusive diagnosis and conduct research
- Have the ability and the curiosity to become an in dependence lifelong learner.
- The dental students should be able to diagnose and treat oral diseases.
- They should have knowledge of the following topics:

<b>Course Description &amp; Objectives:</b>	<b>Suggested Lecture Hours</b>
• Disturbances of teeth, jaws oral mucosa, gingival ,tongue and Lymphatic tissue	8
• Dental caries including aetiology, clinical features types, histo pathology of enamel, dentin, & root caries	3
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