

BASIC MEDICAL SCIENCES PRE-CLINICAL SKILLWORK

| DEPARTMENT | PRE-CLINICAL SKILL WORK |
|---------------------|---|
| ANATOMY | <ul style="list-style-type: none"> ▪ To locate various structures of the body and to mark the topography of the living anatomy. ▪ To identify various tissues under microscope. ▪ To identify the features in radiographs and modern imaging techniques. ▪ To detect various congenital abnormalities. ▪ Observation of dissected specimens and pro-sections ▪ Osteology ▪ Identification of histology slides. |
| PHYSIOLOGY | <ul style="list-style-type: none"> ▪ Conduct experiments designed for the study of physiological phenomena. ▪ Calculation of blood indices ▪ Determination of RBC count ▪ Determination of WBC count, ▪ Determination of DLC count ▪ Recording of blood pressure ▪ Auscultation of heart sounds ▪ Haemoglobin estimation ▪ Determination of Blood grouping ▪ Determination of Bleeding time and clotting time. |
| BIOCHEMISTRY | <ul style="list-style-type: none"> ▪ Introduction to lab procedures. ▪ Urine analysis. ▪ Introduction to clinical chemistry ▪ Estimation of blood urea ▪ Estimation of serum protein ▪ Estimation of blood sugar level ▪ Precipitation reaction of albumin, gelatin, peptone ▪ Estimation of serum creatinine ▪ Estimation of serum albumin ▪ Colorimeter ▪ Electrophoresis and chromatography. ▪ Glucose tolerance test. |
| PHARMACOLOGY | <ul style="list-style-type: none"> ▪ General Prescription writing ▪ To appreciate adverse reactions and drug interactions of commonly used drugs. ▪ Critically evaluate drug formulation and be able to interpret |

Dr.  **GIRISH KATTI M.D.S.**
PRINCIPAL
NAVODAYA DENTAL COLLEGE
RAICHUR-584 103.



| | |
|--------------------------|---|
| | <p>the clinical pharmacology of marketed preparations commonly used in dentistry.</p> <ul style="list-style-type: none"> ▪ Preparation of mouth wash, mouth Gargle, gum Paint and powders. ▪ Demonstration of common dosage form. ▪ Dental prescription writing for common oral discascs |
| GENERAL PATHOLOGY | <ul style="list-style-type: none"> ▪ Apply the scientific study of disease processes, which result in morphological and functional alterations in cells, tissues and organs to the study of pathology and the practice of dentistry. ▪ Practical work- Hb estimation, Blood grouping, abnormal urine analysis ▪ Determination of differential count ▪ Microscopic study of Pathological slides ▪ Examination of gross specimens. |
| MICROBIOLOGY | <ul style="list-style-type: none"> ▪ Understand the basis of various branches of microbiology and able to apply the knowledge relevantly. ▪ Understand and practice various methods of sterilisation and disinfection in dental clinics. ▪ Have a sound understanding of various infectious diseases and lesions in oral cavity. ▪ Simple staining, Gram staining and Acid fast Staining ▪ Albert stain, ziehl neelson staining |
| DENTAL MATERIALS | <ul style="list-style-type: none"> ▪ Preparation of cube, pyramid and other shapes with plaster. ▪ Manipulation of alginate, impression compound,. ▪ Silver amalgam and trituration. ▪ Manipulation of ZOE,Zinc phosphate and Glass ionomer cements. ▪ Manipulation of rubber base impression material. |

Girish Katti
Dr. GIRISH KATTI M.D.S.
 PRINCIPAL
 NAVODAYA DENTAL COLLEGE
 RAICHUR-584 103.

DENTAL PRE-CLINICAL SKILL WORK OF UG/PG STUDENTS.

| DEPARTMENT | UG – PRE-CLINICAL | PG – PRE-CLINICAL |
|---|--|---|
| PRE-CLINICAL ORTHODONTICS | <ul style="list-style-type: none"> • Basic wire bending exercises • Discussion on clinical topics • Spotters | <ul style="list-style-type: none"> • Basic wire bending exercise • Various orthodontic appliances • Soldering exercises • Welding exercises • Model analysis • Cephalometric analysis • Basics of clinical photography including digital photography |
| PRE –CLINICAL CONSERVATIVE DENTISTRY | <ul style="list-style-type: none"> • Identification and study of hand cutting instruments. • Identification and use of rotary cutting instruments in contra angled hand pieces (micromotor) • Cavity preparation (conservative and conventional) from class I to class VI on plaster models and on natural extracted teeth. • Exercises on phantom heads models (Typhodonts) including | <ul style="list-style-type: none"> • Tooth carvings of all permanent teeth. • Cavity preparation from class I to class VI on typhodont teeth and extracted natural teeth. • Root canal therapy on extracted natural teeth. • Post and core procedures on extracted teeth. • Inlay tooth preparations with lab procedures • Crown preparations |


Dr. GIRISH KATTI M.D.S.
PRINCIPAL
NAVODAYA DENTAL COLLEGE
RAICHUR-584 103.

| | | |
|--|---|---|
| | <p>tooth preparation, base application, placement of matrix band and wedge followed by amalgam restoration</p> <ul style="list-style-type: none"> • Demo on polishing of restorations. • Manipulation of various cements and other dental materials. | |
| PRE-CLINICAL PEDODONTICS AND PREVENTIVE DENTISTRY | <ul style="list-style-type: none"> • Behavioural management • Brushing techniques demonstration • Application of pit and fissure sealants –Demo • Demo on application of rubber dams. • Topical fluoride application • Demonstration of scaling | <ul style="list-style-type: none"> • Teeth carvings of all deciduous teeth • Fabrication of Myofunctional appliances. • Soldering exercises • Welding exercises |
| DENTAL ANATOMY AND ORAL HISTOLOGY | <ul style="list-style-type: none"> • Basic carving of different shapes (cube and rectangles). • Permanent Teeth carvings on wax blocks • Age estimation on plaster casts of different age groups | <ul style="list-style-type: none"> • Teeth carvings • Preparation of ground sections • Biopsy-Grossing, processing and staining. |

Girish Katti
Dr. GIRISH KATTI M.D.S.
PRINCIPAL
NAVODAYA DENTAL COLLEGE
RAICHUR-584 103.

| | | |
|------------------------------------|--|---|
| | <ul style="list-style-type: none"> • Identification of permanent and deciduous teeth. • Microscopic study of oral tissues. • Spotters • Developmental disorders on casts | |
| PRE-CLINICAL PROSTHODONTICS | <ul style="list-style-type: none"> • Primary impressions of maxilla and mandible on metal dies. • Study of Anatomical landmarks. • Preparation of special trays (maxilla and mandible) in base plates and in self cured acrylic resin.. • Fabrication of occlusal rims. • Manipulation of various dental materials like dental plaster, impression compound. • Teeth arrangement in class I relation. • Repair of fractured dentures. | <ul style="list-style-type: none"> • Construction of edentulous and dentulous trays. • Fabrication of occlusal rims. • Study of anatomical land marks • Primary impression taking on metal dies. • Beading and boxing • Space designer • Teeth arrangement in class I, II, III relations. • Cast partial dentures • Preparation of all crowns. |


Dr. GIRISH KATTI M.D.S.
PRINCIPAL
NAVODAYA DENTAL COLLEGE
RAICHUR-584 103.

DETAILS OF PRE CLINICAL SKILL LABS

1. Pre –Clinical Prosthodontics Lab

- Seating capacity -100
- Bunsen burner -71
- Acrilizer -2
- Study models-100
- Lathe -1
- Dewaxing unit-1
- Model trimmer -1
- Water heater-
- Dry lab-1
- Plaster dispenser -1
- Stone dispenser-1

2. Pre –Clinical Conservative Lab.


- Seating capacity – 60
- Phantom chairs – 60
- Models – 60
- Micro motor hand pieces- 60
- Amalgamator – 03

3. Pre-Clinical Pedo/Ortho lab

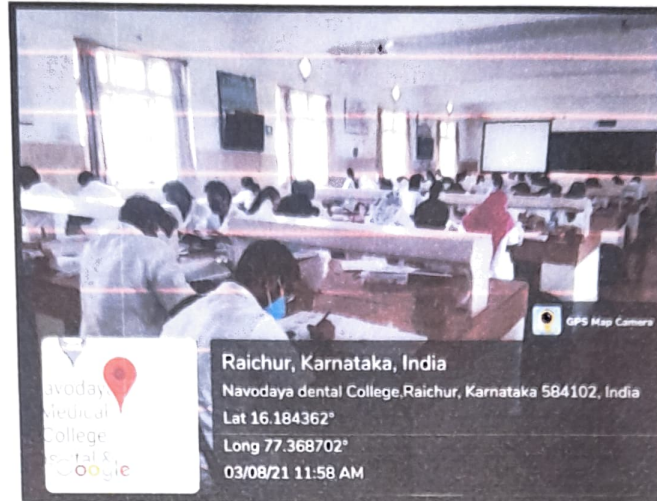
- Seating Capacity -60

4. Pre-Clinical Dental Anatomy and Oral Histology Lab

- Seating Capacity-60


PRINCIPAL
Navodaya Dental College,
RAICHUR

DENTAL ANATOMY AND ORAL HISTOLOGY LAB



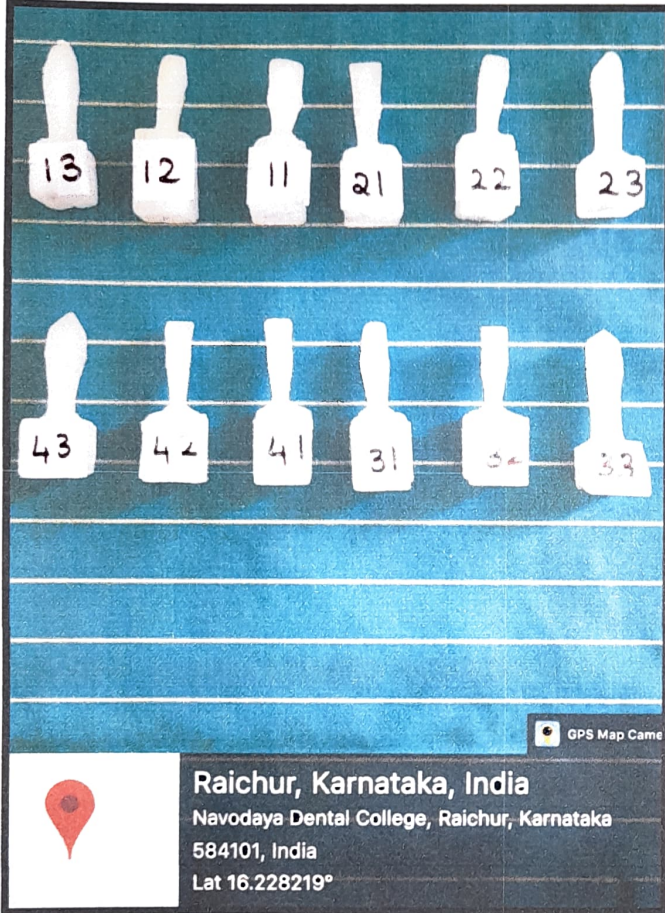
DENTAL STUDY MODELS



Dr. GIRISH KATTI M.D.S.
 PRINCIPAL
 NAVODAYA DENTAL COLLEGE
 RAICHUR-584 101



Navodaya Education Trust®
Navodaya Dental College
Raichur



Girish Katti
Principal

Dr. GIRISH KATTI M.D.S.
PRINCIPAL
NAVODAYA DENTAL COLLEGE
RAICHUR-584 103.