Maratha Mandal's Nathajirao G Halgekar Institute of Dental Sciences & Research Centre, Belagavi

INDEX

Sl.No	Department
1	Oral Medicine & Radiology
2	Implantology
3	Public Health Dentistry
4	Oral & Maxillofacial Surgery
5	Prosthodontics, Crown & Bridge including Implantology
6	Conservative Dentistry & Endodontics
7	Pediatrics and Preventive Dentistry
8	Orthodontics & Dentofacial Orthopedics
9	Peridontology & Implantology
10	Oral Maxillofacial Pathology & Microbiology

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LIST OF CLINICAL SKILL MODELS

DEPARTMENT OF ORAL MEDICINE AND RADIOLOGY

2.3.2: Use of Clinical Skills Laboratory / Simulation Based Learning:

IIIrd BDS

Sl. No	Name of clinical / laboratory skills model
1	Case History- Pulp and periapical diseases
2	Examination of TMJ,
3	Examination of Salivary glands
4	Examination of Lymphnodes
5	Extraoral examination
6	Intraoral examination
7	Making IOPA
8	Processing Radiograph

IV BDS

Sl. No	Name of clinical / laboratory skills model
1	Case History- Pulp and periapical diseases
2	Examination of TMJ,
3	Examination of Salivary glands
4	Examination of Lymphnodes
5	Extraoral examination
6	Intraoral examination
	Examination of soft tissues of oral cavity
7	Identification, examination and description of White patch.
8	Identification, examination and description of Red patch.
9	Identification, examination and description of Ulcer.
10	Identification, examination and description of Swelling
11	Making a D/D list for a given special case
12	Making IOPA
13	Making Bitewing
14	Making occlusal
15	Processing Radiograph

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Post Graduate

Sl. No	Name of clinical / laboratory skills model
1	Case History- Pulp and periapical diseases
2	Examination of TMJ,
3	Examination of Salivary glands
4	Examination of Lymphnodes
5	Extraoral examination
6	Intraoral examination
	Examination of soft tissues of oral cavity
7	Identification, examination and description of White patch.
8	Identification, examination and description of Red patch.
9	Identification, examination and description of Ulcer.
10	Identification, examination and description of Swelling
11	Identification, examination and description of Vesiculobullous lesions
12	Identification, examination and description of Cysts of the jaw
13	Identification, examination and description of Salivary gland disorders
14	Identification, examination and description of TMJ disorders
15	Identification, examination and description of Orofacial pain
16	Identification, examination and description of pigmented lesions
\17	Identification, examination and description of malignant lesions
18	Making a D/D list for a given special case
19	Vitality testing
20	Cytology Smear
21	Incisional Biopsy
22	Excisional Biopsy
23	Punch Biopsy
24	Making IOPA
25	Making Bitewing
26	Making occlusal
27	Making OPG
28	Making Lateral Cephalogram
29	Making lateral skull/PA skull/AP skull
30	Making SMV
31	Making Reverse towns
32	Making Chest Radiograph
33	Making PNS view
34	Puffed Cheek PNS
35	TMJ Tomography
36	TMJ –Traanscranial/Transorbital/Transpharyngeal
37	Processing Radiograph both Intraoral/Extraoral
38	Teaching Skills (Lecture for UG, Seminar, Case presentations)

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IMPLANTOLOGY

Implant Skill Models

1. Dummy Models for Implant Placement
2. Indirect Sinus elevation models with Bone grafts
3. Indirect Sinus Lift procedure with Bone graft placed
4. Newer Technique of Indirect Sinus Lift Procedure
5. Implant Surgical Guide Stent

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DEPARTMENT OF PUBLIC HEALTH DENTISTRY

List of Health Education Model:

1. Materials and instruments used for restoration of the tooth
2. Materials used for before starting surgical procedure in dentistry
3. Waste disposal
4. Fluoride delivery methods
5. Uses of color coded bins
6. Angulation of impacted teeth
7. Progression of caries
8. School dental health program
9. Mandibular fracture and treatment
10. Prosthodontic materials used in dentistry
11. Discoloration of teeth and their treatment
12. Habit breaking appliance
13. What is dental plaque and its treatment
14. Materials used for restoration of the teeth
15. Orthodontic treatment
16. Placement of denture in oral cavity

The equipments used in Public Health Dentistry for the students are:

1. Health Education booklets:
   The students prepare the health education booklets in their final year postings and in their internship they carry the booklets in the school and colleges camps for explaining the details about the oral health .
2. Health Education Models:
   Students prepare the Health Education Models in subgroups and present it in front of staff and explain to the patients about the importance of oral health.
3. Tooth Brushing Models:
   Students demonstrate the brushing techniques and importance of tooth brushing practically to the patients and in the camps to the school children.

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2.3.2: Use of Clinical Skills Laboratory / Simulation Based Learning:

Point 1. List of clinical / laboratory skills models/facilities

Sl. no.	Name of clinical / laboratory skills model	2017-18	2018-19	2019-20	2020-21	2021-22
1.	Health Education Models	4	4	3	1	-
2.	Health Education Materials	10	6	-	6	-
3.	Tooth Brushing Demonstration Model	3	3	3	3	3

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DEPARTMENT OF ORAL AND MAXILLOFACIAL SURGERY

LIST OF MODELS

MODLES FOR BLS/CPR TRAINING (BASIC LIFE SUPPORT)

1. Prestan adult manikin with indicatior (half body)
2. Laedral adult manikin (half body)
3. Laedral little anne q CPR
4. Laedral little junior q CPR
5. Laedral skill guide
6. AED trainer
7. Face shield pack
8. Pocket mask
9. Lung bag
10. Filter
11. CPR masks

Point 1. List of clinical / laboratory skills models/facilities

S.No.	Name of clinical/laboratory skill model	2017-18	2018-19	2019-20	2020-21	2021-22
1	Adult CPR manikin	1	1	1	1	1
2	Child CPR manikin	1	1	1	1	1
3	Infant CPR manikin	1	1	1	1	1
4	AED model	1	1	1	1	1
5	Venti mask					

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DEPARTMENT OF PROSTHODONTICS CROWN AND BRIDGE

LIST OF MODELS

MODELS OF STEPS IN FABRICATION OF COMPLETE DENTURE

1. Models Of Maxillary And Mandibular Cast To Study The Analytical Landmarks.
2. Models Of Various Spacer Design.
   a. Boucher's spacer design
   b. Morro, Rudd and Rhoads spacer design
   c. J.J Sharry's designs
   d. Shelden's spacer design
   e. Neil's spacer design.
   f. I and T spacer design.

3. Models Of Maxillary And Mandibular Cast With Self Cure Resin Custom Trays.
4. Models Of Maxillary And Mandibular Cast With Shellac Temporary Record Base.
5. Models Of Maxillary And Mandibular Cast With Occlusal Rims Fabricated.
6. MODELS OF COMPLETE DENTURE
   a. Class 1
   b. Class 2
   c. Class 3
   d. Dentogenic complete denture

MODELS OF CAST PARTIAL DENTURE

1. Models of wax pattern fabrication for
   a. Kennedy's class 1
   b. Kennedy's Class 2
   c. Kennedy's Class 3
   d. Kennedy's Class 4

2. **MODELS OF CAST PARTIAL DENTURE FABRICATED**
   a. Kennedy's class 1
   b. Kennedy's Class 2
   c. Kennedy's Class 3
   d. Kennedy's Class 4

MODELS OF FIXED PARTIAL DENTURE

a. Models of maxillary and mandibular dentulous cast with 3 unit FPD. (Wax pattern).
b. Models of maxillary and mandibular dentulous cast with single unit metal crown.
c. Models of maxillary and mandibular dentulous cast with 3 unit FPD. (Metal)
d. Model of maxillary dentulous cast with 3/4 restoration.
e. Model of maxillary dentulous cast with 7/8 restoration.
f. Models Depicting Die And Die System
g. Maxillary Dentulous Model with Anterior All Ceramic Restoration.
h. Models Of Maxillary And Mandibular Dentulous Cast With 3 Unit FPD (PFM Restoration)

MAXILLARY AND MANDIBULAR MODELS SHOWING PONTICS DESIGN

1. Modified ridge lap
2. Conical

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3. Sanitary pontics
4. Modified sanitary pontics
5. Spheroidal pontics

MODELS OF IMPLANT DENTISTRY

1. Guided acrylic stands.
2. Guided surgical stands.
3. Guided stand with crowns.
4. MODELS DEPICTING INDIRECT SINUS LIFT PROCEDURE.
5. MODEL DEPICTING HYDRAULIC TECHNIQUE.
6. MODEL SHOWING SURFACE MODIFICATIONS OF IMPLANTS.

MODES OF MAXILLOFACIAL PROSTHESIS

a. Wax pattern of ear prosthesis.
b. Wax pattern of finger prosthesis.
c. Wax pattern of eye prosthesis.
d. Wax pattern of nose prosthesis.
e. Model depicting blinking of eye prosthesis.
f. Maxillary cast with palatal defect.
g. Maxillary hollow bulb obturators.
h. Maxillary palatal obturators.
i. Velopharyngeal appliance.
j. Open bulb obturator.

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DEPARTMENT OF CONSERVATIVE DENTISTRY AND ENDODONTICS

LIST OF MODELS AND SPECIMEN

CLINICAL SKILL MODEL ON PLASTER MODELS

1. Class I Cavity Preparation For Amalgam And Restoration With Modelling Wax.
2. Class II Cavity Preparation for Amalgam and Restoration with Modelling Wax.
3. Class I Cavity Preparation For Amalgam With Buccal Extension And Restoration With Modelling Wax.
4. MOD Cavity Preparation For Amalgam With And Restoration With Modelling Wax.
5. Class III Cavity Preparation for Composite
6. Class 5 Cavity Preparation for GIC

CLINICAL SKILL MODEL ON EXTRACTED TEETH

1. Class I Cavity Preparation, base application and Amalgam RESTORATION
2. Class Ii Cavity Preparation, base application and Amalgam RESTORATION
3. Class I Cavity Preparation For Amalgam With Buccal Extension And Restoration
4. MOD Cavity Preparation for Amalgam with And Restoration
5. Class III Cavity Preparation for Composite
6. Class 5 Cavity Preparation for GIC
7. Class I Cavity Preparation For inlay
8. Class II Cavity Preparation For inlay

EXERCISES ON TYPHODONT TEETH

1. Class I Cavity Preparation, base application and Amalgam RESTORATION
2. Class II Cavity Preparation, base application and Amalgam RESTORATION
3. Class I Cavity Preparation for Amalgam with Buccal Extension And Restoration
4. MOD Cavity Preparation for Amalgam With And Restoration

5.Class I Cavity Preparation For inlay

8. Class II Cavity Preparation For inlay

CLINICAL SKILL MODEL OF INDIRECT RESTORATIONS ON EXTRACTED TEETH

1. Class II (MO,, DO,MOD) Inlay preparation on extracted teeth

Preparation for Cusp capping

1. Onlay preparation

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2. Wax pattern fabrication (Class II premolar &molar, MOD, cusp capping,onlay)

3. Casting (Class II premolar &molar, MOD,cusp capping ,onlay)

CLINICAL SKILL MODEL OF COMPOSITE INLAY

1. Tooth Preparation for composite inlay in extracted teeth

2. Fabrication of composite inlay

CLINICAL SKILL MODEL OF CROWN PREPARATION

1. All ceramic anterior maxillary and mandibular crown preparations

2. All ceramic posterior maxillary and mandibular crown preparations

3.7/8 crown on molars

4.¾ crown on premolars

CLINICAL SKILL MODEL FOR VENEER PREPARATION

1. Maxillary and Mandibular Anterior teeth veneer preparation

CLINICAL SKILL MODEL FOR POST AND CORE

1. Preparation of post space and core build up for anterior teeth

2. Preparation of post space and core build up for posterior teeth

3. Wax pattern fabrication

4. Casting fabrication

CLINICAL SKILL MODEL FOR WAX CARVINGS

1. Maxillary and Mandibular anterior teeth

2. Maxillary and Mandibular premolar teeth

3. Maxillary and Mandibular molar teeth

CLINICAL SKILL MODEL FOR ROOT CANAL TREATMENT

1. Access cavity preparation for Maxillary &Mandibular anterior teeth

2. Access cavity preparation for Maxillary &Mandibular premolar teeth

3. Access cavity preparation for Maxillary &Mandibular molar teeth

4. Working length and biomechanical preparation of Maxillary &Mandibular anterior teeth

5. Working length and biomechanical preparation of Maxillary &Mandibular premolar teeth

6. Working length and biomechanical preparation for Maxillary &Mandibular molar teeth

7. Obturation of Maxillary &Mandibular anterior teeth

8. Obturation of Maxillary &Mandibular Maxillary &Mandibular premolar teeth

9. Obturation of Maxillary &Mandibular Maxillary &Mandibular molar teeth

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DEPARTMENT OF PEDIATRIC AND PREVENTIVE DENTISTRY

CLINICAL SKILL MODEL FOR WAX CARVINGS

- Carving of maxillary & mandibular deciduous teeth

CLINICAL SKILL MODEL ON EXTRACTED TOOTH FOR ENDODONTIC PROCEDURES.

Access cavity preparation on extracted deciduous teeth

- Location of canals
- Obturation technique

CLINICAL SKILL MODEL ON EXTRACTED TOOTH

- Preparation of class II cavity
- Preparation of class II cavity (MOD)
- Preparation of class II cavity with palatal extension.
- Preparation of post & core

CLINICAL SKILL MODEL ON TYPHODONT TEETH

- Preparation of tooth for stainless steel crown adaptation maxillary & mandibular teeth.

CLINICAL SKILL MODEL ON CAST

- Suturing techniques done on mackintosh sheet & adapted on cast.
- Unilateral functional space maintainer
- Unilateral non functional space maintainer
- Bilateral functional space maintainer
- Bilateral non functional space maintainer
- Nance holding arch
- Lingual arch
- Maynes modification
- Band & loop (short & long)
- Distal shoe
- Transpalatal arch
- Nance holding arch
- Hawleys modification with helical space regainer
- Sling shot appliance
- Blue grass appliance
- Palatal crib

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- Triple loop connector
- Oral screen
- Fixed lip bumper
- Tongue crib
- Double oral screen
- Quad helix
- Palatal canine retractor
- Twin block
- Activator
- Catalans appliance
- C clasp
- Adams clasp with single arrow head
- Triangular clasp
- Finger spring
- Double cantilever
- Palatal canine retractor
- Helical canine retractor
- Maxillary expansion screw.

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DEPARTMENT OF ORTHODONTICS

LIST OF MODELS

ORTHODONTIC SPECIMENS AND MODELS

1. **Wire Bending Specimen**
   a. Straight wire
   b. Equilateral triangle
   c. Square
   d. Circle
   e. U Loop
   f. V Loop
   g. Adam's Clasp and its modifications
   h. C Clasps
   i. Jackson's Clasp
   j. Z springs
   k. Finger Springs
   l. T Springs
   m. Short Labial Bow
   n. Long Labial Bow
   o. Reverse Loop Labial Bow
   p. Roberts Retractor
   q. Buccal canine retractor
   r. U Loop canine retractor
   s. Reverse Loop canine Retractor
   t. Palatal Canine Retractor

2. **Appliance specimen**
   a. Hawleys Appliance
   b. Tongue crib Appliance
   c. Oral Screen
   d. Lower inclined Plane
   e. Activator
   f. Bionator
   g. Twin Block
   h. Frankel Appliance
   i. Quad Helix
   j. Pendulum Appliance
   k. Transpalatal Arch
   l. Nance Palatal Arch

3. **Models depicting**
   a. Class I Malocclusion
   b. Class II Malocclusion
   c. Class III Malocclusion

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DEPARTMENT OF PERIODONTOLOGY

PRE- CLINICAL EXERCISE CURRICULUM

1. Suturing on models.
2. Suturing on resin sheets.
3. Acrylic splinting
4. Wire splinting
5. Demonstration of Local anaesthetic procedures.
6. Demonstration of arrangement of the surgical tray.
7. Sterilization and disinfection protocols
8. Donning and doffing of the surgical gown.
9. Identification of anatomical landmarks of maxilla and mandible
10. Identification of instruments
11. Demonstration of Incisions.
12. Class II cavity preparation on typodonts
13. Crown preparation on typodonts.
14. Fabrication of stents.
15. Pre-clinical exercise on Egg using piezo surgical unit.

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DEPARTMENT OF ORAL PATHOLOGY AND MICROBIOLOGY

LIST OF MODELS AND SPECIMEN

DENTAL ANATOMY SPECIMEN AND CAST

1. **Tooth specimen for understanding normal anatomy**
   a. **Deciduous Human extracted teeth**
      i. Maxillary Central incisor
      ii. Maxillary lateral incisor
      iii. Maxillary canine
      iv. Maxillary first molar
      v. Maxillary second molar
      vi. Mandibular central incisor
      vii. Mandibular lateral incisor
      viii. Mandibular first molar
      ix. Mandibular second molar
   b. **Permanent Human extracted teeth**
      i. Maxillary central incisor
      ii. Maxillary lateral incisor
      iii. Maxillary canine
      iv. Maxillary 1st and 2nd Premolar
      v. Maxillary 1st , 2nd, and 3rd Molar
      vi. Mandibular central incisor
      vii. Mandibular lateral incisor
      viii. Mandibular canine
      ix. Mandibular 1st and 2nd Premolar
      x. Mandibular 1st , 2nd, and 3rd Molar

2. **Cast specimen for age estimation**
   a. Maxillary deciduous dentition cast
   b. Mandibular deciduous dentition cast
   c. Maxillary Mixed dentition cast
   d. Mandibular mixed dentition cast
   e. Maxillary permanent dentition cast
   f. Maxillary permanent dentition cast

3. **Models showing**
   a. Histology of skin
   b. Development of tongue
   c. Wax carving of permanent dentition (Maxillary and Mandibular dentition)
   d. Pharyngeal arches
   e. Structure of tooth
   f. Cemento-enamel junction

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      vii. Mandibular lateral incisor
      viii. Mandibular first molar
      ix. Mandibular second molar
   b. **Permanent Human extracted teeth**
      i. Maxillary central incisor
      ii. Maxillary lateral incisor
      iii. Maxillary canine
      iv. Maxillary 1st and 2nd Premolar
      v. Maxillary 1st , 2nd, and 3rd Molar
      vi. Mandibular central incisor
      vii. Mandibular lateral incisor
      viii. Mandibular canine
      ix. Mandibular 1st and 2nd Premolar
      x. Mandibular 1st , 2nd, and 3rd Molar

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   e. Structure of tooth
   f. Cemento-enamel junction

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ORAL PATHOLOGY SPECIMENS AND MODELS

1. **Tooth Specimen**
   a. Tooth specimen showing various types of dental caries involving crown and root
   b. Tooth specimen showing various physiological and pathological wearing of the tooth

(Attrition, abrasion and erosion)

   c. Taurodontism
   d. Talons cusp
   e. Dens evaginatus
   f. Dens in dentin
   g. Concrescence
   h. Dilacerations
   i. Ankylosis
   j. Supernumerary root
   k. Supernumerary teeth
   l. Macrodontia
   m. Microdontia
   n. Turners hypoplasia
   o. Fusion
   p. Root development cut section- TS and LS
   q. Long root of canine
   r. Cemetoma
   s. Odontoma

2. **Cast specimen**
   a. Talons cusp
   b. Fusion
   c. Gemination
   d. Supernumerary teeth
   e. Paramolar
   f. Distomolar
   g. Mesiodens
   h. Microdontia- peg laterals
   i. Talons cusp
   j. Dens evaginatus
   k. Cleft alveolus
   l. Cleft slveolus andcleft palate
   m. Anadondia
   n. Partial anadontia
   o. Crowding of the teeth
   p. Dental caries

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3. **Models depicting**
   a. Gingival pathology
   b. Tongue pathology
   c. Histologial transition from normal to carcinomatous changes in oral mucosa
   d. Shedding
   e. Cleft lip and palate
   f. Model showing sequel of dental caries
   g. Comparative anatomy model:
      Fish, Buffalo, goat and dog Skull

4. Soft tissue specimen
   a. Periapical granuloma
   b. Cementoma
   c. Fibrous hyperplasia
   d. Oral squamous cell carcinoma- hemimandibulectomy specimen
   e. Odotogenic cyst and tumor resected specimen
   f. RND specimen
   g. Basal Cell carcinoma
   h. Ameloblastoma of the mandible

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