

VEERBHADRA ROAD, RISHIKESH-249203, Uttarakhand

Seema Dental College is running BDS (Bachelor of Dental Surgery) programme since 2003 with annual intake 100 students (100 seats) in each academic year; recognized by DCI and affiliated to HNB Garhwal University, Srinagar Uttarakhand/HNBUMU, Dehradun, Uttarakhand.

## COURSE OUTCOMES OF BDS PROGRAM AS PER DCI BDS GAZETTE

During UG dental training program leading to BDS degree, the students are trained to acquire adequate knowledge, necessary skills and reasonable attitudes which are required for carrying out all activities appropriate to general dental practice involving prevention, diagnosis and treatment of anomalies and diseases of the teeth, mouth, jaws and associated tissues. The dental graduates also understand the concept of community oral health education and rural health care. The learning outcomes & graduate attributes, after completion of BDS, as per the provisions of regulatory body DCI, are as follows:-

- (a) Knowledge & Understanding: During the period of training, a dental graduate acquires the following knowledge & understanding-
- 1. Adequate knowledge of the scientific foundations on which dentistry is based and good understanding of various relevant scientific methods, principles of biological functions and be able to evaluate and analyze scientifically various established facts and data.
- 2. Adequate knowledge of the development, structure and function of the teeth, mouth and jaws and associated tissues both in health and disease and their relationship and effect on general state of health and also bearing on physical and social well being of the patient.
- Adequate knowledge of clinical disciplines and methods which provide a coherent picture of anomalies, lesions and diseases of the teeth, mouth and jaws and preventive diagnostic and therapeutic aspects of dentistry.
- **4.** Adequate clinical experience required for general dental practice.
- 5. Adequate knowledge of the constitution, biological function and behavior of persons in health and sickness as well as the influence of the natural and social environment on the state of health in so far as it affect dentistry.
- (b) Skills: During the training period, a dental graduate develops following skills necessary for dental practice:-
- 1. Able to diagnose and manage various common dental problems encountered in general dental practice keeping in mind the expectations and the right of the society to receive the best possible treatment available wherever possible.
- 2. Acquire the skill to prevent and manage complications if encountered while carrying out various surgical and other procedures.



VEERBHADRA ROAD, RISHIKESH-249203, Uttarakhand

- 3. Possess skill to carry out certain investigative procedures and ability to interpret laboratory findings.
- 4. Promote oral health and help prevent oral diseases where possible.
- 5. Competent in the control of pain and anxiety among the patients during dental treatment.
- (c) Attitudes: During the training period, a dental graduate develops following attitudes:
- 1. Willing to apply the current knowledge of dentistry in the best interest of the patients and the community.
- 2. Maintain a high standard of professional ethics and conduct and apply these in all aspects of professional life.
- **3.** Seek to improve awareness and provide possible solutions for oral health problems and needs throughout the community.
- **4.** Willingness to participate in the CPED Programmes to update the knowledge and professional skill from time to time.
- 5. To help and participate in the implementation of the national oral health policy.

## Programme-specific Learning Outcomes of Dental Graduate (BDS) Programme

During UG dental training program leading to BDS degree, the students are taught many subjects to acquire adequate knowledge, necessary skills and reasonable attitudes, which are required for carrying out all activities appropriate to general dental practice involving prevention, diagnosis and treatment of anomalies and diseases of the teeth, mouth, jaws and associated tissues. The **programme-specific** Learning Outcomes of Dental Graduate (BDS) Programme are as follows-

#### BDS I Year

## 1. HUMAN ANATOMY, EMBRYOLOGY, HISTOLOGY & MEDICAL GENETICS

The students should gain the knowledge and insight into, the functional anatomy of the normal human head and neck, functional histology and an appreciation of the genetic basis of inheritance and disease, and the embryological development of clinically important structures. So that relevant anatomical & scientific foundations are laid down for the clinical years of the BDS course. At the end of the first year BDS course in Anatomical Sciences the undergraduate student is expected to:

- **1.** Know the normal disposition of the structures in the body while clinically examining a patient and while conducting clinical procedures.
- 2. Know the anatomical basis of disease and injury.

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VEERBHADRA ROAD, RISHIKESH-249203, Uttarakhand

- Know the microscopic structure of the various tissues, a pre-requisite for understanding of the disease processes.
- **4.** Know the nervous system to locate the site of lesions according to the sensory and or motor deficits encountered.
- **5.** Have an idea about the basis of abnormal development, critical stages of development, effects of teratogens, genetic mutations and environmental hazards.
- **6.** Know the sectional anatomy of head neck and brain to read the features in radiographs and pictures taken by modern imaging techniques.
- 7. Know the anatomy of cardio-pulmonary resuscitation.
- 8. To locate various structures of the body and to mark the topography of the living anatomy.
- 9. To identify various tissues under microscope.
- 10. To identify the features in radiographs and modern imaging techniques.
- 11. To detect various congenital abnormalities.

### 2. GENERAL HUMAN PHYSIOLOGY

In BDS I year, the broad goal of the teaching undergraduate students in Human Physiology is to provide the comprehensive knowledge of the normal functions of the organ systems of the body and to facilitate an understanding of the physiological basis of health and disease. At the end of the course, the student will be able to:

- 1. Explain the normal functioning of all the organ systems and their interactions for well co-ordinated total body function.
- 2. Assess the relative contribution of each organ system towards the maintenance of the milieu interior.
- 3. List the physiological principles underlying the pathogenesis and treatment of disease.
- 4. Conduct experiments designed for the study of physiological phenomena.
- 5. Interprete experimental and investigative data
- **6.** Distinguish between normal and abnormal data derived as a result of tests which he/she has performed and observed in the laboratory.

#### 3. BIOCHEMISTRY

In BDS I year, the major aim is to provide a sound but crisp knowledge on the biochemical basis of the life processes relevant to the human system and to dental/medical practice. This includes learning of following topics. At the end of the course the students would be able to acquire a useful core of information, which can be retained for a long time and will be helpful for diagnosis, prognosis and treatment of oral/dental/systemic diseases.

1. Chemistry & metabolic processes of carbohydrates, lipids, proteins and nucleic acids.





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- 2. Biochemical genetics and molecular biology
- **3.** Nutrition & dietics, Minerals, Vitamins, anti-vitamins, anti-metabolites, enzymes and enzyme inhibitors to form the basis for the future study of medical subjects.
- **4.** An overview of metabolic regulation is taught by covering hormonal action, second messengers and regulation of enzyme activities.
- 5. Medical aspects of biochemistry like inborn errors of metabolism, gout, diabetes mellitus, organ function tests, jaundice, serum diagnostic enzymes, etc.

## 4. DENTAL ANATOMY, EMBRYOLOGY AND ORAL HISTOLOGY

Dental Anatomy including Embryology and Oral Histology is a composite of basic Dental Sciences & their clinical applications. After a course on Dental Anatomy including Embryology and Oral Histology-

- 1. BDS I year students are expected to appreciate the normal development, morphology, structure & functions of oral tissues & variations in different pathological/non-pathological states.
- 2. The students should understand the histological basis of various dental treatment procedures and physiologic ageing process in the dental tissues.
- 3. The studes know the basic knowledge of various research methodologies.
- 4 acquire basic skills in-
- or or or or or permanent teeth in wax.
- Microscopic study of Oral tissues.
- Identification of Deciduous & Permanent teeth.
- / by patterns of teeth eruption from plaster casts of different age groups.

## **BDS II Year**

## 1. GENERAL PATHOLOGY & MICROBIOLOGY

**PATHOLOGY:** At the end of the BDS II year, the students should be competent to 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. This will enable the students-

- 1. To demonstrate and apply basic facts, concepts and theories in the field of Pathology.
- 2. To recognize and analyze pathological changes at macroscopically and microscopical levels and explain their observations in terms of disease processes.
- To Integrate knowledge from the basic sciences, clinical medicine and dentistry in the study of Pathology.
- **4.** To demonstrate understanding of the capabilities and limitations of morphological Pathology in its contribution to medicine, dentistry and biological research.
- 5. To demonstrate ability to consult resource materials outside lectures, laboratory and tutorial classes.





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**MICROBIOLOGY:** Study of microbiology will introduce the students to the exciting world of microbes and make the students aware of various branches of microbiology, importance, significance and contribution of each branch to mankind and other fields of medicine. At the end of the Microbiology course the students are expected to:

- 1. Understand the basics of various branches of microbiology and able to apply the knowledge relevantly.
- 2. Apply the knowledge gained in related medical subjects like General Medicine and General Surgery and Dental subjects like Oral Pathology, Community Dentistry, Periodontics, Oral Surgery, Pedodontics, Conservative Dentistry and Oral medicine in higher classes.
- 3. Understand and practice various methods of sterilization and disinfection in dental clinics.
- 4. Have a sound understanding of various infectious diseases and lesions in the oral cavity.
- 5. Acquire the skill to diagnose, differentiate various oral lesions.
- **6.** Able to select, collect and transport clinical specimens to the laboratory.
- 7. Able to carry out proper aseptic procedures in the dental clinic.

#### 2. GENERAL AND DENTAL PHARMACOLOGY AND THERAPEUTICS

In BDS II year, the broad goal of teaching under graduate students in pharmacology is to inculcate rational and scientific basis of therapeutics keeping in view of dental curriculum and Profession. At the end of the course the students shall be able to:

- 1. Describe the pharmacokinetics and pharmacodynamics of essential and commonly used drugs in general and in dentistry in particular.
- 2. List the indications, contraindications; interactions, and adverse reactions of commonly used drugs with reason.
- **3.** Tailor the use of appropriate drugs in disease with consideration to its cost, efficacy, and safety for individual and mass therapy needs.
- **4.** Indicate special care in prescribing common and essential drugs in special medical situations such as pregnancy, lactation, old age, renal, hepatic damage and immuno compromised patients.
- 5. Integrate the rational drug therapy in clinical pharmacology.
- 6. Indicate the principles underlying the concepts of "Essential drugs".
- 7. Prescribe drugs for common dental and medical ailments.
- 8. Appreciate adverse reactions and drug interactions of commonly used drugs.
- 9. Observe experiments designed for study of effects of drugs.
- **10.** Critically evaluate drug formulations and be able to interpret the clinical pharmacology of marketed preparations commonly used in dentistry.
- 11. INTEGRATION: Practical knowledge of use of drugs in clinical practice will be acquired through integrated teaching with clinical departments.





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#### 3. DENTAL MATERIALS

Aim of the course is to present basic chemical and physical properties of Dental materials as they are related to its manipulation to give a sound educational background so that the practice of the dentistry emerged from art to empirical status of science as more information through further research becomes available. It is also the aim of the course of Dental materials to provide with certain criteria of selection and which will enable to discriminate between facts and propaganda with regards to claims of manufactures. At the end of the course the students shall be able to:

- 1. To understand the evolution and development of science of dental material.
- 2. To explain purpose of course in dental materials to personnel concerned with the profession of the dentistry. Knowledge of physical and chemical properties.
- **3.** To understand the biomechanical requirements of particular restorative procedure. An intelligent compromise of the conflicting as well as co-ordinating factors into the desired Ernest.
- **4.** To lay down standards or specifications of various materials to guide to manufacturers as well as to help professionals.
- **5.** To search for newer and better materials which may answer the requirements with greater satisfaction?
- 6. To understand and evaluate the claims made by manufactures of dental materials

## 4. PRE-CLINICAL PROSTHODONTICS AND CROWN & BRIDGE

Students should have good knowledge and skills regarding these topics after completion of Pre-clinical Prosthodontics subject:

- · Able to understand and use various dental materials.
- Familiar with the concept of Introduction & Biomechanics of the edentulous state including Applied Anatomy and Physiology.
- Should have knowledge of Residual ridge resorption. Understanding the patients. Mental attitude
  for the proper Diagnosis and treatment planning for patients, with some teeth remaining or with no
  teeth remaining. a) Systemic status. b) Local factor. c) The geriatric patient. d) Diagnostic
  procedures.
- Dental Impressions -in detail. a) Muscles of facial expression. b) Biologic considerations for maxillary and mandibular impression including anatomy landmark and their interpretation. c) Impression objectives. d) Impression materials. e) Impression techniques. f) Maxillary and mandibular impression procedures. i. Preliminary impressions. ii. Final impressions.
- Should know in details about Laboratory procedures involved with impression making (Beading & Boxing, and cast preparation). H. Record bases and occlusion rims- in detail.
   a) Materials &



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VEERBHADRA ROAD, RISHIKESH-249203, Uttarakhand

techniques. b) Useful guidelines and ideal parameters. c) Recording and transferring bases and occlusal rims.

- Recording maxilla-mandibular relation. a) Vertical relations. b) Centric relation records. c) Eccentric relation records. d) Lateral relation records. Tooth selection and arrangement. a) Anterior teeth. b)
   Posterior teeth. c) Esthetic and functional harmony. Relating inclination of teeth to concept of occlusion- in brief. a) Neutrocentric concept. b) Balanced occlusal concept.
- Principles of Removable Partial Denture Design & Survey and design in brief.
- Able to carry out treatment of routine prosthodontic procedures

#### 5. PRE CLINICAL CONSERVATIVE DENTISTRY

- Student should be able to identification and use all hand cutting instruments.
- They should be able to identification and use rotary cutting instruments and burs.
- Student should know and identify all the GV Black cavity preparation on patient.
- Able to prepare cavity on typhodont tooth placed on phantom head.
- Able to manipulate varnish and bases like Zinc Phosphate, Poly-carboxylate, Glass Ionomers, Zinc Oxide Eugenol cements.
- Identification and manipulation of various matrices, tooth separators.
- Able to apply base, varnish, matrix and wedge placement on typhodont tooth placed on phantom head.
- Mixing, handling and proper disposing of amalgam material.
- Student should be able to do restoration with amalgam on typhodont tooth placed on phantom head.
- Polishing of above restoration.
- Familiar with the concept for composites restoration followed by polishing and finishing of the restoration of composites.

## **BDS III Year**

## 1. ORAL PATHOLOGY & ORAL MICROBIOLOGY

At the end of Oral Pathology & Oral Microbiology course, the students of BDS IV year should be able to comprehend -

- 1. The different types of pathological processes that involves the oral cavity.
- 2. The manifestations of common diseases, their diagnosis & correlation with clinical pathological processes.
- 3. An understanding of the oral manifestations of systemic diseases should help in correlating with the systemic physical signs & laboratory findings.
- 4. The student should understand the underlying biological principles governing treatment of oral diseases.

7



VEERBHADRA ROAD, RISHIKESH-249203, Uttarakhand

- 5. The principles of certain basic aspects of Forensic Odontology.
- **6.** Microscopic study of common lesions affecting oral tissues through microscopic slides & projection slides.
- 7. Study of the disease process by surgical specimens.
- 8. Study of teeth anomalies/polymorphisms through tooth specimens & plaster casts.
- 9. Microscopic study of plaque pathogens.
- 10. Study of haematological preparations (blood films) of anaemias & leukemias.
- 11. Basic exercises in Forensic Odontology such as histological methods of age estimation and appearance of teeth in injuries.

#### 2. GENERAL MEDICINE

While teaching and training in General Medicine Department, special emphasis is given throughout on the importance of

- 1. Various diseases as applicable to dentistry.
- 2. Special precautions/contraindication of anesthesia and various dental procedures in different systemic diseases.
- 3. Oral manifestations of systemic diseases.
- 4. Medical emergencies in dental practice.
- 5. A dental student is taught in such a manner, the he/she should acquire basic skills
- to record the arterial pulse, blood pressure and be capable of suspecting by sight and superficial examination of the body diseases of the heart, lungs, kidneys, blood etc.
- to handle medical emergencies encountered in dental practice.
- to take history, do general physical examination (including build, nourishment, pulse, BP, respiration, clubbing, cyanosis, jaundice, lymphadenopathy, oral cavity) and to examine CVS, RS and abdomen and facial nerve.

#### 3. GENERAL SURGERY

To acquaint the students with various diseases, which may require surgical expertise and to train the student to analyze the history and be able to do a thorough physical examination of the patient. The diseases as related to head and neck region are to be given due importance, at the same time other relevant surgical problems are also to be addressed. At the end of BDS III year, the dental students should have a good theoretical knowledge of various ailments, and be practically trained to differentiate benign and malignant diseases and be able to decide which patient requires further evaluation. The students should acquire basic to examine a routine swelling, ulcer and other related diseases and to perform minor surgical procedures such as draining an abscess, taking a biopsy, etc.

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### **BDS IV Year**

## 1. CONSERVATIVE DENTISTRY AND ENDODONTICS

The dental graduates acquire the following knowledge during the period of training-

- 1. To diagnose and treat simple restorative work for teeth.
- 2. To gain knowledge about aesthetic restorative material and to translate the same to patients needs.
- 3. To gain the knowledge about endodontic treatment on the basis of scientific foundation.
- 4. To carry out simple endodontic treatment.
- **5.** To carry out simple luexation of tooth and its treatment and to provide emergency endodontic treatment.

The dental graduates acquire following skills necessary for practice of dentistry-

- To use medium and high speed hand pieces to carry out restorative work.
- To use and familiarize endodontic instruments and materials needed for carrying out simple endodontic treatment.
- To achieve the skills to translate patients esthetic needs along with function.

#### 2. ORAL & MAXILLOFACIAL SURGERY

To produce a dental graduate who is competent in performing extraction of teeth under both local and general anesthesia, prevent and manage related complications, acquire a reasonable knowledge and understanding of the various diseases, injuries, infections occurring in the Oral & Maxillofacial region and offer solutions to such of those common conditions and has an exposure in to the in-patient management of maxillofacial problems. At the end of the BDS IV year and the clinical training the dental graduates are expected to -

- 1. apply the knowledge gained in the related medical subjects like pathology, microbiology and general medicine in the management of patients with oral surgical problem.
- 2. diagnose, manage and treat (understand the principles of treatment of) patients with oral surgical problems.
- 3. perform range of surgical treatments.
- 4. decide the requirement of a patient to have oral surgical specialist opinion or treatment.
- 5. understand the principles of in-patient management.
- **6.** understand the management of major oral surgical procedures and principles involved in patient management.
- 7. know ethical issues and communication ability.

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VEERBHADRA ROAD, RISHIKESH-249203, Uttarakhand

The dental graduates acquire following skills necessary for practice of dentistry-

- Should be able examine any patient with an oral surgical problem in an orderly manner. Be able to understand requisition of various clinical and laboratory investigations and is capable of formulating differential diagnosis.
- Should be competent in the extraction of teeth under both local and general anesthesia.
- Should be able to carry out certain minor oral surgical procedures under L.A. like frenectomy, alveolar procedures & biopsy etc.
- Should be able to assess, prevent and manage various complications during and after surgery.
- Should be able to provide primary care and manage medical emergencies in the dental office.
- Should be able to understand the management of major oral surgical problems and principles involved in inpatient management.

#### 3. ORAL MEDICINE AND RADIOLOGY

The syllabus in ORAL MEDICINE & RADIOLOGY is divided into two main parts.

- (i) Diagnosis, Diagnostic methods and Oral Medicine- subdivided into three sections-
- (A) Diagnostic methods
- (B) Diagnosis & differential diagnosis
- (C) Oral Medicine & Therapeutics.
- (ii) Oral Radiology

At the end of the BDS IV year and the clinical training the dental graduates are expected-

- 1. To diagnose the common disorders of Orofacial region by clinical examination and with the help of such investigations as may be required and medical management of oro-facial disorders with drugs and physical agents.
- 2. To know importance, role, use and techniques of radiographs/digital radiograph and other imaging methods in diagnosis.
- 3. To understand the clinical and radiographic aspects of Forensic Odontology.

## 4. ORTHODONTICS & DENTAL ORTHOPAEDICS

Undergraduate programme in Orthodontics is designed to enable the qualifying dental surgeon to diagnose, analyse and treat common orthodontic problems by preventive, interceptive and corrective orthodontic procedures. Students are trained to fabricate orthodontic appliances by conducting intricate wire bending procedures.

## 5. PUBLIC HEALTH DENTISTRY

Students learn to prevent and control oral diseases and promote oral health through organized community efforts. At the conclusion of the BDS course the students shall have a knowledge of the basis of public

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health, preventive dentistry, public health problems in India, Nutrition, Environment and their role in health, basics of dental statistics, epidemiological methods, National oral health policy with emphasis on oral health policy. Students shall develop skill of identifying health problems affecting the society, conducting health surveys, conducting health education classes and deciding health strategies. Students should develop a positive attitude towards the problems of the society and must take responsibilities in providing health. The dental students should be able to communicate the needs of the community efficiently, inform the society of all the recent methodologies in preventing oral disease.

#### 6. PERIODONTOLOGY

The students shall acquire the skill to perform dental scaling, diagnostic tests of periodontal diseases; to use the instruments for periodontal therapy and maintenance of the same. The students shall develop attitude to impart the preventive measures namely, the prevention of periodontal diseases and prevention of the progress of the disease. The student shall also develop an attitude to perform the treatment with full aseptic precautions; shall develop an attitude to prevent iatrogenic diseases; to conserve the tooth to the maximum possible time by maintaining periodontal health and to refer the patients who require specialist's care.

#### 7. PROSTHODONTICS AND CROWN & BRIDGE

Training is structured to achieve knowledge and skill in providing Prosthodontic therapy and to produce dental graduates-

- 1. with knowledge on prosthetics needs of patients, fabrication of all prosthodontic modes of treatment
- 2. able to diagnose, motivate and treat patients who are partially and completely edentulous (including geriatric patients) with complete and partialdentures
- 3. skilled enough to identify cases requiring specialist prosthodontic treatment needs and refer them for further follow up.

## 8. PAEDIATRIC & PREVENTIVE DENTISTRY

Aim is to produce dental graduates with ability to diagnose common dental problems and/or capability to assess growth and development variations and suggest necessary referrals or actions as needed timely. Dental graduates can also effectively and efficiently perform basic dental treatments in children from birth to adolescence with proper behavior management of child and the parent, as well as instill positive dental attitude with preventive modalities.

## Knowledge:

• To have adequate knowledge and understanding of the scientific and systematic procedure of history taking and examination of Orofacial region to arrive at proper diagnosis and management



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- To have understood the morphology of primary teeth and basic differences in the principles of cavity preparation in primary and permanent teeth
- To have essential knowledge of the preventive (oral prophylaxis, topical fluoride application) and therapeutic measures (restoration of carious teeth, extraction of primary teeth) in caries management

## Skills:

- To communicate and manage child patient
- To obtain proper clinical history, examination of the patient, perform diagnostic procedures and interpret them to arrive at a provisional diagnosis
- To prepare various cavity designs on primary and permanent teeth and restore them using different restorative materials.
- · To extract primary teeth

#### Attitude:

- To deliver optimum treatment to pediatric patients with tender loving care irrespective of the social status, caste, creed or religion of the patient
- Willing to share the knowledge and clinical experience with professional colleagues
- Respect patient rights and privileges, including patients/parents right to information, obtaining consent from parents for each procedure and right to seek a second opinion
- Develop attitude to seek opinion from an allied medical and dental specialists as and when required.

## Communicative Skills and Ability:

- Develop adequate communication skills to manage child patient, explaining various treatment options to parents and obtain a true informed consent from them for the most appropriate treatment available at that point of time
- Develop the ability to communicate with professional colleagues
- Develop ability to present seminars and develop leadership skills.

## DENTAL INTERNSHIP PROGRAMME

After qualifying the University BDS final year (BDS IV Year) examination, the students undergo one year compulsory rotatory interdepartmental internship in the department of Oral Medicine & Radiology, Pediatric & Preventive Dentistry, Orthodontics & Dentofacial Orthopaedics, Periodontology, Prosthodontics & Crown & Bridge, Conservative Dentistry & Endodontics, Oral & Maxillofacial Surgery, Public Health Dentistry and Oral Pathology & Microbiology. The Internship is done in a Dental College duly recognized/approved by the Dental Council of India for the purpose of imparting education and training to Dental graduates in the





## VEERBHADRA ROAD, RISHIKESH-249203, Uttarakhand

- D. To facilitate understanding of professional and ethical principles:-
  - 1. Right and dignity of patients.
  - II. Consultation with other professionals and referral to seniors/institutions.
- III. Obligations to peers, colleagues, patients, families and Community.
- IV. Provision of free professional services in an emergent situation.

E. To initiate individual and group action, leading to disease prevention and dental health promotion, at the level of individual's far ad the community.

#### General @

oriented training. The interns should participate in various institutional and field programmes and be given due responsibility to perform the activities in all departments of the Dental Colleges and associated Institutions.

- 2. To facilitate ant of basic skills and attitudes the following facilities should be provided to all dental graduat
- ing, examination, diagnosis, charting and recording treatment plan of cases.
- ii) Presentation of cases in a group of Seminar.
- iii) Care and sterilization of instruments used.
- iv) Performance and interpretation of essential laboratory tests and other relevant investigations.
- v) Data analysis and inference.
- vi) Proper use of antibiotics, anti-inflammatory and other drugs, as well as other therapeutic modalities.
- vii) Education of patients, their relatives and community on all aspects of dental health care while working in the institution as also in the field.
- viii) Communication aimed at inspiring hope, confidence and optimism.
- ix) Legal rights of patients and obligations of dental graduate under forensic jurisprudence.

Dr P Narayana Prasad

**Principal** 



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country. One year rotatory interdepartmental internship is compulsory for the award BDS degree; the BDS degree is only granted after completion of internship. The curriculum during the 4 years of BDS training is subject based with more emphasis on learning practical skills. During one year internship the emphasis is given on competency-based training in different departments during the postings of interns.

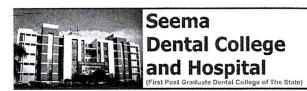
### PERIOD OF POSTINGS IN DIFFERENT DEPARTMENTS

- 1. Oral Medicine & Radiology 1 month
- 2. Oral & Maxillofacial Surgery 1 1/2 months
- 3. Prosthodontics & Crown & Bridge 1 1/2 months
- 4. Periodontology 1 month
- 5. Conservative Dentistry & Endodontics 1 month
- 6. Pediatric & Preventive Dentistry 1 month
- 7. Oral Pathology & Microbiology 15 days
- 8. Orthodontics & Dentofacial Orthopaedics 1 month
- 9. Public Health Dentistry/Rural Services 3 months
- 10. Elective 15 days

## **Objectives:**

- A. To facilitate reinforcement of learning and acquisition of additional knowledge:-
- a) Reinforcement of knowledge.
- b) Techniques & resources available to the individual and the community; Social and Cultural setting.
- c) Training in a phased manner, from a shared to a full responsibility.
- B. To facilitate the achievement of basic skills: attaining competence Vs. maintaining competence in:-
- i) History taking.
- ii) Clinical Examination.
- iii) Performance and interpretation of essential laboratory data.
- iv) Data analysis and inference.
- v) Communication skills aimed at imparting hope and optimism in the patient.
- vi) Attributes for developing working relationship in the Clinical setting and Community team work.
- C. To facilitate development of sound attitudes and habits:-
- i) Emphasis on individual and human beings, and not on disease/symptoms.
- ii) Provision of comprehensive care, rather than fragmentary treatment.
- iii) Continuing Dental Education and Learning of accepting the responsibility.

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 Recognized by: Dental Council of India vide Govt. Gazette Notification No. V-12017/49/2001-DE dated 25/06/2008

Awarded As The Best Dental College

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## PROGRAMME-SPECIFIC LEARNING OUTCOMES FOR MDS PROGRAM AS PER DCI MDS GAZETTE No.DE-87-2017

Seema Dental College is presently running MDS (Master of Dental Surgery) programme in 06 dental specialties/courses as given below. These courses are recognized by DCI and affiliated to HNB Garhwal University and HNB Uttarakhand Medical Education University, Dehradun.

## **List of PG Programmes Offered**

PG Programmes	
MDS Course	
MDS (Oral Medicine & Radiology)	
MDS (Orthodontics and Dentofacial Orthopaedics)	
MDS (Prosthodontics and Crown & Bridge)	
MDS (Pediatric and Preventive Dentistry)	
MDS (Periodontology)	
MDS (Conservative Dentistry & Endodontics)	

## GOALS AND OBJECTIVES OF THE MDS CURRICULUM

## 25. (25) GOALS.\_

The goals of the post-graduate training in various specialities is to train the graduate in Dental Surgery who will,

- 1. (i) practice respective speciality efficiently and effectively, backed by scientific knowledge and skill;
- 2. (i) exercise empathy and a caring attitude and maintain high ethical standards;
- 3. (iii) continue to evince keen interest in professional education in the speciality and allied specialities whether in teaching or practice;
- 4. (iv) willing to share the knowledge and skills with any learner, junior or a colleague;
- 5. (v) to develop the faculty for critical analysis and evaluation of various concepts and views and to adopt the most rational approach.

## 26. (26) OBJECTIVES.\_

The objective of the post-graduate training is to train a student so as to ensure higher competence in both general and special area of interest and prepare him or her for a career in teaching, research and speciality practice. A student must achieve a high degree of clinical proficiency in the subject and develop competence in research and its methodology in the concerned field.



# Seema Dental College and Hospital (First Post Graduato Dental College of The St

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The objectives to be achieved by the candidate on completion of the course may be classified as under:—

- 1. (a) Knowledge (Cognitive domain)
- 2. (b) Skills (Psycho motor domain)
- 3. (c) Human values, ethical practice and communication abilities

## (a) KNOWLEDGE:

- 1. (i) demonstrate understanding of basic sciences relevant to speciality;
- 2. (ii) describe aetiology, pathophysiology, principles of diagnosis and management of common problems within the speciality in adults and children;
- 3. (iii) identify social, economic, environmental and emotional determinants in a given case and take them into account for planned treatment;
- 4. (iv) recognise conditions that may be outside the area of speciality or competence and to refer them to the concerned specialist;
- 5. (v) update knowledge by self study and by attending courses, conferences and seminars pertaining to speciality;
- (vi) undertake audit, use information technology and carry out research in both basic and clinical with the aim of publishing or presenting the work at various scientific gathering;

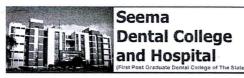
## (b) SKILLS:

- 1. (i) take a proper clinical history, examine the patient, perform essential diagnostic procedures and order relevant tests and interpret them to come to a reasonable diagnosis about the condition;
- 2. (ii) acquire adequate skills and competence in performing various procedures as required in the speciality.

## (c) HUMAN VALUES, ETHICAL PRACTICE AND COMMUNICATION ABILITIES.

- 1. (i) adopt ethical principles in all aspects of practice;
- 2. (ii) foster professional honesty and integrity;
- 3. (iii) deliver patient care irrespective of social status, caste, creed, or religion of the patient;
- 4. (iv) develop communication skills, to explain various options available and obtain a true informed consent from the patient;
- (v) provide leadership and get the best out of his team in a congenial working atmosphere;
- 6. (vi) apply high moral and ethical standards while carrying out human or animal research;
- 7. (vii) be humble and accept the limitations in his knowledge and skill and to ask for help from colleagues when needed;
- 8. (viii) respect patient's rights and privileges including patient's right to information and right to seek a second opinion.





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The programme-specific Learning Outcomes of various MDS Programme/Courses are as follows-

## MDS (PEDIATRIC AND PREVENTIVE DENTISTRY)

Pediatric Dentistry is an age-defined specialty that provides comprehensive preventive and therapeutic oral health care for infants and children through adolescence, including those with special healthcare needs. Students are trained in aspects of child psychology, behavior management, preventive dentistry, interceptive orthodontics, management of decayed teeth and traumatic injuries. They are trained in radiology pertaining to children, dental health education and school dental health programmes.

**OBJECTIVES:** The following objectives are laid out to achieve the goals of the course. These are to be achieved by the time the candidate completes the course. These objectives may be considered under the following subtitles.

**KNOWLEDGE:** At the end of 36 months of training, the candidates should be able:

- To have adequate knowledge of Child psychology and Behavior management techniques
- To have knowledge of the etiology, patho-physiology, diagnosis and treatment planning of various common problems
- · To understand the principles of prevention and preventive dentistry right from birth to
- To Know various treatment modalities to prevent and intercept malocclusion
- · To have knowledge of aberrant oral habits, diagnosis and available habit breaking treatment options

#### **SKILLS**

- · Obtain proper clinical history, methodological examination of the patient, perform essential diagnostic procedures and interpret them, and arrive at a reasonable diagnosis and treat appropriately.
- Competent to treat dental diseases which are occurring in child patient.
- · Manage to repair and the lost/tooth structure to maintain harmony between both hard and soft tissues of the oral cavity.
- · Manage the disabled children effectively and effectively, tailored to the needs of individual requirement and conditions.

#### **ATTITUDES**

- Develop an attitude to adopt ethical principles in all aspects of Pedodontics practice.
- Professional honesty and integrity are to be fostered.
- Treatment care is to be delivered irrespective of the social status, cast creed, and religion of



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the patients.

- Willingness to share the knowledge and clinical experience with professional colleagues.
- Willingness to adopt, after a critical assessment, new methods and techniques of pedodontic management developed from time to time, based on scientific research, which are in the best interest of the child patient.
- Respect child patient's rights and privileges, including child patient's right to information and right to seek a second opinion.
- Develop an attitude to seek opinion from allied dental specialties, as and when required.
   Communication Skills and Ability
- Develop adequate communication skills to manage child patient, explaining various treatment options to parents and obtain a true informed consent from them for the most appropriate treatment available at that point of time
- · Develop the ability to communicate with professional colleagues
- Develop ability to teach undergraduates, present seminars and develop leadership skills.

## MDS (CONSERVATIVE DENTISTRY & ENDODONTICS)

The students are trained to have complete knowledge of aetiology, pathophysiology, diagnosis and management of dental carries, trauma, restorative and endodontic procedures. Students use advanced materials like composites, glass ionomers, varnishes and sealants, dentin bonding and light cure systems. The students are also trained in endodontic procedures using advanced technologies like apex locators, radiovisiography and latest root canal obturation methods.

**OBJECTIVES:** The following objectives are laid out to achieve the goals of the course. These are to be achieved by the time the candidate completes the course. These objectives may be considered under the following subtitles.

**KNOWLEDGE:** At the end of 36 months of training, the candidates should be able to:

- Describe etiology, pathophysiology, periapical diagnosis and management of common restorative situations, endodontic situations that will include contemporary management of dental caries, management of trauma and pulpal pathosis including periodontal situations.
- Demonstrate understanding of basic sciences as relevant to conservative/ restorative dentistry and Endodontics.
- Identify social, economic, environmental and emotional determinants in a given case or community and take them into account for planning and execution at individual and community level.
- Ability to master differential diagnosis and recognize conditions that may require multidisciplinary approach or a clinical situation outside the realm of the specialty, which he or she



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- should be able to recognize and refer to appropriate specialist.
- Update himself by self-study and by attending basic and advanced courses, conferences, seminars, and workshops in the specialty of Conservative Dentistry-Endodontics-Dental Materials and Restorative Dentistry.
- · Ability to teach/guide, colleagues and other students. Use information technology tools and carry out research both basic and clinical with the aim of his publishing his work and presenting the same at scientific platform.

#### **SKILLS**

- Take proper chair side history, examine the patient and perform medical and dental diagnostic procedures as well as perform relevant tests and interpret to them to come to a reasonable diagnosis about the dental condition in general and Conservative Dentistry - Endodontics in particular. And undertake complete patient monitoring including preoperative as well as post operative care of the patient.
- · Perform all levels of restorative work, surgical and non-surgical Endodontics as well as endodontic-periodontal surgical procedures as part of multidisciplinary approach to clinical condition.
- Provide basic life saving support in emergency situations.
- Manage acute pulpal and pulpo periodontal situations.
- · Have a thorough knowledge of infection control measures in the dental clinical environment and laboratories.
- · Should have proper knowledge of sterilization procedures Human Values, Ethical Practice and Communication Abilities
- · Adopt ethical principles in all aspects of restorative and contemporary Endodontics including non-surgical and surgical Endodontics.
- Professional honesty and integrity should be the top priority.
- Dental care has to be provided regardless of social status, caste, creed or religion of the patient.
- · Develop communication skills in particular to explain various options available for management and to obtain a true informed consent from the patient.
- Apply high moral and ethical standards while carrying on human or animal research.
- · He/She shall not carry out any heroic procedures and must know his limitations in performing all aspects of restorative dentistry including Endodontics. Ask for help from colleagues or seniors when required without hesitation.
- Respect patient's rights and privileges including patients right to information.





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## MDS (PROSTHODONTICS AND CROWN & BRIDGE)

The prosthodontic graduate training programme imparts knowledge pertaining to restoration and maintenance of oral function, health, comfort and appearance by the replacement of missing and lost natural teeth. Students are trained on complete dentures, cast partial dentures, crown and bridge work, implant supported prosthesis through didactic and clinical learning. They undergo extensive training using state-of-the-art modern equipment and materials of international standards to enhance their preclinical skills. They also get trained in casting and ceramic work in the Ceramo-metal Laboratory.

**AIM:** To train the dental graduates so as to ensure higher level of competence in both general and specialty areas of Prosthodontics and prepare candidates with teaching, research and clinical abilities including prevention and after care in Prosthodontics – removable dental prosthodontics, fixed dental prosthodontics (Crown &Bridge), implantology, maxillofacial prosthodontics and esthetic dentistry.

GENERAL OBJECTIVES OF THE COURSE: Training program for the dental graduates in Prosthetic dentistry— removable dental prosthodontics, fixed dental prosthodontics (Crown & Bridge), implantology, maxillofacial prosthodontics and esthetic dentistry and Crown & Bridge including Implantology is structured to achieve knowledge and skill in theoretical and clinical laboratory, attitude, communicative skills and ability to perform research with a good understanding of social, cultural, educational and environmental background of the society.

- To have adequate acquired knowledge and understanding of applied basic and systemic medical sciences, both in general and in particularly of head and neck region.
- The postgraduates should be able to provide Prosthodontic therapy for patients with competence and working knowledge with understanding of applied medical, behavioral and clinical science, that are beyond the treatment skills of the general BDS graduates and MDS graduates of other specialties,
- To demonstrate evaluative and judgment skills in making appropriate decisions regarding prevention, treatment, after care and referrals to deliver comprehensive care to patients.

At the end of 3 years of training the candidate should be able to acquire adequate knowledge of the discipline.

## KNOWLEDGE:

- The candidate should possess knowledge of applied basic and systemic medical sciences.
- On human anatomy, embryology, histology, applied in general and particularly to head and neck, Physiology & Biochemistry, Pathology Microbiology & virology; health and diseases of various systems of the body (systemic) principles in surgery and medicine, pharmacology, nutrition, behavioral science, age changes, genetics, Immunology, Congenital defects & syndromes and Anthropology, Bioengineering, Bio-medical & Biological Principles

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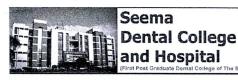
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- The student shall acquire knowledge of various Dental Materials used in the specialty and be able to provide appropriate indication, understand the manipulation characteristics, compare with other materials available, be adept with recent advancements of the same.
- Students shall acquire knowledge and practice of history taking, Diagnosis, treatment planning, prognosis, record maintenance of oral, craniofacial and systemic region.
- Ability for comprehensive rehabilitation concept with pre prosthetic treatment plan including surgical re-evaluation and prosthodontic treatment planning, impressions, jaw relations, utility of face bows, articulators, selection and positioning of teeth, teeth arrangement for retention, stability, esthetics, phonation, psychological comfort, fit and insertion.
- Instructions for patients in after care and preventive Prosthodontics and management of failed restorations shall be possessed by the students.
- Understanding of all the applied aspects of achieving physical, psychological well-being of the patients for control of diseases and / or treatment related syndromes with the patient satisfaction and restoring function of Cranio mandibular system for a quality life of a patient.
- · Ability to diagnose and plan treatment for patients requiring Prosthodontic therapy
- Ability to read and interpret radiographs, and other investigations for the purpose of diagnosis and treatment planning.
- The theoretical knowledge and clinical practice shall include principles involved for support, retention, stability, esthetics, phonation, mastication, occlusion, behavioral, psychological, preventive and social aspects of Prosthodontics science of Oral and Maxillofacial Prosthodontics and Implantology
- Tooth and tooth surface restorations, Complete denture Prosthodontics, removable partial denture Prosthodontics, fixed prosthodontics and maxillofacial and Craniofacial Prosthodontics, implants and implant supported Prosthodontics, T.M.J. and occlusion, craniofacial esthetics, and biomaterials, craniofacial disorders, problems of psychogenic origin.
- Should have knowledge of age changes, geriatric psychology, nutritional considerations and prosthodontic therapy in the aged population.
- Should have ability to diagnose failed restoration and provide prosthodontic therapy and after care.
- Should have essential knowledge on ethics, laws, and Jurisprudence and Forensic Odontology in Prosthodontics.
- Should know general health conditions and emergency as related to prosthodontics treatment like allergy of various materials and first line management of aspiration of prosthesis
- Should identify social, cultural, economic, environmental, educational and emotional determinants of the patient and consider them in planning the treatment.
- Should identify cases, which are outside the area of his specialty/competence, refer them to appropriate specialists and perform interdisciplinary case management.
- To advice regarding case management involving surgical and interim treatment



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Should be competent in specialization of team management in craniofacial prosthesis design.

- To have adequate acquired knowledge, and understanding of applied basic, and systemic medical science knowledge in general and in particular to head and neck regions.
  - Should attend continuing education programmes, seminars and conferences related to Prosthodontics, thus updating himself/herself.
  - To teach and guide his/her team, colleagues and other students.
  - Should be able to use information technology tools and carry out research both in basic and clinical areas, with the aim of publishing his/ her work and presenting his/her work at various scientific forums.
  - Should have an essential knowledge of personal hygiene, infection control, prevention of cross infection and safe disposal of waste, keeping in view the risk of transmission of potential communicable and transmissible infections like Hepatitis and HIV.
  - Should have an ability to plan and establish Prosthodontics clinic/hospital teaching department and practice management.
  - Should have a sound knowledge (of the applications in pharmacology, effects of drugs on oral tissues and systems of body and in medically compromised patients.

#### **SKILLS**

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- The candidate should be able to examine the patients requiring Prosthodontic therapy, investigate the patient systemically, analyze the investigation results, radiographs, diagnose the ailment, plan the treatment, communicate it with the patient and execute it.
- To understand the prevalence and prevention of diseases of craniomandibular system related to prosthetic dentistry.
- The candidate should be able to restore lost functions of stomatognathic system like mastication, speech, appearance and psychological comforts by understanding biological, biomedical, bioengineering principles and systemic conditions of the patients to provide quality health care in the craniofacial regions.
- The candidate should be able to demonstrate good interpersonal, communication skills and team approach in interdisciplinary care by interacting with other specialties including medical specialty for planned team management of patients for craniofacial & oral accuired and congenital defects, temporomandibular joint syndromes, esthetics, Implant supported Prosthetics and problems of Psychogenic origins.
- Should be able to demonstrate the clinical competence necessary to carry out appropriate treatment at higher level of knowledge, training and practice skills currently available in their specialty area with a patient centered approach.
- Should be able to interpret various radiographs like IOPA, OPG, CBCT and CT. Should and be able to plan and modify treatment plan based on radiographic findings



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• Should be able to critically appraise articles published and understand various components of different types of articles and be able to gather the weight of evidence from the same

- To identify target diseases and create awareness amongst the population regarding Prosthodontic therapy.
- To perform Clinical and Laboratory procedures with a clear understanding of biomaterials, tissue conditions related to prosthesis and have required dexterity & skill for performing clinical and laboratory all procedures in fixed, removable, implant, maxillofacial, TMJ and esthetics Prosthodontics.
- To carry out necessary adjunctive procedures to prepare the patient before prosthesis like tissue preparation and preprosthetic surgery and to prepare the patient before prosthesis / prosthetic procedures
- To understand demographic distribution and target diseases of Cranio mandibular region related to Prosthodontics.

#### **ATTITUDES**

- To adopt ethical principles in Prosthodontic practice, Professional honesty, credibility and integrity are to be fostered. Treatment to be delivered irrespective of social status, caste, creed or religion of patient.
- Should be willing to share the knowledge and clinical experience with professional colleagues.
- Should develop an attitude towards quality, excellence, non-compromising in treatment.
- Should be able to self-evaluate, reflect and improve on their own.
- Should pursue research in a goal to contribute significant, relevant and useful information, concept or methodology to the scientific fraternity.
- · Should be able to demonstrate evidence-based practice while handling cases
- Should be willing to adopt new methods and techniques in prosthodontics from time to time based on scientific research, which are in patient's best interest.
- Should respect patient's rights and privileges, including patient's right to information and right to seek second opinion.

#### **COMMUNICATIVE ABILITIES**

- To develop communication skills, in particular and to explain treatment options available in the management.
- To provide leadership and get the best out of his / her group in a congenial working atmosphere.





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- Should be able to communicate in simple understandable language with the patient and explain the principles of prosthodontics to the patient. He/She should be able to guide and counsel the patient with regard to various treatment modalities available.
- To develop the ability to communicate with professional colleagues through various media like Internet, e-mails, videoconferences etc. to render the best possible treatment. Should demonstrate good explanatory and demonstrating ability as a teacher in order to facilitate learning among students

## MDS (ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS)

The students are trained in immaculate history taking, methodological examination of patient, performing diagnostic procedures and management of dentofacial deformities. Students fabricate orthodontic appliances by conducting intricate wire bending procedures. The department imparts orthodontic treatment to a large percentage of the local population and the students of SDCH by the latest fixed orthodontic techniques including McLauglin, Benett & Traversy technique. The department caters to cleft lip and palate rehabilitation by multi-disciplinary approach. Orthognathic surgeries, distraction osteogenesis, implants and lingual orthodontics are some of the special interests of the department.

**OBJECTIVES:** The following objectives are laid out to achieve the goals of the course. These are to be achieved by the time the candidate completes the course. The training programme in Orthodontics is to structure and achieve the following objectives.

At the end of 3 years of training the candidate should be able to acquire adequate knowledge of the discipline.

#### KNOWLEDGE:

- 1. The dynamic interaction of biologic processes and mechanical forces acting on the stomatognathic system during orthodontic treatment
- 2. The etiology, pathophysiology, diagnosis and treatment planning of various common Orthodontic problems
- 3. Various treatment modalities in Orthodontics preventive, interceptive and corrective.
- 4. Basic sciences relevant to the practice of Orthodontics
- 5. Interaction of social, cultural, economic, genetic and environmental factors and their relevance to management of oro- facial deformities
- 6. Factors affecting the long-range stability of orthodontic correction and their management
- 7. Personal hygiene and infection control, prevention of cross infection and safe disposal of hospital waste, keeping in view the high prevalence of Hepatitis and HIV and other highly contagious diseases.





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#### **SKILLS**

- 1. To obtain proper clinical history, methodical examination of the patient, perform essential diagnostic procedures, and interpret them and arrive at a reasonable diagnosis about the Dentofacial deformities.
- 2. To be competent to fabricate and manage the most appropriate appliance intra or extra oral, removable or fixed, mechanical or functional, and active or passive for the treatment of any orthodontic problem to be treated singly or as a part of multidisciplinary treatment of oro-facial deformities. Attitude: 1. Develop an attitude to adopt ethical principles in all aspects of Orthodontic practice. 2. Professional honesty and integrity are to be fostered
- 3. Treatment care is to be delivered irrespective of the social status, cast, creed and religion of the patients.
- 4. Willingness to share the knowledge and clinical experience with professional colleagues
- 5. Willingness to adopt, after a critical assessment, new methods and techniques of orthodontic management developed from time to time based on scientific research, which are in the best interest of the patient
- 6. Respect patients' rights and privileges, including patients right to information and right to seek a second opinion
- 7. Develop attitude to seek opinion from allied medical and dental specialists as and when required.

## MDS (ORAL MEDICINE & RADIOLOGY)

"Mouth is the mirror of the body"; most diseases reflect in the oral cavity with various presentations. This department sits at the interface between dentistry and medicine and trains the novice dental student about oral healthcare of patients with chronic, recurrent and medically related disorders of the oral and maxillofacial region with their diagnosis and non- surgical management. Oral and Maxillofacial Radiology is the speciality of dentistry and discipline of radiology concerned with the production and interpretation of images and data produced by all modalities of radiant energy that are used for the diagnosis and management of diseases, disorders and conditions of the oral and maxillofacial region.

At the end of 3 years of training the candidate should be able to acquire adequate knowledge of the discipline.

**KNOWLEDGE:** Theoretical, Clinical and practical knowledge of all oral mucosal lesions, skeletal involvement of maxillofacial region, diagnostic procedures pertaining to them and latest information of imaging modules.

SKILLS: Three important skills need to be imparted in maxillofacial diseases





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- 1. Diagnostic skill in recognition of oral diseases with radiographic diagnosis and their management
- 2. Research skills in handling scientific problems pertaining to oral treatment
- 3. Clinical and Didactic skills in encouraging younger doctors to attain learning objectives

ATTITUDES: The positive mental attitude and the persistence of continued learning need to be inculcated

## MDS (PERIODONTOLOGY)

Periodontics encompasses the prevention, diagnosis and treatment of diseases of the supporting and surrounding tissues of the teeth. Students are trained in case analysis, treatment planning, and maintenance, supportive and surgical periodontal therapy. Knowledge on techniques of muco-gingival surgeries, resective and reconstructive osseous surgeries and implantology is imparted to the students.

**OBJECTIVES:** The following objectives are laid out to achieve the goals of the course.

At the end of 3 years of training the candidate should be able to acquire adequate knowledge of the discipline.

#### KNOWLEDGE:

- Discuss historical perspective to advancement in the subject proper and related topics.
- · Describe etiology, pathogenesis, diagnosis and management of common periodontal diseases with emphasis on Indian population
- · Familiarize with the biochemical, microbiologic and immunologic genetic aspects of periodontal pathology-
- Describe various preventive periodontal measures
- · Describe various treatment modalities of periodontal disease from historical aspect to currently available ones
- Describe interrelationship between periodontal disease and various systemic conditions
- Describe periodontal hazards due to estrogenic causes and deleterious habits and prevention of it
- Identify rarities in periodontal disease and environmental/Emotional determinates in a given case
- · Recognize conditions that may be outside the area of his/her Speciality/competence and refer them to an appropriate Specialist
- Decide regarding non-surgical or surgical management of the case





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- Update the student by attending courses, conferences and seminars relevant to periodontics or by self-learning process.
- Plan out/ carry out research activity both basic and clinical aspects with the aim of publishing his/her work in scientific journals
- Reach to the public to motivate and educate regarding periodontal disease, its prevention and consequences if not treated
- Plan out epidemiological survey to assess prevalence and incidence of early onset periodontitis and adult periodontitis in Indian population (Region wise)
- Shall develop knowledge, skill in the science and practice of Oral Implantology
- Shall develop teaching skill in the field of Periodontology and Oral Implantology
- · Principals of Surgery and Medical Emergencies.
- To sensitize students about inter disciplinary approach towards the soft tissues of the oral cavity with the help of specialist from other departments.

#### **SKILLS**

- Take a proper clinical history, thorough examination of intra oral, extra oral, medical history evaluation, advice essential diagnostic procedures and interpret them to come to a reasonable diagnosis
- Effective motivation and education regarding periodontal disease maintenance after the treatment
- Perform both non-surgical & education regarding periodontal disease, maintenance after the treatment
- · Perform both non-surgical and surgical procedures independently
- Provide Basic Life Support Service (BLS) recognizes the need for advance life support and does the immediate need for that.
- · Human values, ethical practice to communication abilities
- Adopt ethical principles in all aspects of treatment modalities; Professional honesty & integrity are to be fostered. Develop Communication skills to make awareness regarding periodontal disease Apply high moral and ethical standards while carrying out human or animal research, Be humble, accept the limitations in his/her knowledge and skill, and ask for help from colleagues when needed, Respect patients' rights and privileges, including patients right to information and right to seek a second opinion.
- To learn the principal of lip repositioning and perio esthetics surgeries.

## ATTITUDE:

• Human values, ethical practice to communication abilities.

 Respect patient's rights and privileges, including patient's right to information and right to seek a second opinion.

> Dr P Narayana Prasad Principal

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