



# KARPAGA VINAYAGA INSTITUTE OF DENTAL SCIENCES

GST Road, Chinna Kolambakkam, Padalam (po), Chengalpattu (dt)  
Madhuranthagam(tk), Tamilnadu 603 308

S.No	Year	Subject	Course Outcome
	First Year	General Anatomy	<p><b>Knowledge and Understanding :</b></p> <ul style="list-style-type: none"><li>• To identify, show, draw, describe the structural components of the body responsible for carrying out normal body functions</li><li>• To know the process of development of human embryo emphasizing the development and developmental anomalies of oral , dental and maxillofacial structures including head and neck region</li><li>• Demonstrates knowledge about histologic structures of different parts of body system and organs</li><li>• To understand the importance of study of embryology</li><li>• Knowledge about the derivatives of germ layers: ectoderm, mesoderm and endoderm</li><li>• To describe the anatomical basis of clinical disorders of head and neck and CNS</li><li>• To identify and demonstrate the different parts of bones of head and neck, state the gross features and attachments of skull bones including base of skull and cervical vertebrae</li><li>• To demonstrate movements of joints of head and neck</li><li>• To demonstrate the boundary and identify the contents of oral cavity, the gross features and nerve supply of tongue, gum and teeth</li></ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"><li>• To understand the knowledge acquired in anatomy and to correlate, appreciate and apply in other subjects taught in</li></ul>



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			<p>BDS course</p> <ul style="list-style-type: none"> <li>• The student must be able to describe the location, nerve supply, mode of termination of ducts of salivary glands and their functions</li> <li>• To describe and classify neurons and neuralgia</li> <li>• To explain the functions of different parts of autonomic nervous system</li> <li>• To define terms related to embryology</li> <li>• To define and describe the congenital anomalies of head and neck</li> <li>• To draw and demonstrate the important anatomical points and structures of head and neck</li> <li>• To identify the layers of scalp and the contents of temporal region and infratemporal fossa</li> <li>• To correlate the important clinical conditions associated with structures in head and neck</li> <li>• To identify the different types of tissue on slide under microscope</li> </ul>
		<b>Dental Anatomy</b>	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>• To outline the characteristics of human dentition</li> <li>• The student should be able to identify different teeth in different dentition</li> <li>• To differentiate between normal and pathological state of oral structures</li> <li>• Demonstrate knowledge about development of maxilla, mandible, palate, tongue, lips and to state the</li> </ul>



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			<p>congenital defects during their formation</p> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• To describe the physiological process of tooth development</li> <li>• To describe any tooth by its morphology</li> <li>• To mention the chronology of deciduous and permanent teeth</li> <li>• To describe the types of dentition, dental formula and notation</li> <li>• To describe the mechanism and pattern of tooth shedding and its clinical significance</li> <li>• To mention the pattern of tooth eruption and its clinical significance</li> <li>• To carve human teeth morphology in wax blocks</li> <li>• To identify and describe different histologic structures of oro-dental tissues</li> <li>• To explain the clinical importance of teeth and oral tissues</li> </ul>
		<b>Physiology</b>	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>• To understand the goal of Physiology</li> <li>• To perform physiological experiments</li> <li>• To interpret experimental and investigational data</li> <li>• To demonstrate basic knowledge and understanding on the normal functions of all the organ system of the human body and apply it as a background for clinical subjects</li> </ul> <p><b>Skills :</b></p> <ul style="list-style-type: none"> <li>• To develop sound attitude for continuing- self education to improve efficiency and skill in physiology</li> </ul>



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			<ul style="list-style-type: none"> <li>• To demonstrate knowledge about blood grouping and blood transfusion</li> <li>• To explain about heart rate and radial pulse</li> <li>• To describe the blood pressure and its regulation</li> <li>• To describe the general mechanism of action, functions and regulation of secretion of hormones</li> <li>• To describe the physiology and regulation of body temperature</li> <li>• To demonstrate the parts of microscope and skill in using it</li> <li>• To collect and prepare blood sample</li> <li>• To examine the radial pulse and its application</li> <li>• To examine respiratory rate</li> <li>• To elicit light reflex</li> <li>• To record oral and axillary temperature</li> <li>• To determine bleeding time, clotting time, ESR, differential count of WBC</li> </ul>
		<b>Biochemistry</b>	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>• Demonstrate basic knowledge and understanding on major biomolecules, forming the structure of human body, their functions and role in health and disease</li> <li>• Knowledge about the role of enzymes in the diagnosis of disease</li> <li>• To explain the metabolic reactions in the body</li> <li>• To acquire knowledge on fundamental</li> </ul>



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			<p>chemical principles involved in body mechanism upon which life process depends</p> <p><b>Skills :</b></p> <ul style="list-style-type: none"> <li>• Demonstrate skills in performing and interpreting common biochemistry laboratory tests</li> <li>• To apply the knowledge and understanding of biochemistry in medicine and surgery</li> <li>• To estimate glucose, abnormal constituents of urine</li> <li>• To diagnose diabetes mellitus, renal, liver and thyroid functions</li> <li>• The student will be able to list the laboratory hazards and the precautions to prevent them</li> <li>• To interpret the result of serum urea, creatinine, total protein, bilirubin</li> </ul>
	Second year	Microbiology	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>• Demonstrate the knowledge and understanding of microorganisms and their role in disease</li> <li>• Knowledge and understanding of immunology for prevention of disease</li> <li>• To understand the various methods of sterilisation and disinfection and its importance in dentistry</li> <li>• To understand the classification of microorganisms- bacteria, virus, fungus</li> <li>• State bacterial anatomy, physiology, growth and death</li> <li>• To demonstrate the pathogenesis of dental caries, host response and the virulence factors of bacteria</li> <li>• Demonstrate knowledge about general concept of virus with clinical</li> </ul>



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			<p>importance.</p> <ul style="list-style-type: none"><li>• Knowledge about common fungal diseases of oral cavity</li><li>• Knowledge about cross infections and nosocomial infections and methods to prevent them in dental practice</li><li>• Understanding the role of various microorganisms in oral lesions and diseases (oral thrush), other systemic and opportunistic fungi</li><li>• To understand the concept, introduction of fungus with its clinical importance</li><li>• Demonstrate knowledge about general concepts of immunology and its applications</li><li>• To state culture media with sensitivity and its clinical importance</li><li>• Knowledge about oral microbiology with clinical importance</li></ul> <p><b>Skill:</b></p> <ul style="list-style-type: none"><li>• Student should be able to follow proper aseptic techniques in dental practice</li><li>• Should be able to collect samples from oral cavity and carefully transfer to the laboratory</li><li>• To interpret microbiological and serological laboratory tests for diagnosis of disease</li><li>• To apply microbiological knowledge in practicing of dental surgery to improve the oral and dental health of the patients.</li><li>• To understand the general concepts of immunology and its applications, immunity-classification and difference</li><li>• To define and classify hypersensitivity with mechanism and function</li><li>• Knowledge about important respiratory</li></ul>
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			virus with their pathogenesis, clinical importance and lab diagnosis
		<b>Pathology</b>	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>• Understanding about causes and pathogenesis of diseases</li> <li>• Understanding about preventive aspects of diseases</li> <li>• To describe haematological diseases and haematological disorders</li> <li>• To interpret clinical pathological specimen to evaluate the diagnosis of disease</li> <li>• Demonstrate basic tissue changes in acute and chronic inflammation</li> <li>• Demonstrate understanding of healing after dental surgery (tooth extraction) and its complications</li> <li>• Understanding about mechanism of generalized oedema</li> <li>• Knowledge about stages of wound healing</li> <li>• Demonstrate principles of tissue preservation</li> <li>• State different diagnostic procedures of tumours</li> <li>• Knowledge about various hematologic disorders</li> </ul> <p><b>Skill:</b></p> <ul style="list-style-type: none"> <li>• The student should be able to identify and differentiate neoplastic and non-neoplastic lesions around the head and neck region</li> <li>• Advise appropriate investigations for correct diagnosis of disease</li> <li>• To apply the knowledge acquired in</li> </ul>



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			<p>pathology while practicing dental surgery</p> <ul style="list-style-type: none"> <li>• Identify acute, chronic and granulomatous inflammation</li> <li>• Identify granulation tissue under microscope</li> <li>• To know the procedure of sending a biopsy specimen to the laboratory and cytology</li> <li>• To identify common tumours and tumour like lesions of the oral cavity</li> <li>• To mention the importance of jaundice in dentistry</li> <li>• To define and classify diabetes mellitus and describe its complications</li> <li>• To perform and interpret Benedict's test</li> <li>• To know the importance of diabetes mellitus in dentistry</li> <li>• To interpret TC, DC, absolute values, ESR, platelet count, bone marrow examination, BT, CT and PT and determine its clinical significance</li> </ul>
		<b>Pharmacology</b>	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>• Understanding of the pharmacokinetics and pharmacodynamics of essential and commonly used drugs in dentistry</li> <li>• To understand the indications, contraindications, interactions and adverse reactions of commonly used drugs in dentistry</li> <li>• To understand the principles underlying the concepts of essential medicines</li> <li>• To demonstrate knowledge and understanding of teratogenic medicines</li> <li>• To evaluate the ethical and legal issues involved in drug prescribing</li> <li>• Knowledge about geriatric</li> </ul>





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			<p>pharmacology, treatment for medically compromised patients, pregnant women and common dental problems</p> <ul style="list-style-type: none"><li>• Knowledge about medical emergencies of relevance to dental practice like syncope, angina pectoris, myocardial infarction, cardiac arrest, hypertension, hypotension, acute allergic reactions/anaphylaxis, insulin shock/diabetic coma, asthma</li></ul> <p><b>Skills :</b></p> <p>The student should be able to</p> <ul style="list-style-type: none"><li>• Write a rational prescription</li><li>• Able to execute Therapeutic decision making</li><li>• To define mouthwash and dentifrices,</li><li>• Management of common dental infections</li><li>• Management of dental pain</li><li>• Proper use of local anaesthetic agents</li><li>• Prescribing from essential medicine list</li><li>• Management of shock</li><li>• Understanding the drugs for medical emergencies in dental practice and management</li><li>• State the indication, mechanism of action and side effects of chlorhexidine containing mouthwash</li><li>• State and explain the uses of anticoagulant therapy</li><li>• To take necessary action before giving dental treatment to a patient on anticoagulant therapy</li><li>• Method of application and mechanism of action of anti-plaque agents</li><li>• State the principles of cancer chemotherapy and the chemotherapeutic drugs</li></ul>
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			<ul style="list-style-type: none"> <li>State the pharmacology of sialogogues and antisialogogues</li> </ul>
		<b>Dental Materials</b>	<p><b>Knowledge and Understanding :</b></p> <ul style="list-style-type: none"> <li>To understand the physical, chemical, biological and mechanical properties of materials used in dentistry</li> <li>Describe the proper handling and caring of materials</li> <li>Knowledge about the selection of required instruments</li> <li>To understand the toxic and side effects of the materials and protective measures to be taken</li> <li>To understand the biocompatibility of the materials</li> <li>To understand tarnish and corrosion and the preventive measures of the metallic made prostheses and restoratives used in oral cavity</li> <li>Understand the criteria for selection and use of dental ceramics</li> <li>To enumerate the composition, properties of different cements used in dentistry</li> <li>Knowledge about setting mechanism of dental cements</li> <li>Knowledge about classification and principles of cutting of polishing materials</li> <li>Understanding about cast partial dentures</li> <li>Knowledge about denture base materials, techniques of manipulation , maintenance and allergic reactions</li> </ul> <p><b>Skill :</b></p>



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			<p>The student should be able to</p> <ul style="list-style-type: none"> <li>• To identify the materials used in dentistry</li> <li>• Selection of appropriate material for clinical use</li> <li>• Proper use of instruments</li> <li>• Manipulate different types of cements</li> <li>• Manipulate gypsum products</li> <li>• Manipulate amalgam</li> <li>• Manipulate acrylic resin and construction of denture base</li> <li>• Manipulate the dental materials perfectly without loss of its properties</li> </ul>
		<p><b>Preclinical Conservative Dentistry</b></p>	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>• Understanding of the treatment procedures carried out in conservative dentistry</li> <li>• Knowledge about the composition and properties of restorative materials</li> </ul> <p><b>Skills :</b></p> <ul style="list-style-type: none"> <li>• Preparation of different types of cavities in plaster models and simulation phantom heads.</li> <li>• Identification of different types of restorative materials</li> <li>• Manipulation for the various types of restorative materials like zinc oxide eugenol cement, zinc phosphate cement</li> <li>• Manipulation of light cured composite resins</li> <li>• Manipulation of calcium hydroxide</li> <li>• To list the dentin bonding agents and</li> </ul>



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			<p>their mechanism of adhesion</p> <ul style="list-style-type: none"> <li>To describe the pit and fissure sealants</li> </ul>
		<p><b>Preclinical Prosthodontics, Crown and Bridge</b></p>	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>Knowledge about the structure and functions of teeth, jaws and its physiological importance in the physical and social well being of a patient</li> <li>Understanding about teeth occlusion</li> <li>Knowledge about abnormalities in occlusion</li> <li>Knowledge about sequelae following discrepancies in occlusion following improper fabrication of dentures</li> <li>Demonstrate understanding about the properties, composition of elastomeric impression materials</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>Fabrication of removal partial dentures</li> <li>Fabrication of fixed partial dentures</li> <li>To understand the casting procedure</li> <li>Prepare wax pattern</li> <li>To describe the importance, properties of the important base metals used in dentistry</li> <li>Manipulation of base plate wax to make a special tray/temporary base</li> <li>Manipulation of modeling wax to make a wax pattern</li> <li>Technique to construct denture base using acrylic resin</li> <li>Technique to repair fractured denture /model</li> </ul>



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			<ul style="list-style-type: none"> <li>• Manipulation of alginate and taking impression of an edentulous model</li> </ul>
	<b>Third year</b>	<b>General Medicine</b>	<p><b>Knowledge and Understanding :</b></p> <ul style="list-style-type: none"> <li>• Understanding about the various manifestations of common diseases</li> <li>• To understand the basic principles of history taking and clinical examination</li> <li>• Knowledge to correlate the clinical symptoms and physical signs to make a provisional diagnosis of common diseases and suggest relevant investigation</li> </ul> <p><b>Skill :</b></p> <ul style="list-style-type: none"> <li>• To elicit required history from the patient,</li> <li>• To develop communication skill so as to establish effective communication with the patients and with scientific community</li> <li>• Able to record arterial pulse, blood pressure, temperature and respiration</li> <li>• Able to perform CPR</li> <li>• Diagnosis of common clinical problems</li> <li>• To interpret common haematological report, X-ray chest, ECG, CT scan</li> <li>• Writing prescriptions</li> <li>• To acquire skill in performing intramuscular and intravenous</li> </ul>



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			<p>injections</p> <ul style="list-style-type: none"> <li>To follow professional ethics during clinical practice</li> </ul>
		<b>General Surgery</b>	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>Knowledge about common surgical conditions of head and neck</li> <li>Knowledge about the appropriate radiological and haematological investigations</li> <li>Knowledge about the various benign and malignant lesions of head and neck region.</li> <li>To learn the basic surgical principles</li> </ul> <p><b>Skills :</b></p> <ul style="list-style-type: none"> <li>To perform proper general, local and systemic examination</li> <li>To identify common surgical problems</li> <li>Interpretation of investigational results of common surgical problems</li> <li>To provide first aid with prompt referral of complicated patients</li> <li>To know minor surgical procedures like abscess drainage, taking biopsy</li> <li>To know about the universal precautions to be taken against HIV, Hepatitis</li> </ul>
		<b>Oral Pathology and Oral Microbiology</b>	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>To know the basic mechanism of different types of diseases that involves the orofacial tissues</li> <li>To know the oral manifestations of systemic and metabolic diseases</li> <li>To know the use of oral histopathology, FNAC, cytological examination, frozen section and immunohistochemistry</li> </ul>



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			<ul style="list-style-type: none"> <li>• Knowledge about common developmental disturbances of teeth and jaws</li> <li>• To know about developmental disturbances of oral soft tissues and paraoral tissues</li> </ul> <p><b>Skills :</b></p> <ul style="list-style-type: none"> <li>• Writing oral histopathology and requisition form</li> <li>• Handling and maintenance of microscope</li> <li>• Interpretation of pathological reports and data</li> <li>• Preservation of surgical specimen and preparation of fixative for surgical specimens in 10% formalin</li> <li>• Preservation of surgical specimens for Immunohistochemistry</li> </ul>
	Final year	<b>Oral Medicine and Radiology</b>	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>• To know the treatment plan and differential diagnosis of common infective and non-infective ulcers occurring in oral cavity</li> <li>• To describe the clinical features, histopathology and laboratory investigations for common infective and non-infective ulcers in oral cavity.</li> <li>• Knowledge about pathogenesis, clinical features and treatment of common autoimmune diseases of oral cavity</li> <li>• Knowledge about identification and differentiation between traumatic and various reactive lesions occurring in oral cavity</li> <li>• Knowledge about various effects of radiation in oral cavity</li> <li>• Knowledge about common viral and</li> </ul>



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			<p>bacterial diseases of salivary glands</p> <ul style="list-style-type: none"> <li>• Knowledge about causes and complications of xerostomia</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• Able to manage dental, non-dental pain,</li> <li>• Management of trigeminal neuralgia, facial paralysis</li> <li>• Management of autoimmune diseases of oral cavity</li> <li>• Management of leukoplakia and other premalignant lesions of oral cavity</li> <li>• Management of xerostomia</li> <li>• Ability to frame appropriate treatment planning</li> <li>• Ability to take intraoral periapical radiographs and interpret it</li> <li>• Ability to interpret Orthopantomogram</li> </ul>
		<p><b>Conservative Dentistry and Endodontics</b></p>	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>• To have theoretical knowledge about conservative dentistry and endodontics, in order to integrate between theory and practice</li> <li>• Knowledge about current concepts of operative and endodontic care</li> <li>• Knowledge about new concepts of aesthetic dentistry</li> <li>• Knowledge about dental radiology</li> </ul> <p><b>Skill:</b></p> <ul style="list-style-type: none"> <li>• The student should be able to demonstrate adequate diagnostic skills, restorative skills, endodontic skills,</li> <li>• Ability to perform manual skill and dexterity</li> <li>• Communication skills to obtain a</li> </ul>





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			<p>medical and psychosocial history</p> <ul style="list-style-type: none"> <li>• Ability to frame an effective treatment plan for individual patient</li> <li>• Skilled enough to work in a team and show professionalism</li> <li>• Ability to perform emergency pain management</li> <li>• Competent enough to practice Minimally Invasive Dentistry (MID) and Evidence Based Dentistry (EBD) with scientific understanding and thought.</li> </ul>
		<p><b>Periodontology</b></p>	<p><b>Knowledge and Understanding :</b></p> <ul style="list-style-type: none"> <li>• The student should be able to describe the background and scope of Periodontology</li> <li>• Knowledge about classification of periodontal diseases and framing of treatment plan as required</li> <li>• Knowledge about the prevention and progression of periodontal diseases</li> <li>• Knowledge about the basic tissues of periodontium, clinical features of healthy and inflamed gingival</li> <li>• Adequate knowledge about the etiology, pathophysiology, diagnosis, treatment planning of various periodontal diseases</li> <li>• Knowledge about the interrelationship between periodontal disease and systemic disease</li> <li>• Knowledge about the basic concepts and periodontal aspects of dental implants and management of periodontal health of implants</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• Skilled enough to diagnose and manage common periodontal diseases</li> </ul>



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			<ul style="list-style-type: none"> <li>• To develop attitude for further learning of subjects</li> <li>• To execute the basic principles of periodontal instrumentation</li> <li>• Competent enough to perform scaling, root planning, curettage with oral hygiene instructions with full aseptic precaution</li> <li>• To list and identify the basic periodontal instruments</li> <li>• To provide proper referral to specialist consultant</li> <li>• To apply the knowledge and understanding of prevention of periodontal diseases</li> <li>• To apply knowledge of Periodontology to integrate with multidisciplinary treatment approach</li> <li>•</li> </ul>
		<b>Prosthodontics and Crown and Bridge</b>	<p><b>Knowledge and Understanding:</b> To understand the normal relations of human teeth and jaws in dentulous patients</p> <ul style="list-style-type: none"> <li>• To demonstrate knowledge about complete anatomy and physiology of complete or partial edentulous state.</li> <li>• Knowledge about articulation and concept of occlusion</li> <li>• Knowledge about stepwise process, finish and deliver of different prosthesis</li> <li>• To understand the concept of osseointegration and the value of implant-supported prosthodontic procedures</li> <li>• To understand the basic concepts of TMJ movements</li> <li>• To understand the basic principles of</li> </ul>



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			<p>natural and artificial occlusion</p> <ul style="list-style-type: none"> <li>• To understand the basic principles of tooth preparation for construction of crowns</li> <li>• To understand the basic principles of diagnosis, treatment planning of maxillofacial defects</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• To handle various dental materials effectively</li> <li>• Competent to treat edentulous and partial edentulous patients</li> <li>• Skilled enough to treat maxilla-facial defect patient</li> <li>• To diagnose and refer patients requiring treatment</li> <li>• Ability to identify occlusal discrepancies and correct it appropriately</li> <li>• Skilled enough to perform construction of inlay, onlay, partial veneer crown and full veneer crown</li> <li>• Skilled enough to perform various impression techniques</li> </ul>
		<b>Oral and Maxillofacial Surgery</b>	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>• To demonstrate knowledge about basic concepts in oral and maxillofacial surgery</li> <li>• Demonstrate the appropriate attitude to practice in oral and maxillofacial surgical field</li> <li>• Knowledge about diagnosis and effective management of common o To understand the principles of management of major oral surgical problems</li> <li>• To value the ethical issues</li> </ul>



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			<ul style="list-style-type: none"> <li>To understand the principles of inpatient management</li> </ul> <p><b>Skill:</b></p> <ul style="list-style-type: none"> <li>History taking and clinical examination of common disorders of oral and maxillofacial surgery</li> <li>Competent enough to make appropriate decision based on risk benefit of maxillofacial surgery</li> <li>To motivate and counsel the importance of regular oral health screening regarding oral cancer</li> <li>Competent enough to perform basic surgical skills of common disorders of oral and maxillofacial surgery</li> <li>To apply the basic principles of surgery like asepsis and handscrub, care of the hospitalised patient.</li> <li>Able to manage medical emergencies in dental office providing primary care</li> <li>Ability to manage complications during operative and postoperative phase</li> <li>Appropriate referral of high risk patients</li> <li>Competent enough to carry out extraction of teeth under local anaesthesia and general anaesthesia</li> <li>Able to perform biopsy, and other minor oral surgical procedures</li> <li>To maintain high standard of professional ethics</li> </ul>
		<b>Orthodontics and Dentofacial Orthopaedics</b>	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>Knowledge about the etiology, pathophysiology, principles of diagnosis and management of common</li> </ul>



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			<p>dentofacial and orthodontic problems</p> <ul style="list-style-type: none"><li>• To demonstrate basic knowledge and skill to examine, investigate and diagnose the patient's malocclusion for orthodontic treatment</li><li>• To understand the basic concept of fixed orthodontic appliance</li><li>• To understand the design, plan and fabrication of functional appliance</li><li>• Understand the principles of cephalometric tracing</li></ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"><li>• To identify and diagnose anomalies of dentition, occlusion, facial structures, and abnormal functional conditions(orthodontic patients)</li><li>• Skilled enough to detect deviations of development of dentition, of facial growth, and occurrence of functional abnormalities</li><li>• Skilled enough to identify pernicious oral habits that may lead to malocclusion</li><li>• To evaluate the need for orthodontic treatment</li><li>• To plan and execute interceptive orthodontic measures</li><li>• Competent enough to convince the patient for specialised orthodontic consultation</li><li>• To develop communicative skills with the patient regarding preventive, curative and rehabilitative orthodontic care</li><li>• To formulate a treatment plan for simple type of malocclusions and execute</li><li>• To outline the management protocol</li><li>• To manage simple orthodontic</li></ul>
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			<p>problems</p> <ul style="list-style-type: none"> <li>• Skilled enough to insert and activate functional appliance</li> <li>• To identify normal and abnormal growth pattern of jaws and dentition</li> <li>• To identify the changes in face form and facial profile</li> <li>• To evaluate the psychological and social impact of abnormal growth and malocclusion</li> </ul>
		<p><b>Pedodontics and Preventive Dentistry</b></p>	<p><b>Knowledge and Understanding:</b></p> <ul style="list-style-type: none"> <li>• To demonstrate knowledge about diagnosis of dental diseases of paediatric patients</li> <li>• To demonstrate knowledge of relative analgesia</li> <li>• To understand the concept of fixed and removable space maintainer</li> <li>• Understanding about simple surgical procedures like excision of cyst, epulis and ranula</li> </ul> <p><b>Skills:</b></p> <ul style="list-style-type: none"> <li>• To identify primary dentition</li> <li>• To differentiate between primary and permanent dentition</li> <li>• To instill a positive attitude and behaviour in patients to maintain good health</li> <li>• To promote infant's and children's healthy feeding practice</li> <li>• To assess and refer paediatric patients to different specialities appropriately</li> <li>• To motivate and treat psychologically challenged paediatric dental patients</li> <li>• To counsel and motivate children and parents about good oral hygiene and</li> </ul>



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		<p><b>Public Health Dentistry</b></p>	<p>health</p> <ul style="list-style-type: none"> <li>• To do anterior striping and stainless steel crown</li> <li>• To interpret radiographs used in paediatric dentistry</li> <li>• To manage traumatised anterior segment of dentition</li> <li>• To apply pit and fissure sealants and fluorides</li> <li>• To manage different types of pulpal pathologies</li> <li>• To teach the paediatric patients about different brushing techniques</li> <li>• To diagnose, manage and refer patients with communicative disorders</li> </ul> <p><b>Knowledge and Understanding :</b></p> <ul style="list-style-type: none"> <li>• To demonstrate a complete understanding about the concepts of public health and primary healthcare and their delivery system in the community</li> <li>• To understand the different preventive measures to address the prevailing oral and dental problems in the community in each and every level</li> <li>• To describe the concept and methods of epidemiology to design simple research in dental background</li> <li>• To understand the concept of dental jurisprudence and address the legal issues in dentistry</li> <li>• Demonstrate knowledge of social and psychological pattern of disease causation and its management accordingly</li> </ul> <p><b>Skills :</b></p> <ul style="list-style-type: none"> <li>• Competent to plan and conduct field survey properly</li> </ul>
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			<ul style="list-style-type: none"><li>• To interact with the community people about oral health status</li><li>• Competent to work in primary healthcare settings</li><li>• Act as oral health educator</li><li>• Act as a social worker regarding establishing a good oral health status among the community people</li><li>• To provide instruction about- brushing, flossing, interdental cleansing aid, mouthwash</li><li>• To interpret research findings from published journals and articles</li><li>• To promote health promotional materials such as poster, festoon, leaflet, handbill, banner etc.</li></ul>
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**KARPAGA VINAYAGA INSTITUTE OF DENTAL SCIENCES**  
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