



MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
Affiliated to Pondicherry Central University, Recognized by Dental Council Of India
Chalakkara, P.O. Palloor, Mahe-673 310
U.T. of Puducherry. Ph:0490 2337765

COURSE OUTCOME



MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
Affiliated to Pondicherry Central University, Recognized by Dental Council of India
Chalakkara, P.O. Pallor, Mahe-673 310
U.T. of Puducherry. Ph : 0490 2337765

DEPARTMENT OF PHARMACOLOGY

COURSE OUTCOME

The primary objective of the pharmacology courses for dental students is to ensure that students understand the basic principles of pharmacology. After completing the course students should be able to;

CO1: Describe the pharmacokinetics and pharmacodynamics of essential and commonly used drugs in dental practices.

CO2: List the indication, contraindications, interactions and adverse effects of commonly used drugs in dental practices.

CO3: Prescribe drug for common dental ailments

CO4: Evaluate pharmacy exercises and drug formulations.

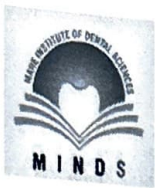
CO5: Identify and comment on certain photographs and pictures.

CO6: Analyze certain clinical problems and therapeutic exercises.

CO7: Solve dose and percentage calculation pertaining to dental practices.

HOD

Department of pharmacology



MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
Affiliated to Pondicherry Central University, Recognized by Dental Council of India
Chalakkara, P.O. Pallor, Mahe-673 310
U.T. of Puducherry. Ph : 0490 2337765

Department of Microbiology
Course outcome

- CO1. Have a sound understanding of various infectious diseases in the oral cavity and clinical interpretations.
- CO2. They are trained in various aseptic microbiological techniques like; sample collection, various staining methods, and culture techniques, identification of respective pathogens, antibiotic sensitivity test and decontamination procedures.
- CO3. Students will be trained for preparation of microbiological culture medium and interpretation of microorganism's cultural characteristics.
- CO4. Students will be trained to develop skills of infection control measures by adapting safe and effective practices.
- CO5. Understanding the basic principles related to different types of sterilization procedure to control the infections in the clinical set up.
- CO6. Apply the knowledge to understanding the implementation of ethical related procedures.



MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
Chalakkara, P.O. Pallor, Mahe-673 310
U.T. of Puducherry. Ph : 0490 2337765
DEPARTMENT OF PAEDODONTICS & PREVENTIVE DENTISTRY

COURSE OUTCOME

CO1 Treating Paediatric patients right from birth to adolescence including those with special health care needs as per the principles of Paediatric and Preventive Dentistry

CO2 Recording detailed case history and methodological examinations of the child patient, and arriving at a treatment plan which is minimally invasive and beneficial for the patient

CO3 Implementing the current concepts of caries and its underlying causative factors in a child for effective management of the dental concern.

CO4 Expertising in recent advances besides the use of various restorative materials used in children including semi-permanent stainless-steel crowns, restorations and aesthetic crowns

CO5 Diagnosis and early prevention and interception of developing dental health problems in the child.

CO6 Understand the basics of growth and development, psychology and behaviour of children and display strategies for management in the dental clinic

CO7 Identify morphology of primary and permanent root canal, pulpal and periapical diseases and perform pulpal therapy techniques

CO8 Mastering the various Local Anaesthetic techniques in children and its recent advances

CO9 Diagnosing common dental injuries in children and rendering effective management of the same

CO10 Demonstrating the management of special children based on the condition and requirement of the patient

CO11 Deliver oral health education lectures and participate in school dental health awareness programmes thereby instilling a positive attitude in children towards dental care and treatment.



MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
Affiliated to Pondicherry Central University, Recognized by Dental Council of India
Chalakkara, P.O. Pallor, Mahe-673 310
U.T. of Puducherry. Ph : 0490 2337765

DEPARTMENT OF PERIODONTICS
COURSE OUTCOME

- CO 1 Describe the diverse anatomic and microscopic features of the Periodontium and the interrelated aspects.
- CO 2 To make the students be competent in recognizing and diagnosing periodontal disease and peri implant diseases and providing basic periodontal therapy to the patients.
- CO 3 The students gain knowledge on periodontal diagnosis
Students gain familiarity with various types of periodontal surgical procedures while they watch and assist the procedures performed by post graduates as well as faculty.
- CO 4 After gaining knowledge through theory classes as well as through chair side demonstration of various periodontal therapies , students gain the confidence in performing some of the minor surgical procedures depending on the type and complexity of the surgery.
- CO 5 Identify, plan and execute non surgical and surgical periodontal treatment procedures based on current scientific evidence to treat systemically healthy and systemically compromised patients.
- CO 6 By understanding the significance of maintenance phase, students can educate and motivate the patients for further recall visits.
- CO 7 Communicate and demonstrate appropriate measures in prevention of periodontal diseases
- CO 8 Thorough chair side discussion on case histories enable the students to identify gingivitis and Periodontitis related cases as well as cases requiring interdepartmental discussions to reach at proper diagnosis and to establish an ideal treatment plan for that particular case.
- CO 9 Inculcate a sense of social responsibility and capacity to deliver periodontal healthcare to the underprivileged sections of the society

MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
Affiliated to Pondicherry Central University, Recognized by Dental Council of India
Chalakkara, P.O. Pallor, Mahe-673 310
U.T. of Puducherry. Ph : 0490 2337765

Department of General Pathology
Course outcome

At the end of students should have understood and able to recall

- CO1. Haemostasis - Mechanisms and Disorders.
- CO2. Cell injury, Immune response, Inflammation and Healing process.
- CO3. Immune System - Components and diseases related to it.
- CO4. Infectious and Non Infectious diseases.
- CO5. Haemodynamic disorders – Oedema, Congestion, Thrombosis, Embolism, Infarction and Shock.
- CO6. Neoplasia –Classification, carcinogenesis, laboratory diagnosis.
- CO7. Epidemiology, Gross, Microscopy, clinical presentation, diagnostic techniques of different diseases and organ system.
- CO8. Haematological diseases , Blood banking.
- CO9. Perform and interpret basic bedside clinical pathology procedures on blood and urine.



MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
Affiliated to Pondicherry Central University, Recognized by Dental Council of India
Chalakkara, P.O. Pallor, Mahe-673 310
U.T. of Puducherry. Ph : 0490 2337765

DEPARTMENT OF PROSTHODONTICS

COURSE OUTCOME

1. The candidate would be able to apply basic and systemic medical sciences on human anatomy, embryology, histology, applied in general and particularly to head and neck, Physiology & Biochemistry, Pathology and Microbiology, virology, health and diseases of various systems of the body (systemic). Apply basic and systemic medical sciences in surgery and medicine, pharmacology, nutrition, behavioral science, age changes, genetics, Immunology, Congenital defects and syndrome and Anthropology, Bioengineering, Bio-medical and Biological Principle and applications to Dental material science
2. The candidate would be able to Diagnose and plan treatment for patients requiring a Prosthodontic therapy, Interpret a radiograph and other investigations for the purpose of diagnosis and treatment plan. Evaluate 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 esthetic, and biomaterials, craniofacial disorders, problems of psychogenic origin. Evaluate General health conditions and emergency as related to Prosthodontics treatment.
3. The candidate would have the knowledge on ethics, laws and Jurisprudence and forensic odontology in Prosthodontics. Respect patient's rights and privileges including patients right to information and right to seek the second opinion.
4. The candidate would identify social, cultural, economic, environmental, educational and emotional determinants of the patient and consider them in planning the treatment.
5. The candidate would acquire essential knowledge of personal hygiene, infection control, prevention of cross infection and safe disposal of waste, keeping in view the risks of transmission of Hepatitis and HIV.
6. The candidate would be able to examine the patients requiring Prosthodontics therapy, investigate the patient systemically, analyze the investigation results, radiography, diagnose the ailment, plan a treatment, communicate it with the patient and execute it. Identify cases, which are outside the area of his specialty/ competence and refer them to appropriate specialists. Interact with other specialty including medical specialty for a planned team



MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
Affiliated to Pondicherry Central University, Recognized by Dental Council of India
Chalakkara, P.O. Pallor, Mahe-673 310
U.T. of Puducherry. Ph : 0490 2337765

management of patients for a craniofacial and oral acquired and congenital defects, Temporomandibular joint syndromes, esthetics, Implant supported Prosthetics and problems of Psychogenic origin.

7. The candidate would be able to restore lost functions of Stomatognathic system namely mastication, speech, appearance and psychological comforts, by understanding biological, biomedical, bioengineering principles and systemic condition of the patient to provide a quality health care of the craniofacial region.
8. The candidate would perform clinical and Laboratory procedure with an understanding of biomaterials, tissue conditions related to the prosthesis and have competent dexterity and skill for performing clinical and laboratory procedures in fixed, removable, implant, maxillofacial, TMJ and esthetics in Prosthodontics. Adopt new methods and techniques in prosthodontics from time to time based on scientific research, which is in patient's best interest.
9. The candidate would be able to communicate in simple understandable language with the patient and explain the principles of Prosthodontics to the patient. He would be able to guide and counsel the patient with regard to various treatment modalities available. Develop the ability to communicate with professional colleagues through various media like Internet, e-mail, video conference, and etc. to render the best possible treatment



MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
Affiliated to Pondicherry Central University, Recognized by Dental Council of India
Chalakkara, P.O. Pallor, Mahe-673 310
U.T. of Puducherry. Ph : 0490 2337765

DEPARTMENT OF PHYSIOLOGY

COURSE OUTCOME

- CO1** Understand the basic concepts in physiology which helps to provide comprehensive knowledge in the physiological basis of health disease.
- CO2** Define homeostasis and explain how homeostatic mechanisms normally maintain a constant interior milieu.
- CO3** State the functions of each organ system of the body, explain the mechanism by which each functions, and relate it.
- CO4** Understand and demonstrate the interactions of the organ systems to each other.
- CO5** Predict and explain the integrated response of the organ systems of the body to physiological and pathological stresses.
- CO6** Explain the pathophysiology of common diseases related to the organ system of the body.
- CO7** Understand basic laboratory techniques which are used in the physiology and perform hematology experiments such as blood cell count, hemoglobin estimation, bleeding time and clotting time tests, blood grouping, and recording of blood pressure etc.


HOD
Dept. Of Physiology



MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
Chalakkara, P.O. Pallor, Mahe-673 310
U.T. of Puducherry. Ph : 0490 2337765

DEPARTMENT OF ORTHODONTICS

- Co1 –define orthodontics, explain basic principles, concepts ,process of growth, development of arches, occlusion and associated craniofacial structures
- Co2 – classify and explain different types and etiological factors in different type of skeletal and dental problems
- Co3 – explain different types of anchorage ,tooth movement , biological reactions and biomechanical principles of tooth movement in orthodontics
- Co4 –demonstrate skills in diagnosis and treatment planning in orthodontics and dentofacial orthopaedics , to make upper and lower dental arch impressions, prepare the study models,perform model analysis and analyse and interpret the radiographs
- Co5 –describe the various lab procedures, materials and their uses in the fabrication of different types of orthodontic appliances
- Co6 – etiology, theory, schools of thought of retention and retainers in orthodontics
- Co7 – recognize the type of malocclusion and refer the cases to a specialist for higher level of care. Ability to diagnose and manage simple malocclusion
- Co8 – explain etiopathogenesis, classification and management of patients with CLP and patients requiring surgical correction



MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
Affiliated to Pondicherry Central University, Recognized by Dental Council of India
Chalakkara, P.O. Pallor, Mahe-673 310
U.T. of Puducherry. Ph : 0490 2337765

DEPARTMENT OF ANATOMY

COURSE OUTCOME

After completing first year student should be able to -

CO1- Understand basic structure of human body.

CO2- Identify gross anatomical structure and its relations with vital anatomical structures

CO3- Discuss normal microscopic structure of organs and key identifiable features of slides.

CO4 -Describe the general embryology , development of Head & Neck and applied aspects. Along with congenital anatomy.

CO5 - Describe the basic concept of human genetics .

MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL

CHALAKKARA, PALLOOR, MAHE - 673 310. U.T OF PUDUCHERRY

(Affiliated to Pondicherry Central University & Recognized by Dental Council of India)

DEPARTMENT OF CONSERVATIVE DENTISTRY & ENDODONTICS

COURSE OUTCOME

- CO1 – Acquire adequate knowledge, necessary skill and attitude to carry out dental practice involving prevention, diagnosis and treatment of anomalies and diseases of teeth and associated hard and soft tissues.
- CO2 – Apply basic knowledge of anatomy, physiology and bio-mechanical properties of teeth, bio materials and associated issues for effective practice of Dentistry.
- CO3 – Understand and demonstrate the aetiology, pathophysiology and clinical manifestation of diseases of the teeth and adjacent hard and soft tissues.
- CO4 - Acquire basic knowledge of aetiology, biology, prevention, interception and management of carious and non-carious lesion of teeth.
- CO5 – Choose various methods to identify the disease process at different stages and determine the treatment modalities
- CO6 – Define and Classify disease of teeth and adjacent tissues and plan out the treatment preferences
- CO7 – Communicate effectively and sensitively with patients and public to bring about satisfaction and trust.
- CO8 – Identify and manage common anomalies of shape, size and number of teeth
- CO9 – Perform and interpret basic diagnostic procedure of teeth and perioral tissues, its prevention and treatment with the knowledge of physiological systems.
- CO10 – Demonstrate basic knowledge of the biological basis of endodontics and management of various endodontic situations including diagnosis, treatment planning and treatment modalities.
- CO11 – Identify and refer patient requiring special care
- CO12 – Analyse occlusion, factors affecting and physiology of occlusion with emphasis on trauma from occlusion correction



DEPARTMENT OF ORAL PATHOLOGY AND MICROBIOLOGY

- CO1-Should have the ability to understand the manifestations of common lesions affecting the oral and para-oral structures.
- CO2-Students will have a detailed knowledge of the pathology and histopathological diagnosis of diseases affecting the teeth, the jaw bones, the oral soft tissues and the salivary glands
- CO3-Able to identify the Oral disease, interpret diagnosis and able to compare based on its clinical, radiograph and histopathologic features of oral disease
- CO4-Dental graduate with basic skills in preparation of ground sections and oral smears.
- CO5-Should be able to identify the microscopic slides of the diseases of oral cavity
- CO6-Dental graduate with potential to efficiently communicate diagnosis & correlate with other oral disease with their pathological processes.
- CO7-Should be able to understand the basic aspects of Forensic Odontology.

MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
Affiliated to Pondicherry Central University, Recognized by Dental Council of India
Chalakkara, P.O. Pallor, Mahe-673 310
U.T. of Puducherry.Ph : 0490 2337765



DEPARTMENT OF DENTAL ANATOMY & ORAL HISTOLOGY

- CO1-Basic knowledge on Morphology of both deciduous and permanent teeth. And students should be able to identifying the teeth and understand the chronological events
- CO2-Able to understand the mechanism of Embryology, Development of Oral & Para Oral Structure, Oral Physiology and its clinical consideration
- CO3-Dental graduate with basic skills in Wax carving of teeth, Identifying the basic histology slides by microscopy
- CO4-Students should have a detailed knowledge of the normal anatomy and histology of the teeth, the jaw bones, oral soft tissues and the salivary glands
- CO5-Students should have basic understanding about laboratory techniques involved in routine soft tissue and hard tissue processing.



MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
Affiliated to Pondicherry Central University, Recognized by Dental Council of India
Chalakkara, P.O. Pallor, Mahe-673 310
U.T. of Puducherry. Ph : 0490 2337765

DEPARTMENT OF BIOCHEMISTRY

Course outcome

- CO1. At the end of the course students will be able to understand the scientific basis of life processes at cellular and molecular level in both health and disease which guides them in clinical practice.
- CO2. Adequate knowledge about common biochemical laboratory investigations and their clinical interpretation.
- CO3. Adequate knowledge regarding the inborn errors of metabolism.
- CO4. Apply the basic concept of enzymes in clinical diagnosis and therapeutic use.
- CO5. Relate the knowledge of chemistry and metabolism of various biomolecules in health & disease.
- CO6. Role of Nutrition (Vitamins & Minerals) in health & disease.



DEPARTMENT OF PUBLIC HEALTH DENTISTRY

MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL

Affiliated to Pondicherry Central University, Recognized by Dental Council of India

Chalakkara, P.O. Pallor, Mahe-673 310

U.T. of Puducherry. Ph : 0490 2337765

The Department of Public Health Dentistry aims in a unique manner at four different domains in the BDS training program.

CO.1 Adequate knowledge in the sciences – Epidemiology and Biostatistics, Social Sciences and Principles in Health Administration , Tool Development, Validation and Standardization of Epidemiological tools.

CO.2. Adequate Knowledge and training in Dental ethics including patient's rights and privileges on RTI and right to seek a second opinion.

CO.3 Adequate clinical skills in Diagnosis and Treatment Plan.

CO.4 Adequate hands on training in the application of epidemiological tools to conduct independent research and to be a part of research team and to understand the methodologies used in published articles.

CO.5 Adequate training in soft skills for communication and oral health education and to develop Health Education aids and impart Health Education using appropriate methods to various target groups.

CO.6 Adequate clinical training in preventive treatments and Clinical training in Comprehensive dental care

CO.7 Adequate knowledge to derive community diagnosis and to Plan, implement and evaluate appropriate Community Oral Health Programs for Promotion of Oral Health and Prevention of Oral disease at the Community level for various target groups including school children.

CO.8 Adequate knowledge to identify health systems and health policies for delivery of health care services in India and advocate the need for Oral health policy.

ORAL AND MAXILLOFACIAL SURGERY

C01

The student should be able to acquire the knowledge regarding the basic scientific knowledge and principles of surgery required to provide Oral and maxillofacial surgery care and prevention of hospital acquired infections.

C02

Application of knowledge gained from the clinical subjects (anatomy, physiology, biochemistry, pathology, microbiology, pharmacology, general medicine and general surgery) and basic sciences in the diagnosis and management of oral surgical problems.

C03

Case history recording, clinical examination, investigations and interpretation to arrive at a final diagnosis and plan the treatment and then manage the oral and maxillofacial problems.

C04

Competency in managing the medically compromised patients with minor oral surgical problems and prompt management of medical emergencies if any during procedures and decision making regarding the need for specialist consent.

C05

Competently performing the extraction of tooth/teeth under local or general anesthesia with the prescription of medications and proper post extraction instructions, proper follow up care and management of complications of both intra and post operative with referral to an oral and maxillofacial surgeon as required.

C06

To know the ethical issues and develop the communication skills and compassion towards the patient for establishing the better patient and doctor relationship irrespective of social status, caste, creed or the religion of the patient.

C07

To competently carry out simple minor oral surgical procedures such as alveoloplasty, frenectomy, incision and drainage, dental wiring , biopsy and assist the oral and maxillofacial surgeon in OT for major surgical procedures.

C08

To update with the recent advances in the speciality of Oral and maxillofacial surgery such as dental implant ,laser ,distraction osteogenesis and cryotherapy .

C09

Management of major oral surgical problems intra operatively and post operatively by adhering the principles of patient care in the hospital.



**DEPARTMENT OF ORAL MEDICINE AND RADIOLOGY
MAHE INSTITUTE OF DENTAL SCIENCES & HOSPITAL
Chalakkara, P.O. Pallor, Mahe-673 310
U.T. of Puducherry. Ph : 0490 2337765**

COURSE OUTCOME

- CO1** Examination of patients and formulate provisional diagnosis and treatment plan with a scientific approach.
- CO2** Identification of precancerous and cancerous lesions of the oral cavity and refer to the concerned specialty for their management.
- CO3** Adequate knowledge on oral mucosal lesions, musculoskeletal, bony, vascular, neurologic pathologies, lesions of Para oral structures and referral to the concerned specialty for their management.
- CO4** Adequate knowledge about medical complications that can arise while treating systemically compromised patients and take prior precautions/ consent from the concerned medical Specialist.
- CO5** Competent to take intraoral radiographs and interpret the radiographic findings; Gain adequate knowledge of various extra-oral radiographic procedures.
- CO6** Adequate knowledge about radiation health hazards, radiations safety and protection
- CO7** Adequate knowledge about common laboratory investigations and interpretation of their results.
- CO8** Be aware of the importance of intra- and extra-oral radiographs in forensic identification and age estimation.