

PROGRAMME OUTCOME AND COURSE OUTCOME



### Introduction

At Seema Dental College and Hospital, Rishikesh, we take pride in shaping future dental professionals with a curriculum that meets the highest standards set by the Dental Council of India (DCI). Our Bachelor of Dental Surgery (BDS) program aims to nurture cognitive, psychomotor, and affective skills in a structured and progressive manner.

Rooted in the principles of Bloom's Taxonomy, the Program Outcomes (POs) and Course Outcomes (COs) for the BDS curriculum as stated by the Dental Council of India are meticulously designed to ensure holistic development—starting with knowledge acquisition, advancing through comprehension, application, and critical thinking, and culminating in creating competent dental practitioners. This is an important step in outcome-based education. As medical and dental education moves from a traditional teaching-learning process to competency-based or outcome-based education, this needs to be incorporated into the evaluation system. All these steps help to monitor not only the performance of the program but also the individual students.

This framework equips students not just with technical proficiency, but also with the soft skills and ethical grounding necessary to excel in today's ever-evolving healthcare landscape.

Whether it's diagnosing oral health conditions, performing complex dental procedures, or fostering community awareness about dental hygiene, our graduates are empowered to make a meaningful impact. Here, education goes beyond textbooks, preparing our students for the real-world challenges they will face as professional dentists.

Welcome to a curriculum where every lesson aims for more than just passing marks—it aims for excellence.



### **Terminologies**

### Program educational objective (PEO)

Program Educational Objectives are broad statements that describe what graduates are expected to attain within a few years of completing their program. These are based on the needs of society as analyzed and outlined by the regulatory bodies.

### Program Outcome (PO):

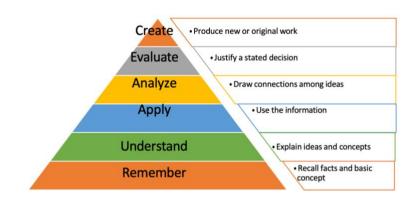
Program outcomes represent broad statements that incorporate many areas of inter-related knowledge and skills developed throughout the program through a wide range of courses and experiences. They represent the big picture, describe broad aspects of knowledge, skill and attitude development, and encompass multiple learning experiences.

### Course Outcomes (CO):

Course outcomes describe the learning that will take place across the curriculum through concise statements, made in specific and measurable terms, of what students will know and/or be able to do as the result of having successfully completed a course.

### Bloom's Taxonomy

Bloom's Taxonomy of Learning Domains was created in 1956 under the leadership of educational psychologist Dr. Benjamin Bloom in order to promote higher order of thinking in education. It is most often used when designing educational, training, and learning processes. The three Domains of Learning are (1) Cognitive: Mental Skills (Knowledge), (2) Affective: growth in feelings or emotional areas (attitude or self) and (3) Psychomotor: manual or physical skills (skills). (Figure 1)



**Figure. 1** Bloom's taxonomy

Seema Dental College and Hospital Rishikesh is affiliated to Hemwati Nandan Bahuguna Uttarakhand Medical Education University, a Health Education University of Uttarakhand State. It has provided the syllabus for various Health Care courses, where all courses have its own objectives and methodology to achieve the course outcomes. To attain the course outcomes and program outcome, the institute use course wisemarks of students and the pass percentage of the summative assessment.



### (A) Under Graduate

### 1.Bachelor of Dental Surgery (BDS)

### **Program Educational Objectives (PEO)**

As defined in the DCI document, the roles of the Indian Dental Graduate (IDG) are being considered as program educational objectives for under graduate program and are as follows:

- PEO1: Able to systematically diagnose and plan treatment for diseases of oral cavity and head & neck with systemic considerations and carry out the treatment with expected competency with patient centered approach
- PEO2: Able to deliver preventive treatment and counseling to patients who are at risk of developing diseases affecting the tooth associated structures of head and neck
- PEO3: It is a community oral health educator & participates in the rural health care delivery programmes existing in the country & also participate in the implementation of the National Oral Health Program.
- PEO4: It is involved to practice evidence-based dentistry, participate in dental research and contribute
  to the scientific community at large, develop continuous learning habit, in an aim to improve the
  standards of care to the society.
- PEO5: Provide a holistic care to the patient with utmost care including high standards of professionalism, ethics, demonstrate interdisciplinary and inter professional teamwork with good communication skills

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### Program outcome (PO)

- At the end of the 5 years of training Indian Dental Graduate(IDG) of SDCH should be able to:
- O PO 1: Ability to diagnose using routine clinical work up and appropriate investigations and referral, plan preventive, interceptive and therapeutic treatment for common diseases and conditions of teeth and oral cavity including carious lesions, premalignant lesions, developing malocclusions, growth and developmental disorders using patient centered approach.
- PO 2: Ability to effectively motivate the public towards good oral hygiene practices, educate them to follow oral hygiene measures and to abstain from habits that could prove detrimental to the health of the dental and oral tissues.
- PO 3: Ability to routinely update state of art developments with regard to materials, techniques and instrumentation and be able to perform on patients with standards of care.
- o **PO 4:** Ability to prescribe the appropriate pain killers, antibiotics and other appropriate drugs for common infections, diseases or conditions of the oral cavity orally or by other routes like subcutaneous, intramuscular or intravenous wherever appropriate.
- O PO 5: Ability to deliver treatment to patients who are children, geriatric or with special needs or disabilities with utmost concern with sound underlying principles governing the Behavioural management of the general and special population.



- PO 6: Ability to carry out a holistic integrated dental care through preventive, restorative, procedures, following optimal sterilization disinfection and waste management protocols with high standards of professionalism and ethics.
- o **PO7:** Ability to assess the outcomes to the prescribed objectives and optimal satisfaction of the patient,
- PO 8: Ability to perform extractions, minor oral surgical, preventive and restorative procedures and trauma care under local anaesthesia.
- PO 9: Ability to identify common medical emergencies in dental office like bleeding, syncope, seizure, hypoglycaemic episode, hyperventilation and anaphylaxis, to manage the same within the scope of a dental surgeon and also realize the need for early medical intervention.
- PO 10: Ability to realize the importance of laboratory support and be able to guide the technicians involved in fabrication of restoration and replacements.
- PO 11: Ability to identify the community needs in prevention of a dental or oral disease and to carry out an action plan for prevention or management of the same which should be aligned with national and global objectives of health care [oral/general] and prevention.
- PO 12: Ability to perform simple research for assessment of demographical status, incidence or prevalence of a disease or condition and be able to correlate the pattern with national and global scenario.

### Course outcome

BDS program consists of following course. 1<sup>st</sup> BDS consists of Anatomy, Physiology, Biochemistry, Dental anatomy and Oral Histology; 2<sup>nd</sup> BDS consists of General pathology, Microbiology, Pharmacology, Dental Materials ,Preclinical Prosthodontics, Preclinical Conservative dentistry and Endodontics; 3<sup>rd</sup> BDS consists of General Medicine, General Surgery, Oral Pathology; 4<sup>th</sup> BDS consists of Prosthodontics, Conservative dentistry & Endodontics, Periodontics, Public Health Dentistry, Orthodontics, Pedodontics, Oral Surgery and Oral Medicine. Each course has its well-defined course outcome mentioned in individual course book.



### **BDS CURRICULUM**

### **BDS FIRST YEAR**

### **ANATOMY**

ACO1: Explain in detail about Gross Anatomy of Head and Neck and Neuroanatomy.

**ACO2**: Explain in detail the microscopic structure of the Human body.

**ACO3**: Explain in detail the clinical correlation of the organs and structures involved and interpret the anatomical basis of disease presentations.

**ACO4**: Explain the development of various structures of the Head & Neck, differentiate abnormal development and interpret the formation of various congenital anomalies.

ACO5: Explain the basic principles of Genetics and the basics of Genetic disorders.

**ACO6**: Identify the features of various appearances of Head & Neck in skiagrams after routine radiological investigations.

**ACO7**: Outline the internal structures in relation to the external surface of the body.

### **BIOCHEMISTRY**

**BICO1**: Explain the structure and functions of basic unit of life cell, cell organelles and disorders associated with them

BICO2: Describe the structure, functions, properties of biomolecules and their role in health and disease

**BICO3**: Describe the metabolic pathways of molecules, disorders associated with them and laboratory diagnosis of inborn errors of metabolism

**BICO4:** Explain the role of intermediary metabolism in fasting and fed state and regulation of blood glucose

**BICO5**: Describe the organ function tests and their application in clinical and laboratory diagnosis of disorders



BICO6: Role of nutrition in maintaining oral health and disorders of oral cavity

BICO7: Describe the structure, functions, replication of DNA and the steps of protein synthesis

**BICO8**: Biochemical basis of ordering routine laboratory investigations and reference ranges of routine laboratory investigations

BICO9: Biochemical and molecular basis of Oral cancers and laboratory investigations

BICO10: Follow guidelines for Good clinical laboratory practices in patient care and management.

#### **PHYSIOLOGY**

At the end of the course, the student will be able to:

**PCK1.** Explain the normal functioning of all the organ systems and their interactions for well-coordinated total body function.

**PCK2.** Assess the relative contribution of each organ system towards the maintenance of the milieu interior.

**PCK3.** List the physiological principles underlying the pathogenesis and treatment of disease.

**PCK4.** Conduct experiments designed for the study of physiological phenomena. S2. Interpret experimental and investigative data

**PCK5.** Distinguish between normal and abnormal data derived as a result of tests which he/she has performed and observed in the laboratory.

**PCK6:** At the end of the integrated teaching the student shall acquire an integrated knowledge of organ structure and function and its regulatory mechanisms.

### **DENTAL ANATOMY AND ORAL HISTOLOGY**

**DAOH -CO 1.** Appreciate the normal development, morphology and functions of oral tissue.

**DAOH - CO2**. Identify the histology of the normal oral structures under microscope.

**DAOH - CO3.** Acquire the knowledge and practice of normal tooth morphology of the deciduous and permanent teeth to apply in clinical practice.



### **BDS SECOND YEAR**

### **GENERAL PATHOLOGY**

- **PCO1.** Comprehension of the causes of diseases
- PCO2. Comprehension of the evolution of diseases
- PCO3. Comprehension of the mechanisms of

diseases

- PCO4. Knowledge of alterations in gross morphology of organs in disease states
- PCO5. Knowledge of alterations in cellular morphology of organs in disease states
- **PCO6.** Ability to correlate the natural history, structural and functional changes with the clinical manifestations of diseases.
- **PCO7.** Ability to correlate the natural history, structural and functional changes to diagnose a disease
- **PCO8.** Ability to correlate the natural history, structural and functional changes to treat a disease
- **PCO9.** Knowledge to diagnose a disease with understanding of approach to laboratory diagnosis
- **PCO10.** Perform basic laboratory tests & to interpret test results of laboratory investigations as they apply to the care of the patient

#### **MICROBIOLOGY**

- MICO 1. Understanding of role of microbial agents in health and disease
- MICO 2. Understanding of the immunological mechanisms in health and disease.
- **MICO 3.** Ability to correlate the natural history, mechanisms and clinical manifestations of infectious diseases as they relate to the properties of microbial agents
- MICO 4. Knowledge of the principles and application of infection control measures
- **MICO 5.** An understanding of the basis of choice of laboratory diagnostic tests and their interpretation, antimicrobial therapy, control and prevention of infectious diseases.
- MICO 6. Ability to interpret laboratory investigations
- MICO 7. Ability to perform and interpret gram stain, ZN stain and stool microscopy from clinical samples

### **PHARMACOLOGY**

**PHCO1**: describe the pharmacokinetics and pharmacodynamics of essential and commonly used drugs in general practice and dentistry in particular

**PHCO2**: explain the indications, contraindications, and adverse reactions of commonly used drugs with reason



**PHCO3**: tailor the use of appropriate drugs in disease with consideration to its cost, efficacy, and safety for individual and mass therapy needs

**PHCO4**: indicate special care in prescribing common and essential drugs in special medical situations such as pregnancy, lactation, old age, renal, hepatic damage and immunocompromised patients

PHCO5: integrate the rational drug therapy in dental practice

PHCO6: indicate the principles underlying the concept of "Essential drugs"

PHCO7: appreciate adverse reactions and drug interactions of commonly used drugs

PHCO8: observe clinical experiments designed for study of effects of drugs

PHCO9: critically evaluate drug formulations and be able to interpret the clinical pharmacology of

marketed preparations commonly used in dentistry

PHCO10: prescribe drugs for common dental and medical ailments

### **DENTAL MATERIALS**

### **CONSERVATIVE DENTISTRY**

**DMCO 1:** The student will be able to appreciate the evolution, development of various dental materials including the recent advancements in each in an understanding of its scope and realize the role of various governing bodies regulating development, approval and standardization in terms of safety and efficacy.

**DMCO 2:** The student will be able to explain with correlation and use all the materials used in dentistry which may be theraupetic/restorative, auxillary and preventive in their types, characteristics, properties, manipulation, advantages, limitations and usage in clinical practice. [The student will be able to understand and manipulate all the materials within the scope of general dentist practice

#### **PROSTHODONTICS**

**DMCO 1**: The student will be able to appreciate the evolution, development of various dental materials including the recent advancements in each in an understanding of its scope and realize the role of various governing bodies regulating development, approval and standardization in terms of safety and efficacy.

**DMCO 2**: The student will be able to explain with correlation and use all the materials used in dentistry which may be therapeutics/restorative, auxillary and preventive in their types, characteristics, properties, manipulation, advantages, limitations and usage in clinical practice.

[The student will be able to understand and manipulate all the materials within the scope of general dentist practice]



### PRE CLINICAL CONSERVATIVE DENTISTRY AND ENDODONTICS

**PCC CO 1**: The Student will be able to perform tooth preparation on simulated models like plaster and typhodont teeth mounted on phantom head for various restorations using proper principles and appropriate armamentarium.

**PCC CO 2**: The student will be able to use various materials and realize their characteristics as they fabricate simulated prosthesis with concepts of biomechanics and principles of esthetics.

### PRE CLINICAL PROSTHODONTICS

**PCPCO 1**: The Student will be able to perform tooth preparation on simulated models like plaster and typodont teeth mounted on phantom head for all ceramic and full veneer crown restorations using proper priniciples and appropriate armamentarium.

**PCPCO 2**: The student will be able to carry out preclinical laboratory procedures pertaining to complete denture, removable partial denture construction using simulated partially and completely edentulous models.

**PCPCO 3:** The student will be able to use various materials and realize their characteristics as they fabricate simulated prosthesis with concepts of biomechanics and principles of esthetics.

### **BDS THIRD YEAR**

### **GENERAL MEDICINE**

**GMCO1**: The student will be able to take appropriate history taking, clinical examinations, investigations, treatment or referral plan for common medical conditions.

**GMCO2**: The student will be able to identify and manage the medical emergencies in dental patients.

**GM CO3**: The student will be able to identify oral manifestations of systemic diseases, able to identify special precautions/ contraindications of anesthesia and various dental procedures in different systemic diseases.

**GM CO4**: The student will have an adequate knowledge, indications, contraindications and adverse effects of all commonly used antibiotics, analgesics, anti-diabetic drugs, anti-hypertensives in dental patients, and to prescribe appropriate analgesics, antibiotics and other drugs.

**GM CO5**: The student will be able to adjust drug dosage for analgesics, antibiotics in renal injury or liver cell failure patients.

**GM CO6**: The student will be able to prescribe or appropriate referral plan for prophylaxis in infective endocarditis or rheumatic heart disease patients undergoing dental procedures.



**GM CO7**: The student will be able to identify normal and abnormal lab values and to take appropriate decision.

**GM CO8**: The student will be able to interact with patients and their relatives to explain the medical condition, course of the disease, and prognosis with good communication skills.

### **GENERAL SURGERY**

- **GSCO.1** Student will be able to perform examination, appropriate investigations and management of Thyroid Disorders.
- **GSCO.2** Student will be able to perform examination, appropriate investigations and management of Ulcer.
- **GSCO.3** Student will be able to perform examination, appropriate investigations and management of Oral cavity related diseases.
- **GSCO.4** Student will be able to perform examination, appropriate investigations and management of Salivary gland disorders.
- **GSCO.5** Student will be able to diagnose and ask for appropriate investigations and manage basic General Surgical Problems.

### ORAL & MAXILLOFACIAL PATHOLOGY AND ORAL MICROBIOLOGY

- **OPCO 1**. To comprehend the different types of pathological process that involves in the oral cavity.
- **OPCO 2** .The knowledge of manifestations of common oral diseases, their diagnosis and their correlation with clinic pathological process.
- **OPCO 3.** Understand the oral manifestation of systemic diseases, their diagnosis & correlation with clinico pathological processes.
- **OP CO 4.**Understand the biological principles governing the treatment of oral diseases.
- **OPCO 5**. Know the principles and basic aspects and the role of forensic Odontology in Forensic sciences and age estimation.
- **OPCO 6.** Interpret the oral pathogens and histopathological slides under microscope for common oral diseases. .
- **OPCO 7**. Knowledge on various microorganism causing oral diseases.
- **OPCO 8.** Knowledge on the specimen collection and processing and basic procedures.



### **BDS FOURTH YEAR**

### **ORAL MEDICINE & RADIOLOGY**

- OMRCO 1. Ability to diagnose and treat common oral disease.
- OMRCO 2. Ability to identify, treat or refer to appropriate specialist as per the diagnosis.
- OMRCO 3. Should be competent in diagnosing early premalignant lesions, detect malocclusion and developmental disorders.
- OMRCO 4. An ability to interpret test results of hematology and dental radiology for common oral conditions.
- OMRCO 5. Competent to diagnose treat and refer as required, for oral manifestations of systemic disease.
- OMRCO 6. To council patients and assist them in deciding the appropriate treatment.
- OMRCO 7. Will prescribe appropriate prescription for basic oral disease and sort referral as required.
- OMRCO 8. Ability to conduct a proper general examination and record the vitals skilfully.

### **ORAL & MAXILLOFACIAL SURGERY**

- **OMFS CO 1.**To evaluate the clinical condition, explain the patient about the broad treatment modalities, perform appropriate procedure and manage the intra-operative & post-operative complications efficiently.
- **OMFS CO 2.** Able to identify, provide primary care and manage medical emergencies in the dental office.
- **OMFS CO 3.** Assessing and understanding of the management of trauma patient.
- **OMFS CO 4.** Should have the skill to examine patient with a TMJ problem in an orderly manner and should be able to provide a legit management.
- **OMFS CO 5.** Have a broad knowledge in early identification of carcinoma, cyst & tumors.
- **OMFS CO 6.** Assess the existing dentofacial deformity and refer accordingly the patient with proper counselling
- **OMFS CO 7.** Determine the salivary gland pathology and treat accordingly based on the condition.



### **ORTHODONTICS & DENTOFACIAL ORTHOPAEDICS**

**ORTHCO 1.** The student will be able to evaluate the sequelae of malocclusion and educate the patient on importance of orthodontic treatment in the ideal age with emphasis on instructions on proper maintenance care of appliances.

**ORTHCO 2.** The student will be able to perform cephalometric and model analysis and develop a comprehensive treatment plan with fixed or removable options for various malocclusions.

**ORTHCO 3.** The student will be able to fabricate acrylic removable appliances on patients with the clinical and laboratory steps associated with it.

**ORTHCO 4.** The student will be able to identify problems that could arise with appliances during review/activation visits, treat them accordingly and complete the treatment with emphasis in retention protocol.

**ORTHCO 5.** The student will be able to understand the retention protocol based on the initial malocclusion and deliver the ideal retention appliance

### PEDIATRIC & PREVENTIVE DENTISTRY

- **PDCO 1.** Understand the differences between adult and children and apply them in all facets of Pediatric Dentistry
- **PDCO2.** Diagnose common dental diseases in children by recording a systematic case history, order and interpret appropriate investigations and design a comprehensive patient centred treatment plan and collaborate with medical / dental specialists when required.
- PDCO3. Provide developmentally oriented counselling to parents, caregivers and children
- **PDCO4.** Perform scaling, fluoride application, pit and fissure sealants, restore decayed and traumatized teeth with appropriate materials, extract teeth under local anesthesia and prevent/intercept developing malocclusions in children employing appropriate behavior management techniques and universal precautions
- PDCO5. Prescribe drugs in appropriate dosages for control of pain and infection in children
- **PDCO6.** Understand the dental considerations in the management of children with special healthcare needs and treat or refer appropriately
- **PDCO7.** Recognize & manage medical & dental emergencies in children



**PDCO8.** Know the recent advances in Pediatric dentistry by participation and paper presentation in CDE, Conferences & perform simple research projects

PDCO9: Participate in School Dental Health Programs

### CONSERVATIVE DENTISTRY AND ENDODONTICS

- CEDCO 1: Take relevant case history pertaining to the individual's chief complaint.
- **CEDCO 2**: Prevent the occurrence of carious lesions by providing proper diet counselling to the rural community and individual patients.
- **CEDCO 3**: Diagnose the carious and non-carious lesions and perform vitality tests.
- **CEDCO 4**: Prevent the progression of incipient carious lesions with fluoride application and pit and fissure sealants.
- **CEDCO 5**: Manage dental emergencies due to trauma under appropriate aseptic condition.
- **CEDCO 6**: Proper interpretation of intraoral radiographs.
- CEDCO 7. Formulate treatment plan for various clinical findings including all age groups.
- **CEDCO 8**: Perform esthetic restorations.
- **CEDCO 9**: Treat the carious lesions with simple restorative procedure.
- **CEDCO 10**: Manage deep carious lesions with restorative treatment.
- **CEDCO 11**: Perform endodontic treatment in anterior teeth.
- **CEDCO 12**: Provide appropriate post endodontic restoration.

### **PERIODONTOLOGY**

- **PR CO** 1: Perform a thorough diagnostic work up including periodontal examination for identification of aetiology and pathogenesis of the periodontal diseases
- **PR CO 2**: Prescribe appropriate investigations, correlate results with diagnostic findings and arrive at a diagnosis.
- **PR CO 3**: Device a comprehensive treatment plan including interdisciplinary approach and explain to the patient about the proposed treatment.
- **PR CO 4**: Perform Scaling and root planning including management of cases with systemic diseases and prescribe necessary drugs according to the periodontal and systemic health conditions
- **PR CO 5**: Provide appropriate oral hygiene instructions
- PR CO 6: Understand the biologic and surgical basics of Oral Implantology



### PROSTHODONTICS AND CROWN & BRIDGE

**PROSTHO CO 1**: The student will be able to evaluate the predicament associated with partially and completely edentulous state and be able to develop treatment plan with fixed or removable options [conventional and recent] for such conditions and explain the same to the patient for proper decision making.

**PROSTHO CO 2**: The student will be able to educate the patient on consequences of tooth loss, importance of replacement of teeth and proper maintenance care instructions.

**PROSTHO CO 3**: The student will be able to fabricate complete denture, acrylic removable partial Denture on patients, with the clinical and laboratory steps associated with it.

**PROSTHO CO 4**: The student will be able to identify problems that could arise with prosthesis with any coexisting condition and treat them accordingly for maintenance of oral health and prosthesis.

**PROSTHO CO 5:** The student will be able to understand the implant treatment protocol and be able to motivate edentulous patients for the same when indicated.

**PROSTHO CO 6**: The student will be able to understand the need to other specialty [medical/dental] intervention and perform an interdisciplinary case work for appropriate referral

### **PUBLIC HEALTH DENTISTRY**

- **PHDCO 1**. Provide comprehensive dental care services both at community level and as well as in the hospital settings
- **PHDCO 2**. Plan and organize community programs and also integrate with national health programs
- **PHDCO 3**. Practice basic principles of asepsis and sterilization both at community level and as well as in the hospital settings
- PHDCO 4. Provide primary and palliative dental care to population with special health care needs
- **PHDCO 5**. Understand the importance of dental ethics and jurisprudence and knowledge of maintaining dental records
- PHDCO 6. Understand the various etiological factors of common oral diseases
- **PHDCO 7.** Measure the oral diseases using epidemiological principles, dental indices and apply basic statistics.
- PHDCO 8. Conduct oral health survey to document the oral disease levels
- **PHDCO 9**. Handle biomedical waste appropriately
- **PHDCO 10**. Communicate effectively to educate about the treatment options and guide patients in choosing the appropriate services.
- **PHDCO 11.** Practice based on evidence and update their knowledge and skills and possess leadership qualities



**PHDCO 12.** Educate patients about adoption of healthy lifestyle practices to prevent common oral diseases

### **DENTAL INTERNSHIP PROGRAM**

The Dental Internship Program is a pivotal year in a dental graduate's journey, designed to reinforce clinical knowledge, hone practical skills, and instill professional values. After completing the BDS final year, interns undergo a one-year compulsory, rotatory posting across various dental specialties. This program emphasizes competency-based training, allowing interns to gain hands-on experience, strengthen diagnostic and treatment skills, and develop ethical and patient-centered care practices. By the end of the internship, graduates are prepared to provide comprehensive dental care and contribute meaningfully to community health initiatives.

In a dental internship, the **Program Outcomes (POs)** and **Course Outcomes (COs)** serve to define what a dental graduate should achieve by the end of the internship period. These outcomes help guide the educational objectives and assess the competencies gained during the internship.

### **Program Outcomes (POs)**

### 1. Reinforcement of Knowledge and Skills:

- Strengthen the theoretical knowledge acquired during the BDS program through hands-on clinical practice.
- Develop the ability to use techniques and resources within both individual and community settings for optimal patient care.

### 2. Competency Development:

- Attain and maintain clinical competencies in history taking, clinical examination, diagnostic interpretation, and treatment planning.
- Enhance communication skills, especially in delivering patient-centered care that fosters hope and optimism.

### 3. Professionalism and Ethical Practice:

- Understand and respect the rights and dignity of patients, fostering trust through ethical and professional behavior.
- Learn the importance of consultations, referrals, and collaborative teamwork in patient care.
- Embrace the responsibility of providing free emergency services and working for the welfare of the community.

### 4. Comprehensive and Preventive Care:

 Deliver comprehensive dental care, addressing not just the symptoms but the underlying causes, with a focus on prevention and holistic treatment.



 Engage in disease prevention and health promotion activities at individual, family, and community levels.

### 5. Continuous Learning and Adaptation:

- Cultivate habits of lifelong learning and continuous dental education.
- Develop the capacity for working in diverse clinical settings, from shared to full responsibility for patient care.

### 6. Community Health and Public Service:

- Actively participate in public health initiatives and dental outreach programs, promoting dental health at the community level.
- Gain experience in rural health services and understand the socio-cultural contexts of healthcare.

### **Course Outcomes (COs) for Different Departments:**

### 1. Oral Medicine & Radiology:

- CO1: Conduct comprehensive clinical history-taking and perform diagnostic radiographs for effective treatment planning.
- CO2: Analyze and interpret radiological data for the diagnosis of oral diseases.

### 2. Oral & Maxillofacial Surgery:

- CO1: Perform minor surgical procedures such as extractions and manage trauma cases under supervision.
- CO2: Assist in major surgeries and post-operative patient care.

### 3. Prosthodontics & Crown & Bridge:

- CO1: Carry out the clinical steps involved in fabricating and placing removable and fixed prostheses.
- CO2: Design and execute treatment plans for patients requiring crowns, bridges, and dentures.

### 4. Periodontology:

- CO1: Diagnose and treat common periodontal diseases through non-surgical and basic surgical interventions.
- CO2: Educate patients on the maintenance of oral hygiene to prevent periodontal issues.

### 5. Conservative Dentistry & Endodontics:

- CO1: Perform restorative procedures, including fillings, and root canal treatments under supervision.
- CO2: Develop treatment plans for preserving the structure and function of natural teeth.

### 6. Pediatric & Preventive Dentistry:

 CO1: Manage the dental needs of pediatric patients, including preventive care and simple therapeutic procedures.



CO2: Address behavioral aspects and educate both children and parents about oral health.

### 7. Oral Pathology & Microbiology:

- CO1: Interpret histopathological data and understand the microbial basis of oral diseases.
- CO2: Assist in laboratory investigations and correlate clinical findings with pathological data.

### 8. Orthodontics & Dentofacial Orthopaedics:

- CO1: Perform diagnostic procedures for malocclusion and assist in orthodontic treatments such as appliance placement.
- CO2: Monitor patient progress and provide follow-up care.

### 9. Public Health Dentistry/Rural Services:

- CO1: Conduct community health surveys and organize dental health education programs in rural areas.
- CO2: Participate in dental outreach programs, promoting preventive oral health care in underserved communities.

### 10. Elective Posting:

- CO1: Choose a specific area of interest within the dental field to deepen understanding and gain specialized skills.
- CO2: Apply knowledge and skills in a focused clinical area, contributing to personal and professional growth.

These POs and COs are aligned with the objectives of providing comprehensive training, skill development, and an ethical foundation for dental graduates during their one-year internship.