

SOP FOR BDS PROGRAM OUTCOME AND COURSE OUTCOME



TAGORE DENTAL COLLEGE

**Affiliated to
The TN Dr. MGR Medical University**

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INTRODUCTION TO OUTCOME BASED EDUCATION (OBE)

Deciding outcomes for academic achievements and its attainment for assessment and formulation is based on a learning theory called Outcome Based Education (OBE).

OBE is an educational theory that bases each part of an educational system around goals (outcomes). By the end of the educational experience, each student should have achieved the goal. There is no single specified style of teaching or assessment in OBE; instead, classes, opportunities, and assessments should all help students achieve the specified outcomes. The role of the faculty adapts into instructor, trainer, facilitator, and/or mentor based on the outcomes targeted.

The accreditation and regulatory organisations have clearly made their intentions clear about introducing a skill-based, competency nurturing learning experience. Outcome based education emphasizes on:

1. Stating what you want your students to be able to do at the end of the program,
2. Assessing the students whether they are able to do what they are expected to do to do what they are expected to do,
3. Orienting teaching and other academic processes to facilitate students to do what they are expected to do.

Program Outcomes (POs)

POs are statements about the knowledge, skills and attitudes (attributes) the graduate of a formal program should have. POs deal with the general aspect of graduation for a particular program, and the competencies and expertise a graduate will possess after completion of the program.

These are broad and covers a wider area than of COs. The Program Outcomes set by the institution must reflect on these.

Course Outcomes (COs)

POs are attained through program specific Core Courses, which has their own previously set outcomes to attain. These course-specific outcomes are called Course Outcomes. Outcomes are stated in such a way that they can be actually measured. COs are set by the institution, by consulting with the department heads, faculty, students and other stakeholders.

All POs can be adequately addressed through the selection of core courses and their COs. These measurements provide the basis for continuous improvement in the quality of learning.

TERMINOLOGY

Outcome : An outcome of an educational Programme is what the student should be able to do at the end of a Programme/ course/ instructional unit.

Programme Outcomes : Programme Outcomes (POs) are what knowledge, skills and attitudes a graduate should have at the time of graduation

Course Outcomes (COs) : COs are statements that describe what students should be able to do at the end of a course.

METHOD FOR MEASURING OUTCOMES

The program outcome (PO) and course outcome (CO) for BDS program is given by The TN Dr. MGR Medical University. As Tagore dental college is affiliated to this university, we follow the PO and CO given by it.

COURSE OUTCOME ATTAINED

Assessment processes used to gather the data upon which the evaluation of Course Outcome attainment is based on, involves

- i. Terminal exams (formative assessment)
- ii. Final university examination (summative assessment) both in theory and practical components.

Weightage given for formative assessment is 10% as internal assessment in the final university examination.

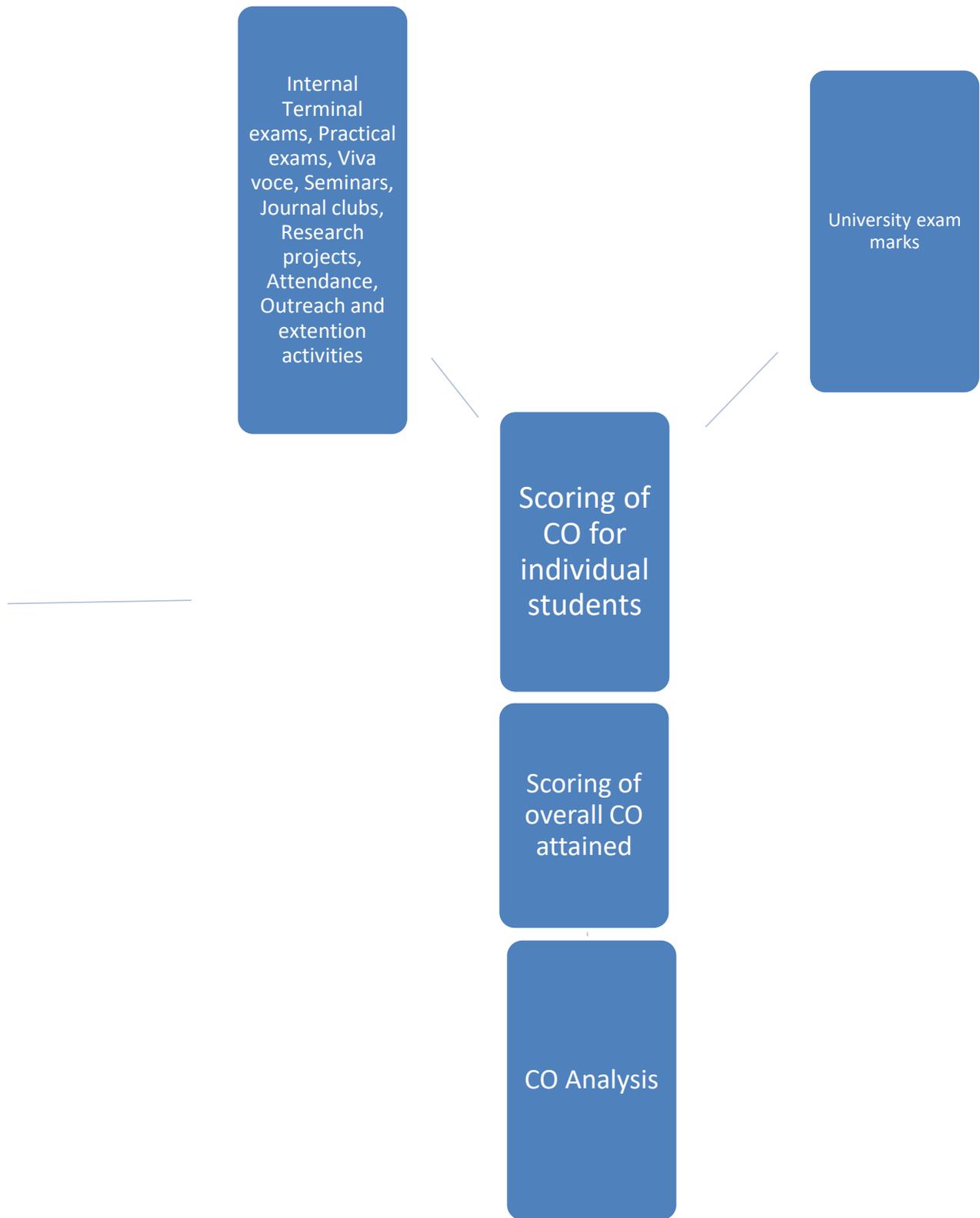
Criteria for Pass:

A candidate shall be declared as pass if he secures 50% of marks (including internal assessment) in each subject in theory and practical examination separately.

Scoring:

Scoring of Internal assessment is done based on the scores obtained on formative written examination, oral examination, practical or clinical examination, record work, assignments and tests. The syllabus and the teaching plans are designed in such a way as to achieve the defined course outcomes and the examinations are designed to check the attainment of course outcomes.

Flowchart for procedure to calculate CO



CO Scoring Criteria:

Score	Marks obtained %	CO attainment
0	0 – 50	Nil
1	51- 60	Slight
2	61- 80	Moderate
3	81-100	Substantial

PROGRAM OUTCOME ATTAINED

Assessment processes used to gather the data upon which the evaluation of Program Outcome attainment is based on, involves their abilities in the following criteria

Program Outcomes

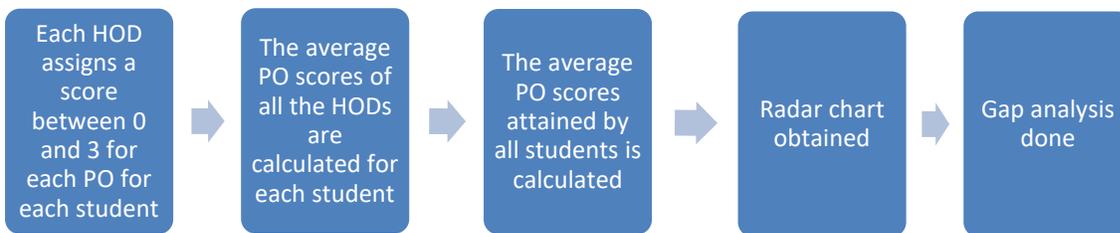
- PO 1 Knowledge of normal dental structures
- PO 2 Application of basic knowledge
- PO 3 History taking, examination and investigating patients
- PO 4 Differential diagnoses
- PO 5 Oral radiological examination
- PO 6 Treatment planning and administration.
- PO 7 Medical emergencies
- PO 8 Patient referral
- PO 9 Global and national needs
- PO10 Team work
- PO11 Communication
- PO12 Acquiring new knowledge/skills.
- PO13 Career pathway
- PO14 Medico-legal, ethical and professional issues
- PO15 Integrity, responsibility, respect and selflessness.

Scoring:

Scoring is done based on the above criteria. The courses are designed in such a way as to achieve the defined program outcomes and the course outcomes are designed to contribute to the

attainment of these program outcomes. Each HOD of each department individually scores each student at the end of the program for each PO. The average of each HOD's score is taken as the final score for a particular PO for a student. The average of the PO scores obtained for the students is taken as the PO attained.

Flowchart for procedure to calculate PO:



PO Scoring Criteria:

Score	PO attainment
0	nil
1	slight
2	moderate
3	substantial

**TOOLS USED TO ASSESS ATTAINMENT OF COURSE OUTCOME AND
PROGRAM OUTCOME**

	Tools	Purpose / Outcome measured
Direct assessment Performance of students serves as an indicator of programme outcome	Internal Terminal examination	Measurement of attainment of knowledge, experimental, writing, communication and problem-solving skills.
	University examination	Measurement of attainment of knowledge, experimental, writing, and problem-solving skills.
	Practical examinations	Assessment of practical skills, logical thinking, planning, problem solving, ability to use materials, instruments and equipment, communication skills, knowledge and attitude
	Viva Voce	Assessment of knowledge, communication skill, problem solving ability
	Seminar & journal club assessment	Assessment of ability to understand the concepts, effective communication, acquisition of knowledge
	Student research projects	To inculcate scientific temper, introduce to research
	Clinical Internship training	Exposure to undergo hands on training. Relate the theoretical concepts with clinical situations
	Attendance	Responsibility, Sincerity
Indirect assessment The programme outcome is assessed	Outgoing Intern feedback	Measurement of student satisfaction level, employability
	Annual feedback student	Assessment of course/programme delivery,
	Employer feedback	Indicator for graduate employability, competency, course relevance, areas of weakness

Alumni feedback	Measurement of effectiveness, relevance of the course
Academic audit	Identification of strengths and weakness of the curriculum and its delivery
Peer assessment	Assessment of relative standing of the institution and effectiveness of the programme
Guest lectures/seminars	Measurement of comprehension of the concepts
Field visits	To understand the actual application of theoretical concepts
Co-curricular activities	Application of theoretical knowledge in professional activities
Extra-curricular activities	Contribution to the overall development of the personality, interpersonal relationship, team building
Placement record	Gives an indication of the employability of the graduates, their professional competency, skills

STATEMENT OF PROGRAM OUTCOMES AND COURSE OUTCOMES

Program Outcomes

- PO 1 Describe normal and abnormal human structure, development, function and behavior that is relevant to the practice of Dentistry.
- PO 2 Apply basic knowledge of biomedical, technical and clinical sciences for the effective practice of Dentistry.
- PO 3 Elicit detailed Dental and relevant Medical history, perform an oral and general physical examination and choose relevant laboratory diagnostic tests for identification of oral disorders, prevention of oral disease and promotion of oral health.
- PO 4 Demonstrate the ability to interpret available clinical and laboratory data and effective clinical problem solving, in order to generate differential diagnoses and to manage oral health disorders.
- PO 5 Perform and interpret a basic oral radiological examination safely.
- PO 6 Plan and administer, safely, appropriate treatments, including surgical procedures, for common oral disorders in adults as well as children.
- PO 7 Identify and manage common medical emergencies encountered in general dental practice.
- PO 8 Identify and refer patients who may require specialist care.
- PO 9 Demonstrate knowledge of global and national needs, policies and regulatory frameworks relevant to oral health.
- PO10 Function effectively as an oral health care team member in health care settings.
- PO11 Communicate effectively and sensitively with patients, care-givers, colleagues and the public in a manner that will improve health care outcomes and patient / client satisfaction.
- PO12 Demonstrate the ability to continue refining existing knowledge / skills and acquire new knowledge/skills.
- PO13 Select and pursue an appropriate career pathway that is professionally rewarding and personally fulfilling.
- PO14 Recognize and manage medico-legal, ethical and professional issues in dental practice.
- PO15 Demonstrate and practice integrity, responsibility, respect and selflessness.

Course outcomes

Conservative dentistry and endodontics

- 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 biomechanical properties of teeth, biomaterials and associated tissues for effective practice of Dentistry
- CO3 Understand and Demonstrate the etiology, pathophysiology and clinical manifestation of diseases of the teeth and adjacent hard and soft tissues.
- CO4 Acquire basic knowledge of etiology, 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 the 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 periodontal 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 patients requiring specialist care
- CO12 Analyze occlusion, factors affecting and physiology of occlusion with emphasis on trauma from occlusion correction.

Dental Anatomy & Dental Histology

- CO1 Student should be able to appreciate the morphological features of all primary and permanent teeth, its chronology, sequence of eruption, occlusion and variations in morphology
- CO2 Students should have an understanding about the development of orofacial structures in particular developmental processes of teeth with applied aspects
- CO3 Students should know various properties of dental tissues, their microscopic features, the histological basis of various dental treatment procedures, physiologic aging process and the clinical considerations
- CO4 Students should appreciate the macroscopic and microscopic structure and functions of oral facial tissues & variations in different pathological/non-pathological states and physiologic aging process
- CO5 Students should have basic understanding about laboratory techniques involved in routine soft tissue and hard tissue processing.

Dental Materials

CO1 Dental student interpret the Biocompatibility and type of biological responses that materials cause and the anatomic aspects of the oral cavity that influence or modify the biological response to materials

CO2 Dental student acquire knowledge of the composition, properties, manipulative variables, and recent advances of restorative, preventive, esthetic and surgical dental materials.

CO3 Dental student develop the ability to use dental materials which will include the manipulation through laboratory and clinical exercises.

Oral and Maxillofacial Surgery

CO1 To acquire knowledge regarding the scientific and surgical principles required to provide Oral Maxillofacial surgical care and prevention of cross infection

CO2 Apply the knowledge gained from basic science and clinical subjects (anatomy, physiology, biochemistry, pathology, microbiology, pharmacology, general medicine and general surgery) in the diagnosis and management of oral surgical problems.

CO3 Record case history, perform clinical examination, order essential investigations and interpret them to arrive at a final diagnosis and plan the treatment and management of oral and maxillofacial problems.

CO4 Competently diagnose and treat medically compromised patients with minor oral surgical problems and manage medical emergencies if any during the procedures. Assess the need for specialist consent for such patients.

CO5 Perform competently extraction of tooth/teeth under local/general anesthesia with prescription of medications, post extraction instructions and proper follow-up care. Management of intra/post-operative complications with referral to an Oral and Maxillofacial Surgeon as required.

CO6 To know the ethical issues and develop communication skills and compassion towards the patient for establishing better patient-doctor relationship irrespective of social status, caste, creed or religion of the patient.

CO7 Ability to carry out simple minor oral surgical procedures such as alveoloplasty, frenectomy, incision and drainage, dental wiring and biopsy.

CO8 To keep abreast with the recent advances in the speciality of Oral and Maxillofacial Surgery such as dental implants, laser and cryotherapy.

CO9 Understand the management of major oral surgical problems and principles involved in the management of hospitalised patients.

Oral Medicine and Radiology

CO1 To have adequate knowledge of the applied anatomy of the face and oral cavity, the basic physiologic processes, pathologic processes and the basics of pharmacologic applications

CO2 Case history- communication skills, intra oral & extra oral examination, investigations

CO3 To know the etiology, epidemiology, clinical presentation and management protocols of the common disorders of the oral and para-oral structures

CO4 Understand the oral manifestations of systemic diseases & dental management of medically compromised patients

CO5 Outline the basic principles, clinical, radiographic and medico-legal aspects of forensic odontology

- CO6 To know the history of Radiology and basics of Radiation Physics
- CO7 To understand the basics of effects of radiation on living tissues, radiation safety measures
- CO8 To understand and perform various intra-oral radiographic techniques using appropriate accessory devices and film processing equipments to produce quality intra - oral radiographs
- CO9 To understand principles of radiographic interpretation and to identify anatomical structures and to differentiate it from pathologies on an intra-oral radiographs
- CO10 To identify and understand the indications of various extra - oral radiographs in different maxillofacial pathologies
- CO11 To know and understand various digital and advances in maxillofacial imaging

Oral Pathology

- CO1 Describe the pathological processes that involve the oral cavity and the manifestations of common diseases, their diagnosis and correlation with other clinical pathological processes
- CO2 Discuss the oral manifestations of systemic diseases to help in correlating with systemic physical signs and laboratory findings
- CO3 Determine the principles governing treatment of oral diseases
- CO4 Describe the basic aspects and methods used in Forensic Odontology
- CO5 Report microscopic studies of common lesions affecting the oral tissues through microscopic slides & projection slides and study of disease processes with the help of surgical specimens
- CO6 Discuss teeth anomalies, polymorphisms with the help of specimens & plaster casts.
- CO7 Diagnose the commonly occurring diseases in the oro-facial region on the basis of clinical, radiological and histological findings

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 types of skeletal and dental problems.
- CO3 Explain different types of anchorage, tooth movement, biological reactions and Bio-mechanical 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 analyses 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 types of malocclusions 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 patient with CLP and patients requiring surgical correction.

Paedodontics

- CO1 Demonstrate the principles of pediatric and preventive dentistry right from birth to adolescence, including those with special health care needs
- CO2 Elicit detailed case history and methodological examination of the child patient, perform

essential diagnostic procedures and interpret them, arrive at a reasonable diagnosis and formulate a comprehensive treatment plan and treat appropriately.

CO3 Relate the current concepts of caries and its underlying causative factors in a child, and to implement timely, effective management strategies.

CO4 Master the use of various restorative materials used in children, including semi-permanent, stainless steel crowns, restorations, and esthetic crowns along with recent advances

CO5 Diagnose, prevent and intercept developing dental health problems in the child, including malocclusions.

CO6 Understand 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 pulp therapy techniques

CO8 Master exodontia and LA techniques for children

CO9 Describe salient features of gingiva and periodontium in primary dentition and summarize management of common gingival and periodontal diseases in children

CO10 Demonstrate the management of disabled children effectively and efficiently, tailored to the need of individual requirement and conditions

CO11 Understand the etiology, prevention and management of common dental injuries in children.

CO12 Develop and deliver oral health education and participate in school dental health program

Periodontics

CO 1 Describe the diverse anatomic and microscopic features of the periodontium and the interrelated functional aspects.

CO 2 Explain the etio-pathogenesis of periodontal/peri-implant diseases

CO 3 Demonstrate the ability to recognise and diagnose the various forms of periodontal/peri-implant diseases.

CO 4 Apply the appropriate diagnostic technique to diagnose periodontal diseases

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 Communicate and demonstrate appropriate measures in the prevention of periodontal diseases

CO 7 Analyse the role of inter-disciplinary approaches in periodontal/peri-implant therapy and referral to the specialist.

CO 8 Inculcate a sense of social responsibility and capability to deliver periodontal healthcare to the underprivileged sections of the society

Prosthodontics

CO1 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

CO2 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.

CO3 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.

CO4 Identify social, cultural, economic, environmental, educational and emotional determinants of the patient and consider them in planning the treatment.

CO5 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.

CO6 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 management of patients for a craniofacial and oral acquired and congenital defects, Temporomandibular joint syndromes, esthetics, Implant supported Prosthetics and problems of Psychogenic origin.

CO7 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

CO8 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.

CO9 Communicate in simple understandable language with the patient and explain the principles of Prosthodontics to the patient. He should 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

Public Health Dentistry

CO1 Elicit case history, perform Clinical Examination to arrive at a diagnosis using appropriate diagnostic aids and provide comprehensive Oral health care to the patients with strict adherence to the Infection control protocol.

CO2 Identify Community health/ oral health problems using the knowledge of Epidemiology and indices to arrive at Community Diagnosis and communicate the findings to the community.

CO3 Develop Health Education aids and impart Health Education using appropriate methods to various target groups.

CO4 Identify health systems and health policies for delivery of health care services in India and advocate the need for Oral health policy.

- CO5 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.
- CO6 Adopt practices to prevent Occupational hazards associated with the practice of dentistry
- CO7 Identify and manage Medico legal issues in the practice of dentistry. Adopt and apply ethical and Moral Standards while carrying out Epidemiological Researches, Community Oral Health Activities
- CO8 Display competency and work efficiently in a 'Team Approach'
- CO9 Strive to maintain the highest professional dignity and honour by adhering to the guidelines and values set up by the governing bodies of the profession. Respect patient's rights and Privileges including Patient's right to information and right to seek a second opinion.
- CO10 Develop communication and administration skills to coordinate between appropriate manpower and resources for delivery of Health/ Oral health care.
- CO11 Sensitize the community towards the various payment plans and public health/ oral health programs in place for availing health/oral health services.
- CO12 Communicate Environmental Health Hazards and associated Health Outcomes to the Community, Stakeholders and Professional audience

Medical Subjects:

Biochemistry

- CO1 Understanding of biochemical and molecular processes involved in health and disease with relevance to dentistry.
- CO2 Understanding of importance of nutrition in health and disease relevant to dentistry.
- CO3 Understanding of biochemical basis and rationale of clinical laboratory tests, and demonstrate ability to interpret these in the clinical context.

General Medicine

- CO1 Demonstrate understanding of the patho-physiologic basis, epidemiological profile, signs and symptoms of disease and their investigation and management,
- CO2 Competently interview and examine an adult patient and make a clinical diagnosis,
- CO3 Appropriately order and interpret laboratory tests,
- CO4 Initiate appropriate cost-effective treatment based on an understanding of the rational drug prescriptions, medical interventions required and preventive measures,
- CO5 Follow up of patients with medical problems and refer whenever required,
- CO6 Communicate effectively, educate and counsel the patient and family,
- CO7 Manage common medical emergencies and refer when required,
- CO8 Independently perform common medical procedures safely and understand patient safety issues.

Microbiology

- CO1 Understanding of role of microbial agents in health and disease,
- CO2 Understand and practice various methods of Sterilisation and disinfection in dental clinics.
- CO3 Understanding the immune system in health and disease.
- CO4 Ability to understand the etiology, pathogenesis, laboratory diagnosis & prevention of common infections.

Pharmacology

- CO1 Describe the pharmacokinetics and pharmacodynamics of essential and commonly used drugs in general and in dental practice
- CO2 List the indications, contraindications; interactions, and adverse reactions of commonly used drugs with reason
- CO3 Prescribe drugs for common dental and medical ailments
- CO4 Prescribe common and essential drugs in special conditions such as pregnancy, lactation, old age, renal, hepatic damage and immunocompromised patients
- CO5 Integrate the rational drug therapy in clinical pharmacology
- CO6 Indicate the principles underlying the concepts of "Essential drugs"
- CO7 To appreciate adverse reactions and drug interactions of commonly used drugs
- CO8 Critically evaluate drug formulations and be able to interpret the clinical pharmacology of marketed preparations commonly used in dentistry

Physiology

- CO1 Explain the normal functioning of organs, their integration with various systems in maintenance of homeostasis
- CO2 Explain the pathophysiological basis of diseases related to various organ systems
- CO3 Perform and interpret the experiments designed for the better understanding of physiological functions

General Anatomy

- CO1 Understanding of the gross and microscopic structure and development of various structures in head & neck
- CO2 Comprehension of the normal regulation and integration of the functions of the structures and systems related to head & neck
- CO3 Understanding of the clinical correlation of structures and systems involved and interpret the anatomical basis of disease presentation in head & neck region

General Pathology

- CO1 Describe the normal homeostatic mechanisms and the pathological process in their derangement and the effects on human systems.
- CO2 Discuss the concepts of cell injury and pathological and immunological responses produced thereby in different tissues and organs and the body's capacity for healing.
- CO3 Demonstrate basic knowledge and understanding of the immune system in health and disease.
- CO4 Explain the etiology, pathogenesis, pathological effects and clinicopathological correlation of common infectious and non-infectious diseases.
- CO5 Describe the concept of hemodynamic disorders, thromboembolic disease and shock and their clinical application.
- CO6 Describe the concept of neoplasia with reference to the etiology, morphological features, diagnosis and prognosis in different tissues and organs of the body.
- CO7 Discuss the epidemiology, gross and microscopic features, clinical presentation and diagnostic techniques associated with different diseases in different organ systems to the extent needed for the understanding of disease processes and their clinical significance.

CO8 Recognise and interpret the common hematological disorders and the investigations, blood banking as well as cytological procedures.

CO9 Perform and interpret the basic bed-side clinical pathology procedures on blood and urine samples.

General Surgery

CO1 Understanding of the structural and functional basis, principles of diagnosis and management of common surgical problems in adults and children

CO2 Ability to choose, calculate and administer appropriately intravenous fluids, electrolytes, blood and blood products based on the clinical condition

CO3 Ability to apply the principles of asepsis, sterilization, disinfection, rational use of prophylaxis, therapeutic utilities of antibiotics and universal precautions in surgical practice

CO4 Ability to perform common diagnostic and surgical procedures at the primary care level

CO5 Ability to recognize, resuscitate, stabilize and provide Basic life support to patients following trauma

CO6 Ability to administer informed consent and counsel patient prior to surgical procedures

TEMPLATE FOR CALCULATING OUTCOME ATTAINED

Course outcome attained

	Subject/ Course	Substantial 3	Moderate 2	Slight 1	Nil 0
1.	General Anatomy Including Embryology and Histology				
2.	General Human Physiology and Biochemistry				
3.	Dental Anatomy Embryology and Histology				
4.	General Pathology and Microbiology				
5.	General and Dental Pharmacology and Therapeutics				
6.	Dental Materials				
7.	Pre - Clinical Conservative Dentistry				
8.	Pre - Clinical Prosthodontics				
9.	General Medicine				
10.	General Surgery				
11.	Oral Pathology & Oral Microbiology				
12.	Public Health Dentistry				
13.	Periodontology				
14.	Orthodontics & Dentofacial Orthopedics				
15.	Oral Medicine & Radiology				
16.	Oral & Maxillofacial Surgery				
17.	Conservative Dentistry and Endodontics				
18.	Prosthodontics and Crown & Bridge				
19.	Paedodontics and Preventive Dentistry				

Program outcome attained

Program outcome	Substantial 3	Moderate 2	Slight 1	Nil 0
PO1				
PO2				
PO3				
PO4				
PO5				
PO6				
PO7				
PO8				
PO9				
PO10				
PO11				
PO12				
PO13				
PO14				
PO15				

Overall BDS Program outcome attained

BDS-Program outcome	Substantial 3	Moderate 2	Slight 1	Nil 0