



SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY
(UGC Approved)

Gurugram, Delhi-NCR

Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph. : 0124-2278183, 2278184, 2278185

Faculty of Dental Sciences

Program Outcomes (POs)



The aim of the BDS programme is to provide a comprehensive, training to the students that prepares them for providing a best quality dental care to the patients so that at the end of the course he/she will be able to perform the following:

- PO1:** To differentiate normal and abnormal oral and dental tissues.
- PO2:** To diagnose and treat common and simple oral/dental diseases.
- PO3:** To have a general knowledge of medications used, and how to safely prescribe/monitor medications in dental patients.
- PO4:** To interpret medical laboratory reports of dental patients and make proper referrals.
- PO5:** To successfully diagnose and relief dental/pulpal pain and non-dental orofacial pain.
- PO6:** To prepare and restore teeth, using various filling materials available commercially.
- PO7:** To successfully extirpate the pulp and perform root canal treatment of single rooted teeth.
- PO8:** To identify the clinical indications for using different dental implant systems.
- PO9:** To treat patients indicated for simple removable partial dentures and complete dentures.
- PO10:** To prepare teeth for single metal ceramic crowns and 3 unit metal-ceramic bridge.
- PO11:** To appropriately use and interpret radiographic imaging for dental patient.
- PO12:** To know the effects of systemic diseases/conditions on oral and dental structures.
- PO13:** To describe the basic principles of research methodology and scientific evidence.
- PO14:** To describe dental management of a medically compromised patient.
- PO15:** To describe and demonstrate to handle medical emergencies in the dental office.
- PO16:** To successfully diagnose patients with periodontal diseases and successfully apply phase I therapy.



SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY
(UGC Approved)

Gurugram, Delhi-NCR
Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph. : 0124-2278183, 2278184, 2278185

- PO17:** To provide routine dental care for cooperative healthy children.
- PO18:** To successfully give local anesthesia in the oral cavity.
- PO19:** To successfully perform non-surgical extractions and intra-oral incisional biopsies.
- PO20:** To recognize and apply cross infection control guidelines in dental practice.
- PO21:** To select the best treatment option based on Evidence based approach.
- PO22:** To recognize advanced cases that need specialist care and refer to the appropriate specialist.
- PO23:** To participate and attend scientific conferences and activities.
- PO24:** To participate in community dental activities.
- PO25:** To volunteer in current research projects pertinent to the field/faculty.



SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY
(UGC Approved)

Gurugram, Delhi-NCR

Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph. : 0124-2278183, 2278184, 2278185

Program Specific Outcomes(PSOs)



SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY
(UGC Approved) Gurugram, Delhi-NCR

Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph. : 0124-2278183, 2278184, 2278185

PROGRAMME SPECIFIC OUTCOMES

It is supposed that the postgraduate students joining this University have previously incorporated the basic objectives during their graduation. The University thus emphasizes these accomplishments with consequent goals and objectives:

Goals

1. The registered student must be able to practice the specialty meticulously, duly endorsed with experimental findings and validation.
2. The student have to continue to show keen interest in continuing professional education in the concerned specialty and allied specialties also, irrespective of whether in teaching or practice.
3. To encourage avid sharing of knowledge and skills in peer group and clinical settings.

Objectives

Knowledge and understanding

Major objectives to combine knowledge and understanding all through the post graduate curriculum are summarized as:

1. Demonstration of basic science in association and relevant to specialty.
2. Ability to describe etiopathogenesis, principles of diagnosis and management of specialty specific conditions.
3. Recognition of social, economic, environmental and emotional determinants in a given case and their inclusion in operational treatment plan.
4. To be able to carry out research projects depending upon latest trends or the local/national needs utilising evidence based approach.
5. To be able to publish the results of their studies in reputed/indexed or high impact Journals.



Skills

The main objectives of skill development in MDS Programme are

1. To be able to provide the best possible treatment to a particular disease/condition depending on their specialty.
2. To formulate standard operating procedures for every specialty cases
3. To follow all the ethical guidelines and take prior clearance from ethical committee before starting any kind of research work.

CONSERVATIVE & ENDODONTICS

- PSO1:** Practice efficiently Endodontists specialty, backed by scientific knowledge including basic sciences and skills.
- PSO2:** Manage to diagnose majority of cases coming to him/her with the help of clinical skills and radiographic investigations.
- PSO3:** To be able to maintain professional integrity, honesty with high ethical standards
- PSO4:** Plan and advice for the relevant investigations if required for a confirmatory diagnosis.
- PSO5:** Recognize conditions that may be outside the area of the specialty/competence and refer them to an appropriate specialist.
- PSO6:** Demonstrate skills in documentation of case details including epidemiological data.
- PSO7:** Demonstrate competence in basic concepts of research methodology and clinical epidemiology; and preventive aspects of various disease states.
- PSO8:** Be a motivated 'teacher' - defined as one keen to share knowledge and skills with a colleague or a junior or any learner.
- PSO9:** Continue to evince keen interest in continuing education irrespective of whether he/she is in a teaching institution or is practicing and use appropriate learning resources
- PSO10:** Be well versed with his medico-legal responsibilities
- PSO11:** Use information technology tools and carry out research - both basic and clinical, with the aim of publishing the work and presenting the work at scientific forums.



ORAL PATHOLOGY & MICROBIOLOGY AND FORENSIC ODONTOLOGY

- PSO1:** Practice efficiently Oral Pathology speciality, backed by scientific knowledge including basic sciences and skills.
- PSO2:** Manage to diagnose majority of cases coming to him/her with the help of relevant investigations.
- PSO3:** To be able to maintain professional integrity, honesty with high ethical standards
- PSO4:** Plan and advice for the relevant investigations if required for a confirmatory diagnosis.
- PSO5:** Recognize conditions that may be outside the area of the speciality/competence and refer them to an appropriate specialist.
- PSO6:** Demonstrate skills in documentation of case details including epidemiological data.
- PSO7:** Demonstrate competence in basic concepts of research methodology and clinical epidemiology; and preventive aspects of various disease states.
- PSO8:** Be a motivated 'teacher' - defined as one keen to share knowledge and skills with a colleague or a junior or any learner.
- PSO9:** Continue to evince keen interest in continuing education irrespective of whether he/she is in a teaching institution or is practicing and use appropriate learning resources
- PSO10:** Be well versed with his medico-legal responsibilities
- PSO11:** Use information technology tools and carry out research - both basic and clinical, with the aim of publishing the work and presenting the work at scientific forums.

Oral & Maxillofacial Surgery

- PSO1:** To have acquired adequate knowledge and understanding of the etiology pathophysiology, diagnosis and treatment planning of various common oral and maxillofacial surgical problems.
- PSO2:** To have understood the general surgical principles in patient management.
- PSO3:** Understanding of basic sciences relevant to practice of oral and maxillofacial surgery.
- PSO4:** To identify social, cultural, economic, genetic and environmental factors and their relevance to the disease process.
- PSO5:** Essential knowledge of personal hygiene infection control, prevention of cross infection, safe disposal of hospital waste keeping in view the high prevalence of hepatitis and HIV.



- PSO6:** To obtain proper clinical history with methodical examination of the patient, perform essential diagnostic procedures and relevant laboratory tests so as to arrive at a reasonable diagnosis about the surgical condition.
- PSO7:** To perform with competence minor & major oral surgical procedures.
- PSO8:** Capable of providing care for maxillofacial surgery patients.
- PSO9:** Develop attitude to adopt ethical principles in all aspects of surgical practice, professional honesty and integrity are to be fostered. Surgical care is to be delivered irrespective of the social status, caste, creed or religion of the patient.
- PSO10:** Willing to share the knowledge and clinical experience with professional colleagues.
- PSO11:** Willing to adopt new methods and techniques of surgical management developed from time to time based on scientific research, which are in the best interest of the patient.
- PSO12:** Respect patient's rights and privileges, including patients right to information and right to seek a second opinion.
- PSO13:** Develop attitude to seek opinion from allied medical and dental specialists as and when required.
- PSO14:** Develop adequate communication skills particularly with the patients giving them the various options available to manage a particular surgical problem and obtain a true informed consent from them for the most appropriate treatment available at that point of time.
- PSO15:** Develop the ability to communicate with professional colleagues.
- PSO16:** Develop ability to teach undergraduates.

ORTHODONTICS & DENTOFACIAL ORTHOPEDICS

- PSO1:** To have profound knowledge in pre and post natal growth of head, bones of skull, origin of face and oral cavity.
- PSO2:** To diagnose and plan the treatment for different types of malocclusion using evidence based concepts.
- PSO3:** To manage and treat all types of malocclusion in either the transitional or the permanent dentition including dentofacial, craniofacial, functional and temporomandibular problems.
- PSO4:** To have a detailed knowledge regarding the dental materials used in the



SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY
(UGC Approved)
Gurugram, Delhi-NCR

Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph. : 0124-2278183, 2278184, 2278185

speciality.

- PSO5:** To fabricate the conventional orthodontic and myofunctional appliances
- PSO6:** To know the child and adult psychology
- PSO7:** To rehabilitate cleft lip and palate patients
- PSO8:** To know the Principles of interdisciplinary patient treatment
- PSO9:** To know Cephalometric tracing and performing various hard and soft tissue analysis manually
- PSO10:** To adopt ethical principles in all aspects of practice
- PSO11:** Initiate and complete a research project and publishable thesis

PROSTHODONTICS

- PSO1:** to know the basics of human anatomy as relevant to prosthodontics e.g. Surface anatomy of head and neck, important structures/organs location in different anatomical locations in the body; common congenital anomalies.
- PSO2:** to know the basic physiology of various organ-systems as related to prosthodontics, interpretation of symptoms and signs in relation to any oral disease and its management in prosthodontics.
- PSO3:** to know the common pathological changes observed in oral cavity associated with diseases and their correlation with clinical signs; understanding various pathogenic processes and possible therapeutic interventions possible at various levels to reverse or arrest the progress of diseases.
- PSO4:** to have Basic knowledge about common drugs used in prosthodontics and implantology.
- PSO5:** to know the research methodology and studies, epidemiology and basic biostatistics.
- PSO6:** to know the recent advances in relevant basic science subjects.
- PSO7:** Should be able to function as a part of a team, develop an attitude of cooperation with colleagues, and interact with the patient and the clinician or other colleagues to provide the best possible diagnosis or opinion.
- PSO8:** to Always adopt ethical principles and maintain proper etiquette in dealings with patients, relatives and other health personnel and to respect the rights of the patient including the right to information and second opinion.
- PSO9:** to develop communication skills to word reports and professional opinion as well as to interact with patients, relatives, peers and paramedical staff, and for effective teaching.
- PSO10:** to elicit a detailed clinical history
- PSO11:** to perform a thorough intraoral examination and come to a diagnosis and



formulate a treatment plan.

- PSO12:** to demonstrating professionalism and ethical behaviour (humane and professional care to patients)
- PSO13** to utilization of information technology-medline search, internet access, computer usage
- PSO14** to understand research methodology and apply in designing a study
- PSO15** to know how to interpret and present the scientific data

PUBLIC HEALTH DENTISTRY

- PSO1:** to demonstrate understanding of basic sciences relevant to speciality;
- PSO2:** to describe etiology, pathophysiology, principles of diagnosis and management of common problems within the speciality in adults and children;
- PSO3:** to identify social, economic, environmental and emotional determinants in a given case and take them into account for planned treatment;
- PSO4:** to recognize conditions that may be outside the area of speciality or competence and to refer them to the concerned specialist;
- PSO5:** to update knowledge by self study and by attending courses, conferences and seminars pertaining to speciality;
- PSO6:** to undertake audit, use information technology and carry out research in both basic and clinical with the aim of publishing or presenting the work at various scientific gathering;
- PSO7:** to take a proper clinical history, examine the patient, perform essential diagnostic procedures and order relevant tests and interpret them to come to a reasonable diagnosis about the condition
- PSO8:** to acquire adequate skills and competence in performing various procedures as required in the speciality.
- PSO9:** to adopt ethical principles in all aspects of practice; (ii) foster professional honesty and integrity
- PSO10:** to deliver patient care irrespective of social status, caste, creed, or religion of the patient;
- PSO11:** to develop communication skills, to explain various options available and obtain a true informed consent from the patient;
- PSO12:** to provide leadership and get the best out of his team in a congenial working



atmosphere;

- PSO13:** to apply high moral and ethical standards while carrying out human or animal research
- PSO14:** to be humble and accept the limitations in his knowledge and skill and to ask for help from colleagues when needed;
- PSO15:** to respect patient's rights and privileges including patient's right to information and right to seek a second opinion.

ORAL MEDICINE & RADIOLOGY

The intended outcome of a competency based program is a consultant specialist who can practice oral medicine & radiology at a defined level of competency in different practice settings. i.e. ambulatory (outpatient) and inpatient

- PSO1:** Diagnostic skills in recognition of oral lesions with radiographic diagnosis and their management.
- PSO2:** Research skills in handling scientific problems pertaining to oral treatment.
- PSO3:** Clinical and diagnostic skills in encouraging younger doctors to attain learning objectives.
- PSO4:** Practice efficiently Oral medicine & Radiology specialty, backed by scientific knowledge including basic sciences and skills.
- PSO5:** Diagnose and manage majority of conditions in his specialty (clinically and with the help of relevant investigations)
- PSO6:** Exercise empathy and a caring attitude and maintain professional integrity, honesty and high ethical standards
- PSO7:** Plan and deliver comprehensive treatment using the principles of rational drug therapy
- PSO8:** Plan and advice measures for the prevention and rehabilitation of patients belonging to his specialty
- PSO9:** Manage emergencies efficiently by providing Basic Life Support (BLS), Airway management & IV cannulation techniques
- PSO10:** Recognize conditions that may be outside the area of the specialty/ competence and refer them to an appropriate specialist
- PSO11:** Demonstrate skills in documentation of case details including epidemiological data



SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY
(UGC Approved) Gurugram, Delhi-NCR

Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph. : 0124-2278183, 2278184, 2278185

- PSO12:** Play the assigned role in the implementation of Dental Health Programs
- PSO13:** Demonstrate competence in basic concepts of research methodology and clinical epidemiology; and preventive aspects of various disease states
- PSO14:** Be a motivated 'teacher' - defined as one keen to share knowledge and skills with a colleague or a junior or any learner
- PSO15:** Continue to evince keen interest in continuing education irrespective of whether he/she is in a teaching institution or is practicing and use appropriate learning resources
- PSO16:** Be well versed with his medico-legal responsibilities
- PSO17** Undertake audit, use information technology tools and carry out research - both basic and clinical, with the aim of publishing the work and presenting the work at scientific forums.
- PSO18:** able to recognize the mental condition characterized by self absorption and reduced ability to respond to the outside world (e.g. Autism), abnormal functioning in social interaction with or without repetitive behavior and/or poor communications, etc

PAEDODONTICS & PREVENTIVE DENTISTRY

- PSO1:** to describe etiology, pathophysiology, principles of diagnosis and management of common problems within the speciality in adults and children;
- PSO2:** identify social, economic, environmental and emotional determinants in a given case and take them into account for planned treatment.
- PSO3:** Recognize conditions that may be outside the area of speciality or competence and to refer them to the concerned specialist;
- PSO4:** Update knowledge by self study and by attending courses, conferences and seminars pertaining to speciality.
- PSO5:** Undertake audit, use information technology and carry out research in both basic and clinical with the aim of publishing or presenting the work at various scientific gathering;
- PSO6:** Take a proper clinical history, examine the patient, perform essential diagnostic procedures and order relevant tests and interpret them to come to a reasonable diagnosis about the condition;
- PSO7:** acquire adequate skills and competence in performing various procedures as required in the speciality.
- PSO8:** adopt ethical principles in all aspects of practice;



SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY
(UGC Approved)

Gurugram, Delhi-NCR
Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph. : 0124-2278183, 2278184, 2278185

- PSO9:** foster professional honesty and integrity;
- PSO10:** deliver patient care irrespective of social status, caste, creed, or religion of the patient;
- PSO11:** develop communication skills, to explain various options available and obtain a true informed consent from the patient;
- PSO12:** provide leadership and get the best out of his team in a congenial working atmosphere
- PSO13:** apply high moral and ethical standards while carrying out human or animal research;
- PSO14:** be humble and accept the limitations in his knowledge and skill and to ask for help from colleagues when needed;
- PSO15:** respect patient's rights and privileges including patient's right to information and right to seek a second opinion.

PERIODONTOLOGY

- PSO1:** Describe etiology, pathogenesis, diagnosis and management of common periodontal diseases with emphasis on Indian population.
- PSO2:** Familiar with the biochemical, microbiologic and immunologic genetic aspects of periodontal pathology
- PSO3:** Describe various preventive periodontal measures
- PSO4:** Describe various treatment modalities of periodontal disease from historical aspect to currently available ones
- PSO5:** Describe interrelationship between periodontal disease and various systemic conditions
- PSO6:** Describe periodontal hazards due to estrogenic causes and deleterious habits and prevention of it.
- PSO7:** Identify rarities in periodontal disease and environmental/Emotional determinates in a given case
- PSO8:** Recognize conditions that may be outside the area of his specialty/competence and refer them to an appropriate specialist
- PSO9:** Decide regarding non-surgical or surgical management of the case
- PSO10:** Update the knowledge by attending course, conferences and seminars relevant to



periodontics or by self-learning process.

- PSO11:** Plan out/ carry out research activity both basic and clinical aspects with the aim of publishing his work in scientific journals
- PSO12:** Plan out epidemiological survey to assess prevalence and incidence of early onset periodontitis and adult periodontitis in Indian population (Region wise)
- PSO13:** Shall develop knowledge, skill in the science and practice of Oral Implantology
- PSO14:** Shall develop teaching skill in the field of Periodontology and Oral Implantology
- PSO15:** Reach to the public to motivate and educate regarding periodontal disease, its prevention and consequences if not treated
- PSO16:** Human values, ethical practice to communication abilities
- PSO17:** Adopt ethical principles in all aspects of treatment modalities
- PSO18:** Professional honesty & integrity are to be fostered
- PSO19:** Develop Communication skills to make awareness regarding periodontal disease.
- PSO20:** Apply high moral and ethical standards while carrying out human or animal research.
- PSO21:** Be humble, accept the limitations in his knowledge and skill, and ask for help from colleagues when needed, Respect patients rights and privileges, including patient's right to information and right to seek a second opinion.
- PSO22:** Take a proper clinical history, thorough examination of intra-orally, extra-orally, medical history evaluation, advice essential diagnostic procedures and interpret them to come to a reasonable diagnosis
- PSO23:** Effective motivation and education regarding periodontal disease maintenance after the treatment
- PSO24:** Perform both non-surgical & education regarding periodontal disease, maintenance after the treatment
- PSO25:** Perform both non-surgical and surgical procedures independently
- PSO26:** Provide Basic Life Support Service (BLS) recognizes the need for and advance life support and does the immediate need for that.



SGT UNIVERSITY
SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY
(UGC Approved) Gurugram, Delhi-NCR
Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph. : 0124-2278183, 2278184, 2278185

Course Outcomes (COs)



BDS COURSE OUTCOMES

1) GENERAL ANATOMY INCLUDING EMBRYOLOGY AND HISTOLOGY

Course Code: 0210101

Course Description: The study of anatomy in dentistry mainly includes identification of head and neck structures. Particular emphasis is placed on description of bones, joints, muscles and nerves of dentofacial structures.

Course Outcomes:

CO1	To know the normal structures of the head, neck and the adjacent areas.
CO2	To know the embryological development of dento alveolar tissues.
CO3	To locate various structure of the body and to mark the topography of the living anatomy.
CO4	To identify various tissues under microscope
CO5	To identify the features in radiography and modern imaging techniques.
CO6	To detect various congenital abnormalities.

2) GENERAL HUMAN PHYSIOLOGY

Course Code: 0210102

Course Description: The broad goal of teaching Human Physiology to undergraduate Dental students is to provide comprehensive knowledge of the normal functions of the organ systems of the body, to facilitate an understanding of the physiological basis of health and disease.

Course Outcomes:

CO1	To know the normal functioning of all the organ systems and their interactions for well co-ordinated total body function.
CO2	To know the physiological principles underlying the pathogenesis and treatment of disease
CO3	To conduct and interpret experiments related to physiological phenomena.
CO4	To distinguish between normal and abnormal data derived as a result of tests which they have performed/assisted and observed in the laboratory.

3) BIOCHEMISTRY

Course Code: 0210103

Course Description: The study of chemical reactions and processes in a living organisms. It is also called as biological chemistry. It is closely related to molecular biology, the study of



the molecular mechanisms by which genetic information encoded in DNA is able to result in the processes of life.

Course Outcomes:

CO1	To know the molecular biology and structural organization of human cell.
CO2	To know the basic functions of enzymes and their effect on various functions including genetics.
CO3	To understand biochemical basis of life sciences
CO4	To understand the metabolism, function and mechanism of action of various elements of the body.
CO5	To understand the transport system of electron and its effects on body
CO6	Integrate multiple disciplines into an individual comprehensive sequence treatment plan using diagnostic and prognostic information
CO7	Ability to order appropriate investigations

4) DENTAL ANATOMY, EMBRYOLOGY AND ORAL HISTOLOGY

Course Code:0210104

Course Description: The anatomy of head and neck region, histology as well as embryology is dealt. Clinical considerations of common oral diseases or disorders, orofacial pain/swelling utilizing the best possible evidence and diagnostic tools/modalities are taught.

Course Outcomes:

CO1	To carve and reproduce the morphology of human permanent teeth in wax blocks.
CO2	To be able to identify different oral hard tissues in clinical situations
CO3	To be able to differentiate normal from abnormal and diseased states
CO4	To learn the eruption sequence and mechanism of shedding of human teeth.
CO5	To understand the theory and concept of occlusion.

5) GENERAL PATHOLOGY

Course Code: 0210201

Course Description: A scientific study of disease processes which deals with the laboratory investigations in health and disease that focuses on the causes, manifestations and diagnosis of disease.

Course Outcomes:

CO1	To be able to differentiate normal from abnormal and diseased states
CO2	Integrate the general principles, terminologies and mode of spread of disease to the study of Pathology.
CO3	To build a basic understanding of histopathology and morbid anatomy through the examination of microscopic sections and gross specimens, respectively, displaying



	pathological processes.
CO4	Carry out certain investigations and to be able to interpret laboratory findings.

6) MICROBIOLOGY

Course Code: 0210203

Course description: The subject basically provides understanding and knowledge about various microorganisms and their effect on humans. Here various methods and practices of sterilisation as well as disinfection are taught.

Course Outcomes:

CO1	To understand the basics of various branches of microbiology and able to apply the knowledge relevantly.
CO2	To know various culture media and their application
CO3	To know the various methods of physical and chemical methods of sterilization.
CO4	To demonstrate an understanding of key concepts in Immunology.
CO5	To understand the salient features of antigen and antibody reaction and its uses in diagnostics
CO6	To chose appropriate antibiotic for a patient suffering from an infectious disease based on the antimicrobial susceptibility test

7) GENERAL AND DENTAL PHARMACOLOGY AND THERAPEUTICS

Course Code: 0210201

Course Description: The general pharmacology involves the aspects of sources of drugs, route of administration of drugs, absorption of drugs and factors affecting them, distribution, biotransformation and excretion. The broad goal of teaching undergraduate students in pharmacology is to inculcate rational and scientific basis of therapeutics keeping in view of dental curriculum and profession.

Course Outcomes:

CO1	To be able to prescribe drugs for common medical and dental ailments.
CO2	Appreciate adverse reactions and drug interactions of commonly used drugs
CO3	Observe experiments designed for study of effects of drugs.
CO4	Critically evaluate drug formulations and be able to interpret the clinical pharmacology of marketed preparations commonly used in dentistry.

8) DENTAL MATERIALS

Course Code:0210204

Course Description: The subject provides the basic knowledge regarding various materials used in dentistry. It also trains the students regarding the manipulation of the materials to be



used in the dental practice. This can later be effectively implemented in their future dental practice.

Course Outcomes:

CO1	To understand the various materials' characteristics, strengths, and weakness as they relate to patient treatment
CO2	To develop a practical knowledge of the composition, properties, manipulative variables and uses of restorative, preventive, esthetic and surgical dental materials which will include the manipulation of selected materials
CO3	To be able to handle various dental materials depending upon the physical and chemical properties in numerous clinical situation.

9) PRE CLINICAL CONSERVATIVE DENTISTRY

Course Code: 0210206

Course Description: The subject introduces the student to the science of operative dentistry. It provides the student with basic principles about cavity preparation and restorative techniques for amalgam and resin composite restorations.

Course Outcomes:

CO1	To understand the composition, properties, uses and manipulation of the various dental materials.
CO2	To know the fundamentals of tooth preparation.
CO3	To be able to handle various dental materials depending upon the physical and chemical properties in numerous clinical situation.

10) PRE CLINICAL PROSTHODONTICS, CROWN & BRIDGE

Course Code: 0210205

Course Description: The subject introduces students to laboratory and clinical procedures involved in the fabrication of complete dentures in preclinical settings and provide opportunity for deliberate practice.

Course Outcomes:

CO1	To be able to take impressions of the jaws
CO2	To be able to prepare special trays
CO3	To be able to record jaw relation and then transfer to an articulator over a dummy
CO4	To select appropriate shade of the teeth and arrange them in a particular manner considering the overjet, overbite and esthetics.
CO5	To be able to fabricate a complete/partial denture following all the steps like, try in, waxing , polishing, flasking, dewaxing, packing ,curing and polishing.



11) GENERAL MEDICINE

Course Code: 0210302

Course description: The course provides the student a complete knowledge regarding various diseases affecting humans, their prevention, diagnosis and treatment.

Course Outcomes:

CO1	To take appropriate medical history of the patient
CO2	To be able to examine clinically various systems like Cardiovascular, Respiratory and abdominal areas including the overall gait, built and nourishment as well.
CO3	To evaluate the vital statistics like Pulse, BP, temperature, checking capillary blood glucose
CO4	To differentially diagnose a condition.
CO5	To be able to advice particular investigations for a particular disease and to interpret the lab reports
CO6	To be able to provide basic life support whenever required

12) GENERAL SURGERY

Course Code: 0210301

Course Description: It is the branch of medicine that treats diseases and injuries by operative procedures. It provides the knowledge regarding the fundamentals of general surgical principles and common surgical procedures employed for the management of various diseases and trauma cases.

Course Outcomes:

CO1	To properly take case history and clinically examine the case, differentially diagnose and provisionally diagnose.
CO2	To provide the knowledge regarding surgical anatomy, physiology and pathological basis of diseases
CO3	To provide the basic surgical principles including suturing techniques
CO4	To have a knowledge and understanding of asepsis and infection control measures.

13) ORAL PATHOLOGY

Course Code:0210303

Course Description: It is the science of dentistry that explores the nature, characteristics, cause, effects and diagnoses of diseases affecting oral and maxillofacial regions. It provides knowledge regarding the etiopathogenesis, clinical and histopathological features of various diseases/anomalies affecting oral and maxillofacial region.



Course Outcomes:

CO1	To have a knowledge about the embryonic development of oral and maxillofacial structures.
CO2	To know the structure and functions of various tissues around the tooth in general and in particular.
CO3	To know the developmental and congenital anomalies of teeth and supporting structures.
CO4	To have a basic knowledge regarding biopsy procedure and slide preparation.
CO5	To know the basic haematological tests, urine analysis and their clinical significance.

14) ORAL MEDICINE AND RADIOLOGY

Course Code:0210401

Course Description: It provides the knowledge and understanding of various diseases affecting the oral and surrounding structures, oral manifestations of systemic diseases including the management of medically compromised patients. The course focuses on history taking, clinical examination, diagnosis, investigations, radiographic examinations and medical management of lesions related to oral cavity.

Course Outcomes:

CO1	To diagnose a particular lesion/anomaly by proper case history taking and advising appropriate investigations.
CO2	To manage common oral lesions and their complications.
CO3	Gain adequate knowledge of various extra-oral radiographic procedures, TMJ radiography and Sialography
CO4	To diagnose and manage orofacial pain.
CO5	To be competent enough to identify precancerous and cancerous lesions of the oral cavity and refer to the concerned speciality for their management
CO6	Should be familiar with jurisprudence, ethical and understand the significance or dental records with respect to law.

15) PAEDIATRIC AND PREVENTIVE DENTISTRY

Course Code: 0210402

Course Description: To train the students in managing the oral health issues of infants, children and adolescents including children with special needs. The students also are encouraged to participate in the community oral health care.

Course Outcomes:

CO1	Demonstrate an in-depth knowledge of the art and science of pediatric dentistry.
CO2	Provide comprehensive preventive and therapeutic oral health care for infants and children through adolescence, including those with special health care needs.



CO3	Employ pediatric dental procedures and behavioural management techniques in the ambulatory and hospital settings.
CO4	Work collaboratively with clinicians, parents and other medical specialties advocating for the health of the child patient.

16) ORTHODONTICS AND DENTOFACIAL ORTHOPAEDICS

Course Code:0210403

Course Description: It is the branch of dentistry concerned with the prevention and correction of malocclusions.

Course Outcomes:

CO1	Demonstrate a broad knowledge of the dental and scientific literature as it relates to orthodontics and dentofacial orthopaedics.
CO2	Recognise and classify dental and skeletal malocclusion into the types and various categories
CO3	Diagnose and plan the treatment for different types of malocclusion using evidence-based concepts of growth and development, anatomy, histology, pathology, dental materials and biomechanics.
CO4	To know the imaging modalities and their individual applications in orthodontic therapy.

17) PERIODONTOLOGY

Course Code: 0210404

Course Description: It provides the comprehensive knowledge and skills to treat diseases affecting the supporting structures of the teeth.

Course Outcomes:

CO1	To diagnose and manage various diseases affecting tooth supporting structures.
CO2	To be able to perform manual and ultrasonic scaling procedures
CO3	To be able to maintain the tooth supporting structures and implant by performing supportive periodontal therapy

18) PROSTHODONTICS AND CROWN AND BRIDGE

Course Code:0210407

Course Description: to provide the knowledge and skills to treat complete/partial edentulous jaws with removable/fixed prosthesis.

Course Outcomes:



CO1	To understand the biomaterials used in the science of prosthodontics.
CO2	Communicate to patients individually and efficiently regarding the problem/treatment plan/post –treatment instructions
CO3	To be able to take the impressions of the jaws with a suitable impression material and replicate it
CO4	To be able to take jaw relations and transfer it.
CO5	To know all the steps of fabricating a denture.
CO6	To know the principle and practice of fixed prosthesis

19) CONSERVATIVE DENTISTRY AND ENDODONTICS

Course Code:0210406

Course Description: It provides the knowledge and skills to treat diseases and injuries of teeth and pulp/periapical lesions.

Course Outcomes:

CO1	To have the basic understanding of the various biomaterials used in conservative and endodontics.
CO2	To know the etiopathogenesis and management of various endodontic lesions.
CO3	To perform all levels of restorative work including aesthetic procedures and treatment of complicated restorative procedures.

20) ORAL AND MAXILLOFACIAL SURGERY

Course Code: 0210405

Course Description: It provides the knowledge and skills to diagnose surgical and adjunctive treatment of diseases, injuries or defects of the human jaws and associated oral and facial structures.

Course Outcomes:

CO1	To have a knowledge regarding surgical anatomy, physiology and pathological basis of diseases of head and neck
CO2	To be able to provide primary care and manage medical emergencies in the dental office.
CO3	To be able to perform minor oral surgical procedures including suturing and dressing.
CO4	To apply the knowledge gained in the related medical subjects like Pathology, Microbiology and General Medicine in the management of patients with oral surgical problems
CO5	Understand the management of major oral surgical procedures and principles involved in patient management.



SGT UNIVERSITY

SHREE GURU GOBIND SINGH TRICENTENARY UNIVERSITY
(UGC Approved)
Gurugram, Delhi-NCR

Budhera, Gurugram-Badli Road, Gurugram (Haryana) – 122505 Ph. : 0124-2278183, 2278184, 2278185

21) PUBLIC HEALTH DENTISTRY

Course Code: 0210406

Course Description: The aim of the course is to develop, in students an understanding of the major oral health problems of community and the ability to critically analyze dental public health problems including developing practical solutions to protect and promote the oral health of the whole community.

Course Outcomes:

CO1	Identify social, economic, environmental and emotional determinants in a given individual patient or a community for the purpose of planning and execution of community oral health programme.
CO2	Take history, conduct clinical examination including all diagnostic procedures to arrive at diagnosis at the individual level and conduct survey of the community at a state and national level of all conditions related to oral health to arrive at community diagnosis.
CO3	To be able to act as a consultant in Community Oral Health and take part in research (both basic and clinical), present and publish the outcome at various scientific conferences and journals, both national and international.
CO4	To be able to make use of knowledge of epidemiology to identify causes and plan appropriate preventive and control measures.